COMMONWEALTH

NAVY ORDERS

1950

RESTRICTED
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C.N.O.'s 1-23/60

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
6th January, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

10850/59.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

1.—Issue of Navy Orders—1959.

The last Navy Order issued for 1959 was No. 1112.

(H.N.B. 47/8/7.)

UNCLASSIFIED.

2.—H.M.A.S. BARCOO—Commissioning.

H.M.A.S. BARCOO commissioned on Monday, 7th December, 1959, under the command of Lieutenant-Commander H. C. W. Dillon.

(H.N.B. 1211/5/5.)

1224/1

UNCLASSIFIED.

3.—H.M.A.S. WARRAMUNGA—Paying Off.

H.M.A.S. WARRAMUNGA paid off into operational reserve on Monday, 7th December, 1959.

2. Navy Order 617 of 1959 is hereby cancelled.

(H.N.B. 1211/5/5.) ?

(*Navy Order* 617 *of* 1959.)

? need to check reference. copy not held.

UNCLASSIFIED.

4.—R.A.N. Central Canteen and Relief Fund—Constitution of Committees.

Navy Order 953 of 1959, is to be amended as follows—

(*a*) *Delete* paragraph 9.

(*b*) *Insert* in its stead, new paragraph 9—

> " Proposals for inclusion in the agenda of the meetings should be forwarded by administrative authorities to the Secretary, R.A.N. Relief Fund, Victoria Barracks, Melbourne by 30th November for the January meeting and 30th May for the August meeting."

(D.P.S. 8/52/15.)

(*Navy Order* 953 *of* 1959.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

5.—Band Branch—Change of Uniform and Ratings' Titles.

It has been decided in the interest of economy and uniformity to change the dress of Band Branch personnel from the present adoption of the Royal Marine Uniform to Naval Uniform.

2. The change in dress becomes effective from 1st January, 1960. Officers will wear normal naval uniform. Chief Petty Officer Musicians and confirmed Petty Officer Musicians will wear Class I. and Class III. uniform respectively, except that for purposes of uniformity when paraded, confirmed Petty Officer Musicians will wear Class II. uniform.

Ratings below confirmed Petty Officer Musician will be dressed in Class III. uniform.

3. It has also been decided to effect the following changes in titles of Band Branch ratings from 1st January, 1960—

Present Title.	*New Title.*
Recruit (Junior Musician).	No change.
Junior Musician.	No change.
Recruit (Musician).	No change.
Musician, 2nd Class.	Ordinary Musician.
Musician, 1st Class.	Musician.
Band Corporal.	Leading Musician.
Band Master.	Petty Officer Musician.
Chief Band Master.	Chief Petty Officer Musician.

4. The title of remaining bugle rating serving will be changed as above but the new title will carry the suffix (Bugler). Uniform and badges worn will conform with those prescribed for musicians. Advancement beyond Petty Officer Musician (Bugler) will not be available.

5. Title changes where appropriate are to be effected in ratings' Certificate of Service as early as practicable after 1st January, 1960, and reported to Navy Office on Form A.S. 161.

6. The changes in titles do not involve any change in structure of the branch or in the present qualifications for advancement.

7. Branch badges as indicated below and normal badges of rating will be worn, in conjunction with Good Conduct Badges, in accordance with the provisions of Navy Order 335 of 1958—

Recruit (Junior Musician)	Small lyre.
Junior Musician	
Recruit (Musician)	Basic device (lyre and wreath).
Ordinary Musician	
Ordinary Musician passed professionally for Musician and Musician	Basic device—star above.
Musician passed professionally for Leading Musician and Leading Musician	Basic device—star above.
Confirmed Leading Musician passed professionally for Petty Officer Musician and Petty Officer Musician	Basic device—crown above.
Chief Petty Officer Musician	Basic device—crown above (small for lapels and cuffs).

8. Any amendments to I.P.I. and A.B.R. 10, consequent on the above changes, will be promulgated in due course.

(H.P.B. 930/51/15.)

(*Navy Order* 335 *of* 1958.)

302/2
1 inclosure
uniform

UNCLASSIFIED.

6.—Naval Health Benefits Society—Report as at 30th June, 1959.

The following report as at 30th June, 1959, together with financial statements as appendices A to E, is published for the information of all members of the Naval Health Benefits Society.

GENERAL NOTICE.

During the past twelve months of operation the Society's membership has grown from 2,158 to 2,576. This total includes 2,180 naval personnel and 396 civilian personnel. This figure shows an increase of 380 naval personnel and 78 civilian personnel over the figures shown in the report for the financial year ended 30th June, 1958, and whilst the increase in numbers is considered satisfactory, still more members would enable the Society to function with more efficiency and perhaps offer greater or additional benefits. There is still a large number of naval personnel eligible for membership who have not availed themselves of the opportunity of joining this, their own Society, which was formed essentially to cater for the needs of naval personnel.

2. The more members in the Society the better will be the benefits offered, and members are therefore urged to act as recruiting agents for the Society by informing intending new members of the advantages of membership. Full information about the Naval Health Benefits Society can be found in Navy Order 555 of 1958.

3. A total of 6,689 medical claims and 934 hospital claims, representing an overall average increase of 51 per cent. on business conducted for the previous financial year were paid with benefits totalling as follows—

	£	£
Medical Society Benefit	8,705	
Medical Commonwealth Benefit	7,512	
Total Medical Benefit		16,217
Hospital Society Benefit	7,248	
Hospital Commonwealth Benefit	3,982	
Total Hospital Benefit		11,230
Grand Total Paid		27,447

Contributions received for this period amounted to—

Medical Fund	10,361
Hospital Fund	8,289
	18,650

4. Administration expenses amounted to £99 for postage, stationery, &c.

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5. The operation of the Society throughout the year has been satisfactory and many members have received large benefits. Payment of benefits has sometimes been delayed due to the claim form being rendered incorrect or incomplete. It must be stressed that delay and unnecessary correspondence can be avoided if greater care is taken in compiling the claim form and answering all questions appearing on the form. The doctor's detailed account and receipt must both be attached to the claim and a separate claim made for each member of the family when the accounts cover more than one patient. Form HB21, Certificate of Hospitalization, must also be forwarded when claiming Hospital Benefits.

6. *Increased Hospital Benefits.*—With the transfer of all members to schedule " B " during the past financial year, it has been found that a large majority of members have been recouping their full hospital accounts in benefits.

(Sgd.) A. L. FREER,
Secretary.

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APPENDIX A.

BALANCE-SHEET AS AT 30TH JUNE, 1959.

Liabilities.

	£	s.	d.
Reserve Fund	15,643	17	7
Hospital Benefits Fund	4,027	1	4
Medical Benefits Fund	3,839	19	10
	23,510	18	9

Assets.

	£	s.	d.	£	s.	d.
Cash at Bank				8,202	10	8
Commonwealth Bonds				14,000	0	0
DEPARTMENT OF HEALTH—						
Hospital Benefits Refund ..	503	12	1			
Medical Benefits Refund ..	796	6	0			
				1,299	18	1
Office Equipment	10	10	0			
Less—Depreciation ..	2	0	0			
				8	10	0
				23,510	18	9

Audited and found correct—

(J. L. MILL), Cdr. R.A.N.

(O. E. WILLIAMS), Lt. Cdr., R.A.N.

APPENDIX B.

SUMMARY OF SOCIETY AND COMMONWEALTH BENEFITS PAID FOR THE TWELVE MONTHS ENDED 30TH JUNE, 1959.

	Hospital.			*Medical.*			*Total.*		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Society Benefits paid	7,248	1	0	8,705	5	6	15,953	6	6
Commonwealth Benefits paid.. ..	3,982	1	1	7,512	7	0	11,494	8	1
Total Benefits Paid	11,230	2	1	16,217	12	6	27,447	14	7

Medical Benefits comprising .. 12,018 Consultations.
5,127 Other Services.

17,145 Total Services.

APPENDIX C.

HOSPITAL AND MEDICAL BENEFITS FUND ACCOUNTS FOR THE TWELVE MONTHS ENDED 30TH JUNE, 1959.

	Hospital.			*Medical.*			*Total.*		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Fund Balance as at 30th June, 1958 ..	2,986	6	5	2,184	5	6	5,170	11	11
Add—Contributions received from members, 1st July, 1958 to 30th June, 1959	8,288	15	11	10,360	19	10	18,649	15	9
	11,275	2	4	12,545	5	4	23,820	7	8
Less—Society benefits paid 1st July, 1958 to 30th June, 1959	7,248	1	0	8,705	5	6	15,953	6	6
Fund Balance as at 30th June, 1959	4,027	1	4	3,839	19	10	7,867	1	2

APPENDIX D.

COMMONWEALTH BENEFITS PAID BY THE SOCIETY AND REIMBURSEMENTS RECEIVED FOR THE TWELVE MONTHS TO 30TH JUNE, 1959.

	Hospital.			*Medical.*			*Total.*		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Reimbursements outstanding 30th June, 1958	158	2	0	403	3	0	561	5	0
Add—Commonwealth Benefits paid by the Society	3,982	1	1	7,512	7	0	11,494	8	1
	4,140	3	1	7,915	10	0	12,055	13	1
Less—Reimbursements received from Department of Health	3,636	11	0	7,119	4	0	10,755	15	0
Reimbursement Outstanding 30th June, 1959	503	12	1	796	6	0	1,299	18	1

APPENDIX E.

ADMINISTRATION ACCOUNT TWELVE MONTHS ENDED 30TH JUNE, 1959.

	£	*s.*	*d.*	£	*s.*	*d.*
Income—						
Interest..				579	10	3
Expenses—						
Postage..	94	0	0			
Petty Cash	3	0	0			
Depreciation	2	0	0			
				99	0	0
Surplus Income				480	10	3

(D.G.S. 4837/11/11.)

(*Navy Order* 555 *of* 1958.)

Old number

UNCLASSIFIED.

7.—Royal Australian Fleet Reserve.

Constitution.

The Royal Australian Fleet Reserve is constituted under the Naval Defence Act as a section of the Citizen Naval Forces, and members of the Fleet Reserve will be available for service with the Permanent Sea-going Forces when called up by Proclamation.

Responsibilities of Commanding Officers.

2. The conditions of service in the Royal Australian Fleet Reserve are to be brought to the notice of all eligible and suitable ratings who become due for discharge. When a rating who is eligible and recommended for service in this Reserve is about to be discharged either on completion or prior to termination of his engagement, his Commanding Officer is to ensure that the advantages of joining the Fleet Reserve are set before him and that he is given every facility for joining before he leaves his ship or depot.

Note.—Where a rating is eligible for a gratuity of at least £120 or for a pension in respect of his service, it is generally necessary for him to agree to serve in the Fleet Reserve (without any obligation to drill or entitlement to retainer) before the full rate of the gratuity or pension can be authorized. Where the rating is prepared to serve in the Fleet Reserve, it is necessary that he should sign Form A.B. 103 on or immediately prior to his discharge.

3. Form A.B. 103 is to be completed as applicable in respect of candidates and forwarded to the Registrar, Royal Australian Fleet Reserve. Candidates will be notified whether they have been accepted or not, by the Registrar.

4. As the majority of ratings immediately following discharge "engagement expired", have a requirement for their service documents for the purpose of obtaining employment, housing, &c. (there is also a high percentage of changes of address at time of re-settlement), it has been decided to introduce the following procedure in regard to such documents—

(*a*) On final discharge "engagement expired", a rating who has completed Form A.B. 103 is to be handed his Certificate of Service in which should be enclosed Form A.B. 131B (Certified Mail Envelope.) The applicant is to be instructed that when there is no further immediate

need for him to retain his Certificate of Service he should, if requested by the Registrar, forward it for notation of enlistment, at the same time enclosing his present address.

(*b*) The Registrar will return the Certificate of Service with as little delay as possible, together with a Form A.B. 131 (Address Reporting Card Booklet) and a further Form A.B. 131B (Certified Mail Envelope) for future use as may be necessary.

(*c*) A member of the Royal Australian Fleet Reserve is required to complete an Address Reporting Card annually, in accordance with the instructions on Form A.B. 131.

5. A copy of the general conditions governing eligibility for service in the Royal Australian Fleet Reserve (attachment to Form A.B. 103) is to be handed to each eligible rating on discharge from the Royal Australian Navy.

Eligibility for Enlistment.

6. A candidate for enlistment in the Royal Australian Fleet Reserve must—

(*a*) have served in the Sea-going Forces of the Royal Navy or Royal Australian Navy or of the Permanent Naval Forces of a part of the Queen's Dominions, or combined service in any two or more of them, for not less than three years;

(*b*) be not more than 45 years of age at the date of enlistment, except that Permanent Naval Forces personnel who on discharge become beneficiaries under the D.F.R.B. Act or are paid gratuities of at least £120 may be acceptable for enlistment in the Royal Australian Fleet Reserve even if they have attained the age of 45 years;

(*c*) have borne a generally satisfactory character throughout his service, with an assessment of " Very Good " for character for at least two years, and of " Very Good " or " Good " for the remaining one year of the last three years of service, and an efficiency assessment of not less than satisfactory on discharge from the Permanent Naval Forces;

(*d*) be physically fit for five years' service and pass such medical examination as the Naval Board may approve;

(*e*) must be entered within five years of discharge from one of the services quoted in (*a*) above.

Period of enlistment.

7. A candidate will be enlisted for a period of five years with the option of re-enlistment for further periods of five years provided that, if he will attain the age of 50 years before the expiration of a further five years, the period of enlistment will be the period until he attains the age of 50 years. The normal commencing date of enlistment will be from day following date of discharge from the Permanent Naval Forces.

Retainer.

8. A retainer of £24 per annum is payable subject to satisfactory performance of annual training. Where because of expiration of the period of enlistment a member is unable to qualify for a full year's retainer, payment will be made *pro rata* at the rate of £2 per month for each completed month under enlistment. No retainer will be payable in any case to a member after attaining the age of 50 years. Where the member is a beneficiary under the D.F.R.B. Act or receives a pay code gratuity subject to his contracting to serve on the Reserve, no retainer will be payable for the first period of enlistment.

Annual Training.

9. Training, which will be arranged as far as practicable at a time suitable to each Reservist (subject to fourteen days' notice being given) is required to be carried out as follows—

(*a*) If enlisted within twelve months of discharge from the Permanent Naval Forces—seven days per annum for the first period of five years' enlistment and thereafter, if re-enlisted, fourteen days per annum; or

(*b*) if enlisted after a lapse of twelve months since discharge from Permanent Naval Forces—fourteen days per annum.

10. Additional paid voluntary training of up to fourteen days per annum may be performed, if desired. Annual training may be carried out biennially under prescribed conditions.

11. Members who are beneficiaries under the D.F.R.B. Act or who receive gratuities of at least £120 are not required to perform any training during their first five years of enlistment whilst ineligible for payment of retainer. They may, however, carry out voluntary training up to fourteen days per annum, if desired. Such training will be subject to the applicant having sufficient kit in his possession for this purpose and with the approval of the Registrar.

Rating on Enlistment.

12. Rating on enlistment will be the rating last held in the Permanent Naval Forces, whether acting or confirmed, except that ex-ratings with a break in service will be enlisted in the lowest rating applicable to their class and will be re-advanced in daily stages to the rating last held in the Permanent Naval Forces.

Pay and Allowances whilst Under Continuous Training.

13. The following pay and allowances are payable to members of the R.A.F.R. during periods of full time training including voluntary training—

(*a*) Active pay at the rate promulgated for the Citizen Naval Forces.

(*b*) Marriage Allowance ..
(*c*) Separation Allowance ..
(*d*) Provision Allowance.. ..
(*e*) Living Out Allowance ..
(*f*) Living Out Away From Home Allowance .. ..

} Subject to Citizen Naval Force conditions promulgated in Regulations and Instructions for the R.A.N.R. (Provisional) Articles 245 and 246 as amended by R.I. 3–4/56, 9–12/56 and 7–9/57.

(*g*) Uniform Allowance is not payable.

(*h*) Good Conduct Badge Pay is not payable.

Note.—A Form A.S. 1297 for payment of L.O.A.H.A. must be rendered to Naval Board for approval on date of joining or on date of eligibility, if later.

Travelling Allowance and Travelling Warrants.

14. Travelling Warrants will be issued where necessary to attend training, and to return home. During periods of travel, Travelling Allowance or Meal Allowance, as appropriate, may be paid in accordance with the rates and conditions applying in the Permanent Naval Forces.

Uniform Kit.

15. R.A.F.R. kit will be issued gratuitously on first attendance for training after enlistment or in the case of non-drilling personnel on re-enlistment (i.e., on the first occasion of reporting for training where the rating has an obligation to carry out annual training).

Subsequent replacements will be made only as requisite and with the approval of the Registrar.

16. Navy Order 374 of 1958 is hereby cancelled.

(D.N.R. 1605/3/4.)

(*Navy Order* 374 *of* 1958.)

UNCLASSIFIED. Cancelled ENO 527/62 wrong 302/58

8.—Women's Royal Australian Naval Service—Made-to-Measure Uniforms for Ratings—Sydney and Melbourne—1959-1960.

Made-to-measure uniforms for ratings of the Women's Royal Australian Naval Service may be obtained from the Commonwealth Government Clothing Factory, Miles-street, South Melbourne, and Evers & Cohen Pty. Ltd., 16 Wentworth-avenue, Sydney.

2. The prices operative during the period 1st July, 1959 to 30th June, 1960, are as follows—

	Commonwealth Government Clothing Factory.	*Evers & Cohen Pty. Ltd.*
	£ *s.* *d.*	£ *s.* *d.*
Jackets, Diagonal Serge ..	9 18 6	9 4 3
	Nett	—2½ per cent. 14 days
Skirts, Diagonal Serge ..	2 14 6	3 13 9
	Nett	—2½ per cent. 14 days.

3. Navy Order 728 of 1958 is hereby cancelled.

(D. of V. 917/80/7.)

(*Navy Order* 728 *of* 1958.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

9.—Electrical—Series 1 Amplifier Assemblies—Brushes for D.C. Fan Motor.

(*A.F.O.* 2242/1959.)

The present allowance of spare brushes for those Series 1 amplifier assemblies fitted with a 220V D.C. fan motor is inadequate in all ships concerned.

2. The undermentioned carbon brush which has already been added to the Rate Book and Authorized List of Naval Stores under Class F, Group 2A, is suitable for this service—

Admiralty Pattern.	*Description.*	*Ship's Accounting Classification.*
14251	Carbon Brush, Grade Link EG.5987, 1-in. x ⅝-in. x ¼-in. with flexible lead 2⅜-in. long and terminal. Maker's reference 4053 MG	Consumable.

3. Commanding Officers of all ships fitted with Series 1 assemblies should demand from Superintending Naval and Air Store Officer, Sydney, spare brushes on the basis of 100 per cent. of the total number fitted (two in number are fitted in each D.C. fan motor). Supplies will not be available for some time and demands should not be hastened.

4. All demands should quote this order as the authority.

(D.N.A.S. 518/58/11.)

UNCLASSIFIED.

10.—Daring Class Destroyers Boiler Water Levels.

Recent boiler tube failures in one of H.M.A. Daring Class Destroyers have drawn attention to the importance of maintaining the correct water level under all conditions of steaming.

2. The full power water level as shown on Navy Office Drawing No. D.1472 and indicated in the Foster Wheeler Ltd. handbook of Operating and Maintenance Instructions No. D.8013 is 2-in. below the centre line of the steam drum.

3. Under auxiliary conditions a minimum water level of 9-in. is to be maintained in the low level gauge glass. This corresponds with the centre line of the steam drum. This level should be clearly marked by a white line on the outside of all gauge glass mountings.

(D.M.E. 1215/51/36.)

UNCLASSIFIED.

11.—Gunnery Equipment—Starter for Use with Metadyne Sets for Mk. 6 Director, 40 Mm. Twin R.P. 50 Mks. 5 and 5* Mounting Mk. 7 Fusesetting Machine and A/S Mortar Mks. 1-4.

Admiralty advise that an error exists in Messrs. Allen West drawing No. 19891 in that details of the operating coil shown on the drawing are for a 440-volt coil, whereas in fact, the coil is supplied from a 115-volt transformer.

2. Ships, establishments, and Gunnery Equipment Depots are to examine stocks of spare coils listed in—

(*a*) B.R. 226 C (10), folio 1, index 615.

(*b*) B.R. 226 B (66), section L, index 105B.

(*c*) A.B.R. 226, folio 100, index 125.

(*d*) B.R. 227, part 1, section D, index 134.

and forward an early report to Navy Office showing whether they are for 115-volt or 440-volt operation and the quantity of each held.

(D.O.U.W. 737/60/7.)

UNCLASSIFIED.

12.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following Alteration and Addition Item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 109. *Classification* " *A* ".

Item: To run A.C. supply from switch fuse box No. 4 in radar display room situated at 203 starboard, station 76 to 2-way fuse box in sick bay 3D port, station 40.

Suitable twin core cable to be specified by dockyard.

Approximate length of run 150 feet.

References: H.M.A.S. MELBOURNE's proposed Alteration and Addition Item T.D.L. " BO ".

Navy Office Letter No. 12538 dated 6th July, 1959.

F.O.I.C.E.A. Memorandum N20/14/68 dated 25th September, 1959.

(D.C.C. 1213/52/6.)

UNCLASSIFIED.

13.—Auxiliary Circulating Water Systems—Pressure Gauges. Daring Class Destroyers.

In order to provide an indication of flow in the auxiliary circulating water systems of Daring Class Destroyers, arrangements are to be made to fit an additional pattern 2524 pressure gauge in each engine room.

2. The gauges should be mounted in convenient positions at the control platform and connected to existing screwed and plugged bosses in fittings AC6 and AC256 in A and B engine rooms respectively.

3. The work involved is to be treated as a defect and carried out by ship's staff.

(D.E.E. 1215/56/16.)

UNCLASSIFIED.

14.—A/S Mortar, Mark 10—CJ 271 Spanner, Securing Bush—Modification.

(*A.F.O.* 2431/1959.)

To facilitate the removal and assembly of the CH 328 BUSH OF CH 019 MECHANISM, breech, CJ 271 SPANNER has been modified by the removal of the existing handle and the welding of the head to a steel tube fitted with a tommy bar type handle.

2. The modified item is to be known as CJ 375 SPANNER.

3. CJ 271 SPANNERS in CJ 016 CHESTS are to be exchanged for CJ 375 SPANNERS at the nearest R.A.N. Armament Depot at the earliest opportunity.

R.A.N.A.Ds. only.—Details of this modification have been promulgated in U.W.(A) 20/59 dated 24th March, 1959.

(D.O.U.W. 707/251/13.)

UNCLASSIFIED.

15.—Naval Stores (General) (Class B, Group 11, Part F)—Stripper, Wire, Hand, Plier Type, Pattern B11F/943-7819—Introduction.

(*A.F.O.* 2314/1959.)

The following tool has been introduced as an item of Naval Stores to replace, on the same scale, stripper, pattern B11F/14556—

Pattern No.	*Description.*	*Ship's Accounting Classification.*
B11F/943–7819	Stripper, wire, hand, plier type with adjusting screw end, spring opening jaws (maximum capacity of stripping notch $\frac{3}{16}$-in.)	Consumable.

2. Stripper, pattern B11F/14556 will be marked " O " in the Rate Book, and stock will be expended.

3. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 506/71/31.)

UNCLASSIFIED.

16.—Naval Stores (General) (Class E, Group 12)—Plastic Sponges—Introduction.

(*A.F.O.* 2017/1959.)

In order to reduce labour employed in the cleaning of paintwork, coarse and fine plastic sponges size 6-in. x 4-in. x 2-in. have been introduced as a consumable item of Naval Stores under Class E, Group 12, non-pattern as an addition to the existing range of cleaning materials for H.M.A. ships and dockyards.

2. First outfit quantities for H.M.A. ships will be as follows—

H.M.A.S. MELBOURNE	250 No.
" Darings "	80 No.
Destroyers	60 No.
Frigates	60 No.
Surveying Ships	36 No.

3. Demands should be forwarded as necessary to the appropriate (S)N.S.O. and should include equal quantities of each type of sponge.

(D.N.A.S. 514/62/13.)

UNCLASSIFIED.

17.—Naval Stores (General) (Class F)—Audio Frequency Equipment, A.F. 100 Series—Allowances of Spares.

Navy Order 914 of 1959 is to be amended as follows—

Page 12, last line—

Amend " Patterns 32021/1 Amplifiers " to read " Pattern 32020/1 Amplifiers ".

(D.N.A.S. 517/51/59.)

(*Navy Order* 914 *of* 1959.)

UNCLASSIFIED.

18.—Naval Stores (General) (Class F, Group 3)—Instruments—Sextants and Star Globes—Allowances for Training of Acting Sub-Lieutenants.

(*A.F.O.* 850/1959.)

To facilitate the training of Acting Sub-Lieutenants in destroyers and below, it has been decided to allow such ships additional sextants and star globes. R.A.N. allowances to ships will now be as follows—

Class of Ship.	*Sextant Pattern F3/702M.*	*Star Globe Pattern F3/760.*
Destroyers (all classes)	2 No.	2 No.
Frigates (all classes including Frigates on survey duty)	2 No.	2 No.

2. Demands for sextants in accordance with the above allowances should be forwarded to the appropriate (S)N.S.O. Ships which have already obtained either pattern F3/491M sextants or pattern F3/604 or 760 star globes for training purposes should adjust their holdings as necessary. Demands should not be hastened as some time may elapse before stocks are available.

3. On receipt of the pattern F3/760 star globes, all pattern F3/604 star globes are to be returned for modification.

(D.N.A.S. 400/54/25.)

UNCLASSIFIED.

19.—Victualling Stores—Underwear for Divers—Transfer from Naval Stores. Revision of Supply and Accounting.

As from 1st January, 1960, the Director of Victualling will be responsible for the supply of underwear for divers for all Naval services. Stocks of current Naval Store items held in H.M.A. ships and establishments on that date are to be transferred from the Naval Store Account to the Loan Clothing Account without financial charge, quoting this order as authority. Future demands for these items are to be lodged with the appropriate (S) Victualling Store Officer.

2. Details of the items and the revised descriptions which are to be used from the date of transfer, without reference to pattern or vocabulary numbers, are as follows—

Pattern No.	*Present Description.*	*Revised Description.*
E5/26 ..	Frock, woollen*	Jerseys, white.
E5/27 ..	Drawers, woollen	Drawers, woollen, divers.
E5/29 ..	Stockings, woollen*	Stockings, seaboot
E5/7061/64	One-piece rayon undersuit ..	Undersuits, rayon, one-piece.
E5/3415 ..	Undersuits, type 2, blue ..	Undersuits, blue, type 2.
E5/N/P ..	Athletic track suit, two-piece, fleecy lined, all wool, black or dark blue (in lieu of undersuits E5/7061/64)	Undersuits, wool, two-piece.

3. The existing allowances of these items remain unchanged.

4. Admiralty has advised that the relevant publications will be amended.

* Stocks are to be merged with those of existing Loan Clothing items.

(D.N.A.S. 917/78/17.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

20.—Accounting Procedure—Provisions.

Form A.S. 462—Return of Numbers Victualled and Provisions Expended has been abolished and will be replaced by the following Forms—

(*a*) A.S. 462—General Mess Account.

(*b*) A.S. 462A—Return of Provisions Expended.

The forms are available on demand from the Superintending Naval and Air Store Officer, Sydney.

2. *Form A.S.* 462—*General Mess Account*—

(*a*) Form A.S. 462 is designed to enable the Supply Officer to exercise control over the expenditure to ensure that the victualling allowance is not exceeded.

(*b*) The victualling allowance is the amount available for the feeding of a man present for the full day, and it is expected that the value of provisions expended should closely approximate the total victualling allowance claimed in each calendar month thus ensuring that the approved standard of victualling is maintained.

(*c*) The Supply Officer, or Victualling Officer where no Supply Officer is borne, is to initial the form at least once a week as evidence that he has carefully perused the entries. The Supply Officer may be considered personally responsible if the victualling allowance is exceeded.

(*d*) Where the General Mess operations result in a debit balance, such balance is to be carried forward for elimination or reduction in the succeeding period. An explanation is to be given on the back of the form in cases where the debit balance incurred during any month is in excess of the average daily amount of victualling allowances for that month. The explanation is to be approved by the Captain.

(*e*) Line 11 of Form A.S. 257C—Daily Numbers Victualled—is to be posted to the " Full Victuals " column of Form A.S. 462. The numbers of " Provisions Allowance " personnel present for breakfast and dinner are to be shown in the columns provided.

(*f*) The total daily number catered for is to be computed by adding 30 per cent. of the numbers shown under " B " and 40 per cent. of the numbers shown under " D " for ratings on Provision Allowance to the number shown in the " Full Victuals " column. The resultant figure is to be used to compute the daily amount of victualling allowance.

(*g*) The value of provisions issued to the General Mess on Forms A.S. 77A and A.S. 113 are to be posted daily to Form A.S. 462. These supporting vouchers are to be initialled as evidence of posting.

(*h*) The General Mess balance is to be calculated daily and shown in the column provided.

(*i*) At the end of each calendar month, the grand total line is to be completed. The form is then to be certified and original copy forwarded to the Director of Victualling. The duplicate copy is to be submitted to the Captain and retained by the Supply Officer.

(*j*) A separate Form A.S. 462 is to be used for Naval hospitals. The certificate in Form A.S. 462 for Naval hospitals is to be signed by the Medical Officer in lieu of the Supply Officer; sub-paragraphs (*f*) and (*h*) are not applicable to these forms.

3. *Form A.S.* 462A—*Return of Provisions Expended.*—At the end of each month, the total quantity of each item of provisions issued to the General Mess as shown in the appropriate dissection column of Form A.S. 71—Provisions Ledger Account—is to be entered on the form. The spacing on the form is suitable for standard typewriters and the information can be typed direct from the ledger. The form is to be forwarded to the Director of Victualling with Form A.S. 462. A duplicate copy is not required to be retained on the ship.

4. The references in sub-paragraphs (*c*) and (*d*) of paragraph 17 of Navy Order 526 of 1959 to posting issues on the Navy Office copy of Form A.S. 462 are cancelled.

5. All entries in Form A.S. 71 Provisions Ledger Account—are to be checked daily.

6. Paragraph 13 of Navy Order 526 of 1959 is cancelled.

(D.V. 4528/4/482.)

(*Navy Order* 526 *of* 1959.)

old number

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

21.—Army and R.A.A.F. Lists—Distribution of.

Army and R.A.A.F. Lists will, in future, be distributed as follows—

Army List.	*R.A.A.F. List.*	*R.A.A.F. List.*
Navy Office (3).	Navy Office (9).	C.O. MELBOURNE.
F.O.C.A.F.	F.O.C.A.F.	TOBRUK.
F.O.I.C. E.A.	F.O.I.C. E.A.	ANZAC.
C.S.T. F.N.D.	Capt. of Port, Sydney.	QUEENBOROUGH.
N.O.I.C's.	C.S.T. F.N.D.	QUICKMATCH.
R.A.N.A.S. NOWRA.	N.O.I.C's.	QUIBERON.
	R.A.N.A.S. NOWRA.	VOYAGER.
		VENDETTA.
		VAMPIRE.

2. Superseded copies of the Army List are to be returned to " N " Branch, Victoria Barracks, Melbourne. These copies will then be issued to—

C.O. MELBOURNE.	C.O. VENDETTA.
TOBRUK.	VAMPIRE.
ANZAC.	BARCOO.
QUEENBOROUGH.	WARREGO.
QUICKMATCH.	GASCOYNE.
QUIBERON.	DIAMANTINA.
VOYAGER.	

(H.N.B. 465/57/29.)

UNCLASSIFIED.

22.—Books—B.R. 600 (1) and 601 (1) Combined—The Services Text Book of Radio and the Services Text Book of Electrical Engineering—Volume I—Electrical Fundamentals 1956.

Supplies of B.R. 600 (1) and 601 (1) combined, have now been received from the United Kingdom and are available for gratuitous issue to Electrical rates, on return, where applicable, of B.R. 229 and B.R. 230.

(D.N.A.S. 465/52/3.)

UNCLASSIFIED.

23.—Form A.S. 396Z—Education Officer's Report—Introduction.

Form A.S. 396Z—Education Officer's Report has been introduced for use in ships and establishments where no Instructor Officer is borne and is to be rendered monthly to Administrative Authorities for onward transmission to the Naval Board every six months, for the periods ending 30th June and 31st December.

2. Demands for the form should be addressed to the Superintending Naval and Air Store Officer, Sydney.

3. Form A.S. 396—Education Officer's Journal—will continue to be used in ships and establishments in which an Instructor Officer is borne.

(D.N.E.S. 464/54/60.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 24-44/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
20th January, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

65/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

24.—Photographs, Plans, &c., Reproduced for Repayment Services.

The following charges apply for Photographic Reproduction and Plan Printing Work carried out on behalf of repayment services—

Item.	*Cost.*	*To Cwth. Dept. & Members of the R.A.N.*	*To State Depts. & Public Utilities.*	*To the General Public.*
	s. d.	*s. d.*	*s. d.*	*s. d.*
(1) *Enlargements—½ Tone—*				
8½-in. x 6½-in.	3 9 ea.	4 3 ea.	4 6 ea.	4 9 ea.
10-in. x 8-in.	4 6 „	5 3 „	5 6 „	5 9 „
15-in. x 12-in.	9 0 „	10 6 „	11 0 „	11 6 „
20-in. x 16-in.	10 0 „	11 6 „	12 0 „	12 6 „
(2) *Enlargements—Line Work—*				
8¼-in. x 13¼-in.	3 6 ea.	4 0 ea.	4 3 ea.	4 6 ea.
16-in. x 20-in.	5 9 „	6 9 „	7 0 „	7 3 „
30-in. x 20-in.	7 6 „	8 9 „	9 0 „	9 6 „
40-in. x 25-in.	9 6 „	11 0 „	11 6 „	12 0 „
40-in. x 30-in.	10 6 „	12 0 „	12 9 „	13 3 „
(3) *Photostats—*				
24-in. x 18-in. (Full Sheet)	4 3 ea.	5 0 ea.	5 3 ea.	5 6 ea.
12-in. x 18-in. (½ Sheet) ..	3 6 „	4 0 „	4 3 „	4 6 „
(4) *Film ½ Plate Negative* ..	6 0 ea.	7 0 ea.	7 3 ea.	7 6 ea.
(5) *Luxacopy—Copy Rapid Process—*				
10½-in. x 8¼-in.	1 3 ea.	1 6 ea.	1 6 ea.	1 9 ea.
13¼-in. x 8¼-in.	1 6 „	1 9 „	1 9 „	2 0 „
16½-in. x 11¾-in.	2 9 „	3 3 „	3 3 „	3 6 „
(6) *Plan Printing—*				
	s. d.			
30-in. Blue	0 11 per ft.	Plus 15%	Plus 20%	Plus 25%
40-in. Blue	1 0 „ „			
30-in. Dyeline ..	1 3 „ „			
40-in. Dyeline ..	1 6 „ „			
30-in. Dyeline Linen Opaque	2 10 „ „			
40-in. Dyeline Linen Opaque	3 9 „ „			
30-in. Linen Dyeline Tracing (Trans.)	3 7 „ „			
40-in. Linen Dyeline Tracing (Trans.)	4 7 „ „			

2. Provided that the cost is reasonable both as regards the size of the print to be issued, and the total amount per annum involved, the Naval Board may approve the free issue of photographs of H.M.A. ships in response to requests therefor, where such issues can be justified on recruiting grounds.

3. No charge is to be made for photographic or plan printing work carried out on behalf of another Service Department, and subject to Ministerial approval photographs may be supplied free in respect—

(*a*) of graves of deceased personnel, and

(*b*) to publishers for illustrations in certain books. However, the normal charge for publication rights is £2 2s. per photograph.

(D.N.A. 201/58/15.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

25.—Notification of Particulars of Next-of-Kin—Procedure.

It is important that the name, relationship and address of a member's next-of-kin should be readily available in his ship or establishment and at Navy Office. For the purpose of this order, next-of-kin means the wife, other relative or close friend whom a member would wish to be informed in the case of his death or serious illness.

2. The particulars of next-of-kin are to be recorded with the date (in pencil) in ships and establishments on—

(*a*) Form A.S. 224Z for officers; and

(*b*) Form A.S. 224Z and page 1 of the Certificate of Service for ratings.

3. From the date of this order, particulars of next-of-kin of ratings on entry or re-entry into the Service, will be recorded in Navy Office records and on the Certificate of Service and form A.S. 224Z held at the appropriate training establishment, from the rating's engagement form—form A.S. 55.

4. Particulars of next-of-kin for officers on first appointment in the Service are to continue to be reported to Navy Office, Canberra, on form A.S. 537.

5. Forms A.S. 537, reporting particulars of a member's next-of-kin subsequent to entry, are to be rendered to Navy Office, Canberra, on the following occasions:

(*a*) Whenever an alteration occurs in the particulars of a member's next-of-kin.

(*b*) On the last pay day in May of each year by all members borne for pay.

6. All members should fully appreciate the importance attached to the next-of-kin nominated on form A.S. 537 in the event of death or serious illness, and to the necessity for keeping particulars of address, &c., up-to-date at all times.

7. Members should also understand that while the provisions of paragraph 1 of this Order allow considerable latitude in the choice of next-of-kin a member may nominate for his own reasons, the person nominated on form A.S. 537 will normally be the only person to whom advice would be communicated in the event of anything untoward happening to him.

8. In order to impress upon the member his responsibility in this matter, form A.S. 537 has been revised (*see* Navy Order 44 of 1960) and requires the member's signature on each occasion he completes the form. Provision has also been made on the form to require the member to state briefly the reason for any change which may occur in the relationship of the next-of-kin nominated.

9. When forms A.S. 537 have been prepared, the details on forms A.S. 224Z and Certificates of Service should be checked and amended as necessary in pencil. The date of any alteration is also to be inserted in pencil. Forms A.S. 537 are then to be forwarded to the Secretary, Department of the Navy, Navy Office, Canberra.

10. Tenders or ships not carrying ratings' Certificates of Service are to prepare form A.S. 537 in duplicate and forward one copy to the parent ship.

11. When forms A.S. 537 prepared on the occasions referred to in paragraph 5 (*b*) are being forwarded to Navy Office, they are to be accompanied by a certificate that all officers and ratings borne have completed the form. The forms are to be arranged alphabetically and despatched in a sealed envelope labelled "Forms A.S. 537".

12. Forms A.S. 537 are to be prepared in duplicate for members of other Commonwealth Naval Forces, the duplicate being sent direct to the headquarters of the Service to which the member belongs.

13. In the event of an officer or rating being absent on the occasion referred to in paragraph 5 (*b*), the particulars are to be inserted on form A.S. 537 from form A.S. 224Z. Ratings' Certificates of Service are also to be checked. These particulars are to be verified or corrected as soon as possible by inquiring of the officer or rating concerned. If any change is involved, a fresh form is to be rendered.

14. The procedure for W.R.A.N.S. officers and ratings is to be in accordance with the foregoing.

15. When members of the Army or Air Force are serving in, or attached to H.M.A. ships or establishments, they should, on arrival, be required to complete form A.S. 537 in duplicate, the particulars being noted on form A.S. 224Z. One copy of form A.S. 537 is then to be forwarded to Navy Office and the other to the Department of Army or Air as appropriate.

16. The nomination of next-of-kin under the provisions of this order, does not necessarily confer upon the member an entitlement to be granted leave concession warrants to the address of the next-of-kin so nominated. Home town for purposes of grant of Leave Concession Warrant is defined in I.P.I., Instruction 201/2.

17. This order will be reprinted for posting on Notice Boards.

18. Navy Order 439 of 1959 is hereby cancelled.

(H.P.B. 4014/21/73.)

(*Navy Orders* 439 *of* 1959 *and* 44 *of* 1960.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

26.—Radar—Display Outfits J.C.A, B, C and M Versions—Introduction of Time Base Adaptor Connector Assembly.

(*A.F.O.* 2422/1959.)

Several reports have been received by the Admiralty from H.M. ships on the requirement to remove the Time Base 72L from Display Units 51 A.G. and 51R for servicing.

2. The following item is introduced under Class/Group F.31 (N.A.T.O. Supply Classification Group 5935) in order that the Time Base can be serviced without tension being placed in the existing connectors.

Pattern.	*Description.*	*Accounting Classification.*
209043	Adaptor Connector Assembly	Permanent

3. In keeping with Admiralty practice the Adaptor Connector Assembly pattern F.31/209043 will be allowed in the R.A.N. on the basis of one per ship, irrespective of the number of displays fitted, plus 6 in number additional for Flinders Naval Depot (" L " School) and 2 in number for H.M.A.S. WATSON and 1 for West Head. Supply will be effected without demand by the (S)N.S.O. when the item becomes available.

4. The " E " List will be amended in due course.

(D.E.E. 518/51/129.)

RESTRICTED.

27.—Radar—Removal of C.R.B.F. Directors and S.T.A.A.G. Mountings during Refits.

Radar 262 units are liable to deterioration during refit periods when the associated mounting/director is removed for modification, repair or replacement, due to lack of suitable stowage space for the displaced 262 units and (in some ships) to unavailability of the ship's 262 L.M.A. for testing purposes due to defects.

2. Whenever possible, a new or repaired mounting/director will be provided in exchange for the one removed from the ship. The time required by the dockyard for this exchange is about seven days, and it is considered that for this short period adequate arrangements can be made by ship's staff for the stowage and maintenance of the 262 units. When, however, such direct exchange of mountings/directors is not feasible, the following procedure is to be applied—

(*a*) In cases where the mounting/director is removed for a period exceeding approximately seven days but within the limits of a normal refit, arrangements are to be made by ship's staff as follows—

(i) 262 units where functioning is above suspicion are to be landed by ship's staff and placed in the custody of the (Superintending) Naval Store Officer, who is to arrange suitable storage in a like manner to the procedure for Sea Store Deposit, the transaction being supported by form A.S. 331 raised by the ship's Electrical Officer. The units are to be packed in type D tropicans and a pool for this purpose has been laid down at Sydney and Melbourne.

(ii) Defective 262 units or units which, though functioning correctly, are suffering from physical degeneration through age or exposure, and minor defects which are normally within the capacity of ship's staff, will be accepted for repair by the dockyard if a defective L.M.A. or other special circumstances render repair by ship's staff impracticable within the time available.

(iii) L.M.A. units are to be dealt with as in (i) and (ii) hereof in cases where the L.M.A. itself cannot be used for an appreciable part of the refit.

(*b*) In cases where the mounting/director is removed for a period exceeding that of a normal refit (e.g., ship in dockyard control or undergoing conversion and modernization), the 262 units are to be returned to (Superintending) Naval Store Officer by the responsible authority. When the mounting/director is replaced on board, a complete set of 262 units is to be demanded from the (Superintending) Naval Store Officer: the dockyard will be responsible for both mounting/director and 262 equipment until completion of acceptance trial.

(*c*) In exceptional circumstances, ships may be instructed to land the type 262 units prior to or in preparation for a refit. In these instances ship's staff are to return the units, using form A.S. 331, to the nearest (Superintending) Naval Store Officer. On commencement of the refit the ship is to inform the dockyard that the unit has been returned. The ship (or dockyard if it is in dockyard control) is to demand new units when required for fitting on the mounting/director.

3. On all occasions when 262 radar units are removed from a mounting/director in accordance with the above instructions, care must be taken to ensure that cubicles and other radar items originally supplied for integration in the mounting/director remain in the mounting/director.

4. The success of the procedure outlined in paragraph 2 (*a*) hereof depends on—

(*a*) the accurate rendering of defect lists by ship's staff to ensure that only good 262 units are landed for the custody of the (Superintending) Naval Store Officer.

(*b*) sufficient time being allowed for ship's staff to check the units which have been stored after they and the mounting/director have been returned to the ship.

5. With regard to paragraph 4 (*a*), in order to establish beyond doubt which 262 units are defective, the pre-refit trials are to include trials of the entire system including 262 units.

6. With regard to paragraph 4 (*b*) the 262 units and the mounting/director are to be returned on board in time to allow for a period of at least one week for testing by ship's staff. The date selected for these tests must be at a time when ship's power and full electrical compliment are available, and provision for them must be made at the beginning of the refit, preferably at the refit conference.

(D.E.E. 518/51/72.)

UNCLASSIFIED.

28.—Radio Frequency Measuring.

Further to Navy Order 757 of 1959—Radio Interference, arrangements have been made with the Postmaster-General's Department for H.M.A. ships and establishments to make use of P.M.G. Frequency Monitoring and Measuring Stations in order to check radio transmitters regularly (including radar and navigational aids).

2. Facilities are available in each of the following capital cities for measuring any form of radio emission up to a frequency of 900 Mcs. P.M.G. officers welcome the opportunity to check transmissions, and can be contacted on the telephone numbers listed. Hours of operation are normally 0945 to 2130 local time on weekdays. It will be found advantageous to remain in telephone contact with the Monitoring Station throughout the test. Communications are not to be made on the frequency(s) being tested.

Place.	*Telephone Number.*
Sydney	XB 7832 or XB 7836
Melbourne	JM 9538 or JM 9539
Brisbane	XW 2414
Adelaide	9 4141
Perth	UX 1724.

3. Ships in harbour and shore establishments are to request a frequency measuring check whenever there is any doubt about the accuracy of a frequency in use. As a matter of routine, all transmitters should be tested on commonly used frequencies at least once every six months.

4. These tests should normally be carried out after refit periods, commissioning, installation of new radio equipment, &c.

5. Care should be taken to listen out beforehand in order to avoid any interference to other users when testing frequencies, and to limit actual test transmissions to a minimum.

(D.S.D. 16/208/4.)

(*Navy Order* 757 *of* 1959.)

RESTRICTED.

29.—Electricity—Shore Supplies of Electricity to H.M.A. Ships.

(*A.F.O.* 2866/1958.)

The following *amendment* is to be made to Navy Order 1047 of 1958.

Paragraph 5 (*c*)

Add the following sub-paragraphs—

" Where two or more ships are berthed alongside each other, occasions may arise when it is desired to supply them from a single A.C. supply point. This is permissible providing the ships' hulls are effectively bonded together, at not less than two points, so that the ships form one unit electrically.

If, for this purpose, the ships are linked through their internal systems via " ship to ship " boxes, it should be appreciated that a considerable voltage drop may be involved and that the supply may not be adequate for testing and tuning of equipment."

(D.E.E. 1211/51/100.)

(*Navy Order* 1047 *of* 1958.)

UNCLASSIFIED.

30.—Sealing Electric Cable.

When sealing electric cable, as outlined in A.B.R. 4 Article 1719, Chatterton's Compound or suitable bituminous compound such as A.R.T. Compound and adhesive paper may be used. Chatterton's Compound, pattern 2292, is the only compound which may be used for sealing paper insulated lead sheathed cables.

2. A.B.R. 4 will be amended.

(D.N.A.S. 519/73/26.)

UNCLASSIFIED.

31.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2358/1959.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. H.M.A. ships which are unable to comply within three months from the date of this order are to report the fact to Navy Office for instructions.

Propellant lot or Sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 2354 ..	HSC/T 124–058 ..	Q.F. 3-pdr.; Q.F. 2-pdr.
RNC 2361 ..		
RNC 2380 ..		
RNC 2352 ..	HSC/T 134–055 ..	Q.F. 3-pdr.; Q.F. 2-pdr.
RNC 2353 ..		
RNC 2357 ..		
RNC 2358 ..		
RNC 2360 ..		
RNC 2364 ..		
RNC 2368 ..		
RNC 2370 ..		
RNC 2371 ..		
RNC 2372 ..		
RNC 2378 ..		
RNC 2379 ..		
RNC 2381 ..		
RNC 2383 ..		
RNC 2384 ..		
RNC 2385 ..		
RNC 2386 ..		
RNC 2387 ..		
RNC 2388 ..		
RNC 2389 ..		
RNC 2390 ..		
RNC 2392 ..		
RNC 2399 ..		
RNC 2401 ..		
RNC 3664XD		
RNC 5222XH	HSCK/T 134–055	Q.F. 3-pdr.; Q.F. 2-pdr.; D.C.T.; Squid, A/S mortar.
RNC 986XH		
RNC 903XA	SC 109 ..	B.L. 6-in.; Q.F. 4.7-in.
RNC 1024XB	SC 061 ..	B.L. 6-in.; Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.)
RNC 1147XC	SC 048 ..	Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 4.5-in. reduced charge, Q.F. 3-pdr.
MA 3323 ..	NH 025 ..	Q.F. 40/60.

2. Attention is drawn to Article 211 of Naval Magazine and Explosives Regulations 1956, B.R. 862 and paragraphs 6, 7 and 9 of Naval Cordite Regulations, Article 53, B.R. 862A.

3. Separate instructions have been issued to R.A.N. Armament Depots.

(D.O.U.W. 729/57/34.)

UNCLASSIFIED.

32.—Armament Stores—Ammunition (including T.A.S. Stores)—Returns.

Navy Order 930 of 1959 is to be amended as follows—

Paragraph 1 (*a*)—Under heading " Details Required ".

Delete: " ensuring " in line three.

Insert: " ensuing ".

Paragraph 1 (*b*)—Under heading " Details Required ".

Delete: First and second line and *insert* in their stead—" Stock held as at the end of the month and quantity expended during the period as shown on the form supplied ".

Paragraph 2.

Delete: " In each case ".

Insert: " For returns at (*b*),".

Appendix—Under heading " Details Required ".

Delete: " Ships pyrotechnics ".

Insert: " Ships pyrotechnics, grenades, lachrymatory and chemical stores ".

Delete: " 2-in. motor ammunition ".

Insert: " 2-in. mortar ammunition ".

(D.O.U.W. 725/51/5.)

(*Navy Order* 930 *of* 1959.)

UNCLASSIFIED.

33.—Gun Mountings—4.5-in., Mark 6 Series Mounting—Sintered Filters Fitted in the Pressure Lines to Ammunition Hoist Valves.

(*A.F.O.* 2730/1959.)

Reports have been received that the sintered metal filters fitted to pusher hoists, vide Navy Order 956 of 1959 (*Gun Mountings—4.5-in., Mark* 6, 6* *and* 6* *Mod.* 1 *Mountings—Modifications to Shell and Cartridge Hoists to prevent "double stroking"*) have become choked during the initial period of running after installation.

2. A severely choked filter in the pressure supply pipe to the pilot valve (with consequent starving of oil to the control valve) may cause the hoist, if in the stand-by state, to do an unexpected up-stroke. This is due to the pressure of the oil between the choked filter and the control valve falling away due to leakage and allowing the control valve to move to the up-stroke position.

3. Commanding Officers and Authorities holding these mountings are to ensure that frequent examinations of the above filters are carried out during the initial period after fitting until they are satisfied that the systems are clean.

4. Attention is called to B.R. 922(58), page 34, concerning the running and stopping of pumps in the " Stand To " and " Relaxed " states.

(D.O.U.W. 736/59/36.)

(*Navy Order* 956 *of* 1959.)

UNCLASSIFIED.

34.—40-mm. Twin R.P. 50 Mk. 5 Mountings—Cartridge Chute.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	40-mm. Twin R.P. 50 Mk. 5 mountings.
(*c*) *Part of equipment affected*	Cartridge chute Swinging Bracket.
(*d*) *Purpose of modification* ..	To prevent seizure of the axis pin.
(*e*) *Nature of modification* ..	Oil groove and lubricator added to axis pin, item 24 0.625-in. dia. made " T " tolerance (0.619-in. to 0.621-in.). Thickness of item 21 reduced to 0.121-in.
(*f*) *Drawings*	G.R. 6758, G.R. 6759 items 21, 24 and 30.
(*g*) *By whom to be done* ..	Dockyards. As a defect.
(*h*) *When to be done* ..	At first opportunity.

To be recorded as modification No. AN. 4.

(D.O.U.W. 736/64/19.)

UNCLASSIFIED.

35.—40-mm. Single Mk. 9* Mounting—Buffer and Training Limit Switches Assembly—Lubrication.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	40-mm. single Mk. 9* mountings.
(*c*) *Part of equipment affected*	Operating mechanism for Training Buffer.
(*d*) *Purpose of modification* ..	To improve lubrication of handle assembly.
(*e*) *Nature of modification* ..	Fit a lubricator to the Forked Lever and add oil grooves to the plunger.
(*f*) *Drawings*	10014, 10671, 10675, 10679.
(*g*) *By whom to be done* ..	Dockyard. As a defect.
(*h*) *When to be done*	At the first opportunity.

To be recorded as modification No. AN. 5.

(D.O.U.W. 736/64/26.)

UNCLASSIFIED.

36.—Naval Stores (General)—Admiralty Gyro Magnetic Compasses—Switches and Caps—Introduction.

(*A.F.O.* 1430/1959.)

Experience with Admiralty gyro-magnetic compasses at sea has shown that the compass lighting switch on the binnacle and the lens caps for indicator lights on certain panels are apt to become damaged.

2. It has been decided, therefore, to add these items as detailed below, to the Rate Book and Authorized List of Naval Stores (B.R. 810), to facilitate the supply of replacements.

N.A.T.O. Group and Class.	*Pattern.*	*Description.*	*Ship's accounting Classification.*
5930	F30/205674	Switch, compass lighting, for binnacle, Pattern 8132	Permanent.
6210	F25/202756	Cap, lens, clear, for panels, Patterns 8076, 8167 and 8190	Consumable.
6210	F25/202757	Cap, lens, red, for D.A.T.E.C.'s Patterns 8136 and 8164 and panels, Pattern 8140	Consumable.

3. Switches will be supplied on a replacement basis and the caps should be demanded as required. It is not considered necessary for spare switches or caps to be carried on board.

4. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 517/51/3.)

UNCLASSIFIED.

37.—Alteration and Addition Item—H.M.A. Destroyers.

The following alteration and addition item is approved for Daring, Battle and Tribal Class Destroyers.

Daring Class Destroyers.
Class List Item No. 28 — Classification " A ".

Battle Class Destroyers.
Class List Item No. 139 — Classification " A ".

Tribal Class Destroyers.
Class List Item No. 546 — Classification " A ".

Item: The Torpedo Control Telephone Communication circuits fitted with T.C.S.D., Mk. 5 or Mk. 6 are to be amended to conform with Navy Order Diagram Issue 1/60.

Reference: Navy Office Drawing No. 1001/1188.

(D.C.C. 1211/251/6.)

UNCLASSIFIED.

38.—Alteration and Addition Item—H.M.A. Ships—Removal of 20-in. Searchlights.

The following alteration and addition items are approved for H.M.A. Ships—

Aircraft Carriers—H.M.A.S. MELBOURNE.
H.M.A.S. SYDNEY.
Class List Item No. 106 — Classification " A ".

Daring Class Destroyers.
Class List Item No. 27 — Classification " A ".

Battle Class Destroyers.
Class List Item No. 138 — Classification " A ".

Tribal Class Destroyers.
Class List Item No. 545 — Classification " A ".

A/S Frigates (Converted Fleet).
Class List Item No. 566 — Classification " A ".
" To remove and land the 20-in. searchlights and control equipment."
Note.—Weight reduction is to be reported.

A/S Frigates (Modified River).
Class List Item No. 600 — Classification " A ".

Boom Defence Vessels.
Class List Item No. 130 — Classification " A ".
" To remove and land the 20-in. searchlights and replace with 10-in. searchlights."
Note.—Change in weight is to be reported.

(D.C.C. 1215/251/13.)

39.—Naval Stores (General) (Class B, Group 11, Part E)—Plate, Angle, Pattern B11E/8127 and Plate, Fixed, Pattern B11E/8128—Deletion.

(*A.F.O.* 2668/1959.)

The following items are obsolete and will be deleted from B.R. 810, the Rate Book and Authorized List of Naval Stores.

B11E/8127 Plate, angle, adjustable, 8-in. x 8-in. x 8-in. (R.A.F. Section 3B/1875).

B11E/8128 Plate, fixed, 10-in. x 8-in. x 6-in. (R.A.F. Section 3B/1885).

2. Stocks of both patterns should be disposed of in accordance with current instructions.

3. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 506/71/41.)

UNCLASSIFIED.

40.—Naval Stores (General) (Class F, Group 3)—Bottle Transmitter, Pattern 5356MA—Continued Use for Certain Radar Applications.

(*A.F.O.* 2368/1959.)

Retransmitter Unit Interiors, " M " to " M " type, pattern F3/5357, were introduced as replacements for defective interiors of Bottle Transmitters, pattern F3/5356MA. The new pattern F3/5357 may not, however, be used for the radar applications detailed below. Neither are Retransmission Units patterns F3/5358 and F3/5359 to be used in these applications.

(*a*) High speed radar aerial bearing transmissions where two or more bottle transmitters are, at present, wired in series. In such instances, pattern F3/5356MA Bottle Transmitter is to continue to be demanded as a replacement.

(*b*) Radars type 267PW and type 1,000 series, where the interior of pattern F3/5356MA Bottle Transmitter is mounted in Control Unit Lower Right, design 2, pattern F1A/65712. Pattern F3/5357 Interior Unit cannot be mounted in this position and pattern F3/5356MA Bottle Transmitter is, therefore, to continue to be demanded as a replacement.

(D.N.A.S. 519/53/50.)

UNCLASSIFIED.

41.—Naval Stores (General) (Class F, Group 21)—New Design Weapon Control and Communication Junction Box Cases, &c.—Introduction.

(*A.F.O.* 243/1959.)

Consequent on the introduction of new type terminal units, it has been found necessary to re-design the low power junction box cases to provide increased gland facilities to suit the new units. For this purpose existing " P " type cases have been modified to provide an increased number of glands and larger diagram and tally plates. A new range of " L " type lightweight sheet aluminium cases, and associated gland plate and grommet, have also been introduced to supersede the existing " N " type.

2. The new items have been added to the Rate Book and Authorized List of Naval Stores under Section F. 21, Defence supply classification, as follows—

Pattern No.	*Description.*	*Accounting Classification.*
	Boxes, &c., for Weapon Control and Communications Circuits—case, aluminium alloy (provided with gland bosses) complete with cover—	Portable Fittings
204100	For junction box, type P1(Q)	
204101	For junction box, type P2(Q)	
204102	For junction box, type P3(Q)	
204103	For junction box, type P2(H)	
204104	For junction box, type P3(H)	
204105	For junction box, type P2	
204106	For junction box, type P3	
204107	For junction box, type P4	
204108	For junction box, type P(L)5	
204109	For junction box, type P(S)5	
204110	For junction box, type P(L)6	
204111	For junction box, type P(S)6	
	. . . . . Case, sheet aluminium alloy (provided with solid rubber grommets) complete with cover—	
200255	For junction box, type L2(H)	
204112	For junction box, type L3(H)	
204113	For junction box, type L3	
204114	For junction box, type L4	
204115	For junction box, type L5	
204116	For junction box, type L6	
204117	Gland plate attachable for use with " L " type junction boxes patterns 200255 and 204112 to 204116	
	Tension Grommets for use with " L " type junction boxes patterns 200255 and 204112 to 204116—	Consumable.
204118	No. 1 for cable diams. .120-in.–.175-in.	
204119	No. 2 for cable diams. .175-in.–.290-in.	
204120	No. 3 for cable diams. .290-in.–.385-in.	
204121	No. 4 for cable diams. .385-in.–.475-in.	
204122	No. 5 for cable diams. .475-in.–.600-in.	
204123	No. 6 for cable diams. .600-in.–.675-in.	
204124	Solid Grommet for use with " L " Type Junction Boxes patterns 200255 and 204112 to 204116	

3. Existing type " P " and type " N " Junction box cases patterns F21/60 to 81 inclusive are being marked " X " in the Rate Book and Authorized List of Naval Stores, stocks being retained to meet demands for replacement requirements in old design equipment only. Patterns F1C/92 to 101 (inclusive) junction box cases type " W " are being deleted from the Rate Book and Authorized List of Naval Stores. These boxes are only required for specific services and future requirements will be met by the special purchase of a newly developed range of type " W " boxes which will not be patternized or stocked. Any stocks held of patterns F1C/92 to 101 boxes should be disposed of in accordance with existing instructions.

4. An initial purchase of the stores referred to in paragraph 2 is being arranged for delivery to Dockyards.

5. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 4518/89/1.)

UNCLASSIFIED.

42.—Respirators Anti-Gas, Light Type "Derm"—Introduction.

(*A.F.O.* 1459/1958.)

The undermentioned facepieces anti-dermatitis for Respirators Anti-Gas Light type have been introduced into the R.A.N. The facepieces are for supply to individuals who are sensitive to the rubber of the respirator standard facepiece.

FW 705 Facepiece, light type, derm, normal-assembly.
FW 718 Facepiece, light type, derm, large-assembly.
FW 731 Facepiece, light type, derm, small-assembly.

2. These facepieces are made of black rubber and can be identified by the word "DERM" stamped in YELLOW on the exterior of the mask underneath the chin and inside the mask on the reinforced nose portion.

3. Two "DERM" facepieces are issued per person and both are held on permanent loan by the individual concerned, together with the container, haversack, &c., already held. The standard facepiece is to be withdrawn. The facepiece in use, viz., that to which the container is fitted, is to be identified by the normal method of marking. The second facepiece, which acts as a spare, is to be fitted with a tally of the usual type, secured to one end of the lower head harness buckles and is to be stowed with the recipient's kit, care being taken to avoid damage.

4. The fact that "DERM" facepieces have been issued, is to be recorded on the Medical History Sheet. When the individual is drafted to another ship or establishment the Medical Officer will, on receipt of the Medical History Sheet, inform the Anti-Gas Officer and the Divisional Officer concerned so that appropriate decontamination arrangements and periodic inspection of the facepiece can be initiated.

5. Demands for "DERM" facepieces specifying size required are to be forwarded to the R.A.N. Armament Depot, Spectacle Island, Sydney, together with a certificate from the Dermatologist that issue is necessary.

(D.O.U.W. 4428/67/158.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

43.—Forms A.D. 499 Series—Results of Balancing Electrical Circuits and Fittings.

It has been decided to introduce revised Admiralty forms D. 499 series in lieu of the existing A.D. 499 series for use in the R.A.N.

2. Demands for the new forms should be placed with Superintending Naval and Air Store Officer, Sydney, and on receipt, stocks held of existing forms are to be destroyed.

3. The revised series consists of the following forms—

Sheet.	*Title.*	*Superseded R.A.N. Sheets.*
A	Main Generators D.C.	a, K1
A1	Main Generators A.C.	—
B	Non Automatic Voltage Regulator	B, K1, D
C	Main Supply Switchgear—D.C. Generators	a, K2, C, D
C1	Local Control Panels A.C. Generators	—
D	Ring Main Tests "A" and "B" athwartship Sections and Main Supply Cables	n, D
D1	Ring Main—Breaker Control Circuits	D, a3
D2	D.C. Switchboards (H.P. Remote Control Type)—Supply Section	D, K2, n
D2(a)	D.C. Switchboards (H.P. Remote Control Type)—Distribution Section	Q4, D, n
D3	D.C. Switchboards (Low Voltage Relay Remote Control Type)	a3, a4, D, n
D4	D.C. Switchboards and Inter-connectors (Direct Control Type Switchboards)	a3, D, n
D5	A.C. Switchboards and Interconnections	—
E	Millivolt Drop Test	E
F	Feeders, Mains and Sub Mains (D.C. Ships)	K
F1	Feeders, Mains and Sub Mains (A.C. Ships)	—
G	D.C. Motors	C1, d2, d3, G, M
G1	A.C. Motors	—
H	Motor Generators (D.C./D.C.)	a1, K1
H1	Motor Generators (D.C./A.C.)	a1, K1
H2	Motor Generators (A.C./A.C.)	—
J	Projector Circuits and Lightning Conductors	b, j
K	D.C. Lighting and Power Circuits—Outgoing Circuits from junction and distribution boxes	K
K1	A.C. Lighting and Power Circuits—Outgoing Circuits from panels and distribution boxes	—
L	Spare Armatures and Rotors	L
M	Control and Communications Circuits	i, h, f, e1, M, N.n1
P	Firing Circuits	n1, P
Q	Telephone Exchanges	e, e2, Q, R
S	Emergency Supply Terminals (D.C. Ships)	—
S1	Emergency Connection Boxes (A.C. Ships)	—

(D.N.A.S. 464/55/27.)

UNCLASSIFIED.

44.—Form A.S. 537—Particulars of Next-of-Kin.

Form A.S. 537—Particulars of Next-of-Kin has been revised and is available on demand from the Superintending Naval and Air Store Officer, Sydney. A twelve months' supply of forms is to be demanded on the basis of one form for each member borne plus 50 per cent. for changes and wastage.

2. Forms A.S. 537 are to be completed and rendered in accordance with Navy Order 25 of 1960.

3. Existing stock of form A.S. 537 (revised 1957) is to be disposed of.

(H.P.B. 464/54/28.)

(*Navy Order* 25 *of* 1960.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
21st January, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

45.—H.M.A.S. EMU—Paying off.

H.M.A.S. EMU paid off into operational reserve on Thursday, 17th December, 1959.

(H.N.B. 1240/1/1.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

46.—Jewish Sacred Festivals, 1960—Leave.

(*A.F.O.* 2892/1959.)

Subject to the exigencies of the Service, leave of absence may be granted to R.A.N. personnel belonging to the Jewish Faith, who may desire to observe the following festivals during 1960—

Festival of Passover	12th to 19th April.
Festival of Pentecost	1st and 2nd June.
New Year	22nd and 23rd September.
Day of Atonement	1st October.
Festival of Tabernacles ..	6th and 7th October, and 13th and 14th October.

2. Leave should be granted, if possible, so as to enable those concerned to reach their destination by sunset the previous day in each case.

3. Leave granted is to be regarded as part of the annual leave of officers and ratings in question.

4. Navy Order 5 of 1959 is hereby cancelled.

5. This order will be reprinted for posting on notice boards.

(D.P.S. 319/1/8.)

(*Navy Order* 5 *of* 1959.)

UNCLASSIFIED.

47.—Programme of Educational Tests in the R.A.N.—1960.

The following is the programme for Educational Tests in the Royal Australian Navy during 1960—

(*a*) *Educational Test* 1—

Tuesday, 29th March.
Tuesday, 19th July.
Tuesday, 15th November.

(*b*) *Higher Educational Test*—

Monday, 4th April	..	Afternoon—English Expression.
Tuesday, 5th April	..	Forenoon—General Knowledge. Afternoon—English History.
Wednesday, 6th April	..	Forenoon—Geography. Afternoon—Navigation.
Thursday, 7th April	..	Forenoon—Practical Mathematics. Afternoon—Mechanics.
Friday, 8th April	..	Forenoon—Magnetism and Electricity.
Monday, 24th October	..	Afternoon—English Expression.
Tuesday, 25th October	..	Forenoon—General Knowledge. Afternoon—English History.
Wednesday, 26th October	..	Forenoon—Geography. Afternoon—Navigation
Thursday, 27th October	..	Forenoon—Practical Mathematics. Afternoon—Mechanics.
Friday, 28th October	..	Forenoon—Magnetism and Electricity

2. This order will be reprinted for posting on notice boards.

3. Navy Order 1040 of 1958 is hereby cancelled.

(H.P.B. 4017/7/313.)

(*Navy Order* 1040 *of* 1958.)

48.—Punishments for Offences of Drunkenness.

(*A.F.O.* 2823/1959.)

The Appendix, which is to replace Q.R. & A.I. Article **1984** forthwith, involves no change of principle in the punishment of offences of drunkenness. It amplifies the existing regulations and is intended, in particular, to safeguard against the award of punishment in excess of the maximum authorized for ratings below leading rate on first conviction for returning from leave drunk. The object of limiting the punishment in such cases is to encourage men who have had too much to drink to return on board and, in so doing, to reduce the risk of incidents ashore. When the maximum is exceeded, the Naval Board have no option but to annul the punishment.

2. Admiralty has advised that Q.R. & A.I. will be amended in due course.

3. Paragraph 4 of the Appendix should be construed in the R.A.N. as referring to " Her Majesty's Australian Ship " and to form A.S. 241 " Disciplinary Charge Sheet and Punishment Record ".

APPENDIX.

1984. Mulct of pay for drunkenness. Every rating who is found guilty of an offence of drunkenness under the Act shall be mulcted of one day's pay; and the officer trying the case may at his discretion also award stoppage of grog.

2. Ratings below leading rate shall not receive any punishment other than those referred to in Clause 1 for a *first* offence of returning from leave drunk irrespective of any previous convictions for drunkenness on shore or on board.

APPENDIX—*continued.*

3. All other offences of drunkenness tried under the Act, including drunkenness on leave if the offender is drunk when taken into custody on shore, may be punished by other punishments in addition to those laid down in Clause 1. In awarding punishment for such offences, that is to say drunkenness on board, or on shore, or on a second or subsequent occasion of returning from leave drunk, any previous convictions for drunkenness including that of a first offence of returning from leave drunk may be taken into account.

4. The charge for an offence of returning from leave drunk is to be worded " Was drunk when he returned on board Her Majesty's Ship.....from leave at....." The notation " A second offence " (or " A third offence " &c. as appropriate) is to be made underneath the charge on form S. 241 (" Report of Offender ") and in the section immediately preceding the pronouncement of sentence in any punishment warrant.

5. Offenders dealt with by the civil power for offences of drunkenness are not to be punished but should be dealt with in accordance with Article 2044.

(C.N.J.A. 321/6/10.)

UNCLASSIFIED.

49.—R.A.N. Central Canteens Fund Annual Account to 31st July, 1959.

The following revenue account for the twelve months ended 31st July, 1959 and balance-sheet as at 31st July, 1959 of the R.A.N. Central Canteens Fund are promulgated for information.

2. This order will be reprinted for posting on notice boards.

R.A.N. CENTRAL CANTEENS BOARD.

Revenue Account for Twelve Months ended 31st July, 1959.

	£	s.	d.
Levy on Sales in Service System Canteens including Chief Petty Officers and Petty Officers Canteens ..	28,921	19	6
Aust. Army Canteens Service	146	18	0
Interest	277	11	0
Donations	4	5	7
	29,350	14	1

	£	s.	d.
Grant Relief Trust Fund	10,000	0	0
E. A. Area Sports Fund	1,000	0	0
Vic. Command Sports Fund	150	0	0
MELVILLE Sports Fund	150	0	0
MORETON Sports Equipment	19	2	0
Recruit Sports Fund F.N.D.	250	5	0
Navy News	3,000	0	0
LEEUWIN Welfare	100	0	0
HARMAN Welfare	60	0	0
WAGGA Welfare	1	2	1
White Ensign Club	600	0	0
Freight on Films	938	6	11
on Stationery	0	14	1
Insurance TARANGAU and MELVILLE ..	141	14	4
Depreciation—Equipment	14	0	0
Write-Down—Souvenirs of AUSTRALIA ..	1,304	1	11
Billiard Tables	69	10	0
Audit Fees	31	10	0
General Expenses	12	12	0
Petty Cash	2[illegible]	0	0
Surplus Income	11,505	15	9
	29,350	14	1

Balance-sheet as at 31st July, 1959.

(All amounts adjusted to nearest £1.)

	£	£
Accumulated Funds as at 31st July, 1958 ..	65,764	
Add Surplus Income to 31st July, 1959 ..	11,506	
		77,270
		77,270

	£	£
Cash at Bank		24,096
Balance in Hand Recreational Film Account ..		79
Loans to Canteens, &c.		50,810
Bonds (at cost)		2,130
Souvenirs of AUSTRALIA		35
Billiard Tables		3
Office Equipment	131	
Less Depreciation	14	
		177
		77,270

(H.P.B. 212/53/8.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

50.—Naval Stores (Air) R.A.F. Vocabulary Section 28M Replacement and Introduction of Joint Service Catalogue Numbers.

(*A.F.O.* 2788/1959.)

The undermentioned reference numbers under section 28M are changed as shown. No changes of Vocabulary section, part number or description are involved.

2. H.M.A. ships and establishments are to adjust their ledgers in accordance with A.B.R. 4, Article 1812 (*g*).

3. The relevant publications will be amended.

Old Stores Reference No.	*New Stores Reference No.*
13243	1200096
13288	9403518
13086	9403519
13535	9403517
12929	9403520
14536	12931

(D.N.A.S. 603/78/78.)

UNCLASSIFIED.

51.—Naval Stores (General) (Class E, Group 8)—Rozalex—Use as a Barrier Cream and Precaution Against Dermatitis.

(*A.F.O.* 2687/1959.)

Constant contact of the skin with materials used in the degreasing of engines, machines, &c., and with oils, gasoline, &c., can have injurious effects and may give rise to dermatitis through destruction of the skin tissues and removal of the natural oils of the skin. For these reasons the use of such materials for personal cleansing purposes is to be strongly discouraged at all times.

2. In order to provide a protective barrier for the prevention of dermatitis, the following items have been provided under class E, group 8 of the Rate Book of Naval Stores—

Pattern 7720—Rozalex Barrier Cream No. 1 for protection against oils, greases, tar, paints and dry acid materials.

Pattern 7721—Rozalex Barrier Cream No. 8 for protection against acids and alkalis and aquaeous solutions.

3. These items provide satisfactory protection against most injurious substances normally met with and may be demanded for personnel constantly engaged on duties entailing contact with such substances. Barrier cream should be applied in a thin film to the hands and forearms before commencing work. It is not to be used as a cleansing agent after work.

4. Exceptionally, the above barrier creams may not provide satisfactory protection against certain special materials (e.g. synthetic resin glues). Demands for barrier creams other than those detailed above should be accompanied by a precise statement of the injurious substances against which protection is necessary.

5. In view of the high cost of barrier creams, expenditure is to be watched closely and all necessary precautions taken against misuse, e.g., for cleansing purposes after work. In civil establishments all demands are to be signed personally by heads of departments or branches. Signing officers are to satisfy themselves that the quantities demanded are essential to meet the needs of personnel indicated in paragraph 2 above. In H.M.A. ships and commissioned establishments all issues are to be made on forms A.S. 156 signed by the Head of the Department in accordance with A.B.R. 4, article 0804.

6. As stated above, barrier creams are not supplied as, and are not to be used as, cleansing agents. Their application to the skin prior to commencing work usually renders unnecessary the subsequent use of any cleanser other than warm water and soap. Proprietary brands of hand cleansers are, therefore, not be be supplied in future as a charge to public funds, except in very special circumstances, which should be reported for prior approval.

(M.D.G. 512/87/25.)

UNCLASSIFIED.

52.—Naval Stores (General) (Class E, Group 9)—Electrical Control Gear Manufactured by E.A.C. Ltd.—Silicone Fluid, Pattern E9/10230 for Overload Relay Dashpots—Patternization.

(*A.F.O.* 968/1959.)

In order to facilitate the maintenance and repair of electrical control gear manufactured by the Electrical Apparatus Co. Ltd., fitted in Daring Class Destroyers and being fitted in A/S Frigates type 12, it has been decided that Oil C.D. Medicinal Paraffin, pattern E9/92, is to be replaced by Silicone Fluid MS 200, Centistokes 100 in all type NA (Oil Timelags) overload Relay Dashpots fitted in starters of E.A.C. manufacture.

2. The undermentioned item will be added to the Rate Book of Naval Stores.

Pattern.	*Description.*	*Accounting Classification.*
E9/10230 ..	Silicone Fluid, MS 200, Centistokes 100, in 2-oz. bottles	Consumable.

3. Approval is given for Daring Class Destroyers to include an item in the next main defect list, quoting this order as authority, for the oil to be replaced and for calibration of the relays to be checked and adjusted as necessary by the refitting dockyard. The relevant " as fitted " drawings are to be amended accordingly.

4. The G.O.S.I.E.A.A. and G.M.W.D. are to arrange for similar action in connection with the relays in the starters being fitted in A/S Frigates type 12 Nos. R.A.N. 01, 02 and R.A.N. 04, 05 respectively, now under construction.

5. The relays presently fitted in the starters were carefully set up by the manufacturer prior to despatch and equal care should be exercised in checking and adjusting the calibration of the relays after the oil has been replaced. If this is done, no maintenance is necessary under normal conditions of operation. Should such maintenance be required, however, the greatest care must be exercised in cleaning and filling the dashpot before re-assembly. To assist ships' staffs in carrying out

these operations to ensure correct functioning of the overload relays after servicing, the following instructions and notes issued by Messrs. E.A.C. Ltd., in this connection are appended for information and should be rigidly adhered to—

Overload Relays.

6. These are double pole units fitted with two-rate timelag devices. Apart from checking connections, cleaning contacts and insulation and examining for freedom of operation, very little servicing should be necessary. *Dashpots should not be removed from unit during normal servicing.*

7. Where reasonably practicable, operational tests should be made. Usually it will only be necessary to check operation at 125 per cent. F.L.C., when the unit should trip in not less than ½ minute or in more than 5 minutes—Operation of both poles should be checked as either will trip the unit. (A 15 per cent. increase in current is permissible if unit fails to trip in 5 minutes but, should unit still fail to operate further examination will be necessary.)

8. Further, if unit has been operating repeatedly during normal starting, and there is no apparent fault on the system, examination will again be necessary. (Overload will trip normally in from 6 to 12 seconds at 8 x F.L.C.)

9. Only when faulty operation as described above is apparent should further servicing be attempted, and, normally this should only be done when adequate test equipment is available.

10. *Procedure to be adopted only when operation of unit is faulty.*

(*a*) Remove dashpot and piston assembly of the faulty pole (both units if in doubt)—Drain fluid from dashpot.

(*b*) Thoroughly clean dashpot and piston assembly using a degreasing agent such as carbon tetrachloride—carefully dry inside of pot and piston assembly—all parts must be scrupulously clean as the working tolerances of the parts are extremely fine.

(*c*) Refill dashpot with Silicone Fluid. MS 200 Centistokes 100 to level of shoulder inside pot. *Do not use alternative fluids or oils.* Insert piston and re-assemble to unit. Screw fully home.

(*d*) Check operation as described above for normal servicing.

11. If unit still fails to operate satisfactorily it will be necessary to replace the faulty piston and dashpot unit from spares—follow calibration instructions on tag attached to spare unit, viz.—

(*a*) Insert replacement piston and dashpot, screw fully home, determine minimum trip value (dry).

(*b*) Trip value adjustment—Add washers under spring. (Each washer raises trip 1.5 per cent. approx.)

(*c*) Remove piston—Add Silicone Fluid to level of shoulder inside pot. Recheck trip.

12. As difficulty has been experienced in correctly calibrating the relays after maintenance has been carried out, a test set has been developed for the use of ships' staffs to enable the correct settings to be made. One test set will be supplied to each ship without demand, when available.

13. Three two oz. bottles of Silicone Fluid MS 200 Centistokes 100, pattern E9/10230, will be supplied without demand to each Daring Class Destroyer and A/S Frigate type 12 by S.N.S.O., Sydney, on receipt of supplies from the United Kingdom.

(D.E.E. 512/91/10.)

UNCLASSIFIED.

53.—Naval Stores (General) (Class E, Groups 7B, 12 and 13)—Insecticides.

(*A.F.O.* 1993/1958.)

The various insecticides in use in the R.A.N. have been reviewed and it has been decided to delete from the range, the following patterns which are no longer required—

Class/Group.	*Pattern.*	*Description.*
E.12	4864	D.D.T. emulsion.
E.7b	4294	Residual spray.
E.12	5873	Space spraying aerosols.
E.13	21	Powder insecticide for bakeries.

No further quantities will be provided but existing stocks should be utilized until expended.

2. Fumite D.D.T. generators, patterns 5867, 5868 and 5869 shown in the Rate Book of Naval Stores under class E, group 12, will not be provided in the R.A.N.

3. Provision of the following insecticides only will be made in future—

Lindane (Gamma Isomer of Benzene Hexachloride) Emulsion Concentrate (class E, group 7 (b)—non pattern).

4. This emulsion replaces pattern 4864 D.D.T. emulsion and pattern 4294 residual spray.

5. For residual spray purposes, Lindane Emulsion Concentrate (16 per cent. strength) should be mixed with water in the ratio of one part emulsion to 60 parts water. (Equals 0.27 per cent. strength spray.) Spraying at greater strength is prohibited. One gallon of diluted emulsion is sufficient to spray about 2,000 square feet depending on the nature of the surface. The deposit remains active for approximately two months and frequent application is therefore unnecessary.

6. Spaces are not to be occupied whilst spraying with Lindane is in progress, or for 30 minutes thereafter. Long continued inhalation of the spray must be avoided by the operator, who should wear protective clothing, i.e., masks and gloves when working in a confined space. All protective articles must be cleansed with a detergent washing solution before being used again.

7. The diluted emulsion must not be sprayed in the vicinity of fire or naked lights. No smoking or consumption of food is to be allowed in the vicinity during the spraying operation.

8. Care should be taken that Lindane is not allowed to come in contact with foodstuffs and cooking utensils. It can, however, be used in rooms intended for storing food if the spraying is done before the food material is taken in and if duckboards are used to keep the bags, &c., off the ground.

9. Lindane emulsion contains a highly inflammable solvent. It must, therefore, be stowed in the inflammable store and the preparation of the diluted emulsion carried out in the absence of naked lights and smoking, and under well ventilated conditions, preferably in the open air.

10. Contact with the skin is to be avoided as far as possible and accidental splashes of spray residue should be washed off immediately with plenty of soap. The precautionary measures shown on the contractor's supply containers are to be studied and followed meticulously.

11. *Cockroach Control with Lindane Paint.*—A solution, prepared and used as follows, has proved completely effective in eradicating the current imago population of galley and pantry infestations of the german cockroach and the newly hatched broods for three months following treatments—

Prepare a solution (one part of the 16 per cent. concentrate to six parts of water). This solution is then painted in bands 2-in. wide, strategically placed, so that the insects must cross a band during emergence from their nesting places, e.g., a 2-in. frame around emergence cracks, or the areas behind stoves, cupboards, &c., which are difficult or impossible to thoroughly clean. An ordinary 2-in. paint brush is suitable. Protective rubber gloves are to be worn during painting. Spraying at this strength is prohibited. Precautions as in paragraph 7 are to be observed strictly. Once thoroughly dry, the paint is little affected by washing, as the active principle-gamma isomer of Benzene Hexachloride, is water insoluble. Detergents will affect the insecticidal qualities and it is fat soluble.

12. Symptoms of exposure to spray are irritation of eyes, nose and throat; these disappear rapidly upon removal from further exposure. Contamination by absorption through skin or by ingestion causes dizziness, headache, nausea, tremors and muscular weakness with their associated recognition signs. First aid recommended is to remove patient to fresh air, induce vomiting if any Lindane has been swallowed, and apply artificial respiration with oxygen if respiration is slowed. Take the patient to medical aid as soon as possible.

Anti-mosquito and Anti-fly Spray pattern 4293 (*class E, group 7b*).

13. This insecticide which contains not less than 0.3 per cent. D.D.T. and not less than 0.05 per cent. pyrethrum in kerosene, is now re-introduced particularly for indoor use in malarious and fly troubled areas. It is effective against mosquitoes, flies and other flying insects and has an immediate knock down effect. It has minimal residual value.

14. The same precautions as for Lindane Emulsion spray are applicable.

Insect Repellant Lotion—D.M.P.-Di-methyl-phthalate pattern 485/7.

15. In the R.A.N. this item is issued from the Medical Store upon demand and on advice of the Medical Officer concerned. Navy Order 398 of 1958 is relevant. Patterns 7874 and 7875 shown in the Rate Book of Naval Stores under class E, group 12, will not be provided in the R.A.N.

Powder Insecticide (*A.L.* 63, *mark* 3) *containing* 5 *per cent. D.D.T. pattern* 1752 (*class E, group* 13).

16. This powder supplied in 6-oz. and 10-lb. tins is chiefly effective against pediculi. Its use against bugs is limited by the difficulty of getting contact. Where contact can be made, however, rapid eradication is effected and bedding and clothing powdered with A.L. 63 mark 3 will remain free from infestation for a considerable period. Even where the "hideout" cannot be reached, thorough sprinkling of bedding and of crevices, &c., will ensure control of the infestation and persistence will eventually give complete eradication. A.L. 63 mark 3, whose only active principle is D.D.T. will give a kill only after several hours.

Insecticidal Lacquer (*class E, group 7B*).

17. Navy Order 271 of 1959 refers to the introduction of this item for the control of cockroach and other insect infestation.

18. The use of the more powerful and more toxic pesticides, Dieldrin, Aldrin, Chlordane, &c., and the Phosphate esters TEPP, HETP, EPN, OMPA, Parathion, Systox, Metacide, Malathon, &c., is not permitted without prior Naval Board specific instructions and then only under rigidly controlled conditions.

19. Like pattern 12127 Liquid Insecticide Sprayer (Rega Type) (class B, group 10D), should be used for directional spraying of anti-mosquito and anti-fly spray pattern 4293 into confined spaces.

20. Navy Order 452 of 1959 is hereby cancelled.

(D.N.A.S. 512/51/10.)

(*Navy Orders* 398 *of* 1958 *and* 271 *and* 452 *of* 1959.)

UNCLASSIFIED.

54.—Planned Maintenance—Instructions.

The policy of the Naval Board on the introduction of Planned Maintenance was promulgated in Navy Order 512 of 1959.

2. To facilitate the working of the Planned Maintenance System in ships, separate detailed instructions have been issued for the Hull, Marine Engineering and Ordnance Engineering departments for inclusion in existing volumes of Maintenance Schedules. These instructions, which differ only in departmental detail, are published as appendices to this order so that information on Planned Maintenance may be available in ships and establishments where Planned Maintenance is not in operation.

3. Instructions for Planned Maintenance in the Electrical Department were promulgated in Navy Order 678 of 1959.

4. In addition to the detailed instructions for operating the Planned Maintenance System, ship's officers are to be guided by the general notes set out in the succeeding paragraphs.

5. Changes in refit dates or refitting cycles make it impracticable initially to phase ship's staff Planned Maintenance with dockyard refits. It is therefore incumbent upon ship's officers, to keep under review all work coming into hand, to ensure that any necessary temporary adjustments are made to the programme to fit in with the dockyard refit, bearing in mind that the incidence of leave reduces the average availability of ship's staff labour during refits.

6. Inadequate complement or prolonged operational requirements may preclude the completion of the Planned Maintenance task for the quarter. Where such conditions arise, it will be necessary to abandon certain items of Planned Maintenance. In so doing, the responsible officer is to be guided by the circumstances that apply at the time, by the relative importance of individual items, by the general condition of the equipment concerned, and by the date of the previous examination.

7. Care must be taken, when meeting the requirements of maintenance schedules that the most practical and efficient way of carrying out the work is established, and that this is set down for guidance on future occasions. It should be noted that many tests which are readily carried out in situ require much more labour if assemblies are removed and replaced.

8. There is a wide scope for improvement in the planned maintenance of existing equipments and for improvements in design which will reduce maintenance requirements in future installations. In some cases it may be found that a purely functional test can be used to take the place of an examination requiring the dismantling of equipment. In others, small modifications may enable clearances to be established or examinations carried out without dismantling. Full use should be made of forms A.S. 2062Z—Maintenance Schedule amendment proposal and form A.S. 2022—Report of defective material and design—to ensure that the experience gained in ships is passed to the appropriate authority for action.

(D.C.C. 1209/51/2.)

(*Navy Orders* 512 *and* 678 *of* 1959.)

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C.N.O.'s 55-69/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
12th February, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos J Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

99/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

55.—Foreign Ensigns and Flags—The SEATO Emblem and Flag.

The SEATO emblem was first publicly displayed on 19 February 1959. It consists of a white shield bearing a representation of the globe outlined in blue and an olive branch in gold. The olive branch forms the vertical axis of the globe which also has a horizontal axis, four curved lines of latitude and four of longitude. The lower right-hand quadrant of the globe is coloured blue with the lines of latitude and longitude in white.

2. The shield is the symbol of defence. The globe illustrates the worldwide nature of SEATO membership and the shaded portion indicates the area afforded protection by the South-East Asia Collective Defence Treaty. The olive branch denotes peace and the benefits which flow therefrom.

3. The following instructions for use have been promulgated by SEATO Headquarters. The SEATO emblem may be displayed on a flag or car pennant (*see* diagram below), as a crest for SEATO stationery, official papers and publications as a shoulder flash or metal badge for SEATO military personnel if required, or as a cipher on the property of the South-East Asia Treaty Organization.

4. Stocks of the flag are being obtained and will be distributed in due course to Frigates (Fleet) and above, and to H.M.A.S. CRESWELL and Flinders Naval Depot (for instructional purposes).

5. Navy Order 450 of 1958 is to be noted accordingly.

(D.S.D. 37/3/6.)

(*Navy Order* 450 *of* 1958.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

56.—Education Allowance.

Navy Order 898 of 1959 is to be amended as follows—

Paragraph 14—renumber, to read " 15 ".

Paragraph 15—renumber, to read " 16 ".

Add new paragraph 14—

" 14. The Commissioner of Taxation has ruled that payments of Education Allowance are payments by way of dependents' allowances. The allowance therefore, is not taxable."

(H.P.B. 271/1/6.)

(*Navy Order* 898 *of* 1959.)

UNCLASSIFIED.

57.—Petty Expenses Claim Form.

Arrangements have been made for the printing of a standardised claim form for use by personnel in H.M.A. ships and establishments, rendering claims for petty out-of-pocket expenses, e.g., tram fares, telephone calls, meal allowances, &c.

2. Receipts for such payments will be taken on form A.S.27 and the petty expenses claim attached in support. N.A.R. & I. Article 52 (3) is relevant.

3. First distribution will be made without demand to all H.M.A. ships carrying a Cash Account.

(D.N.A. 464/80/11.)

UNCLASSIFIED.

58.—R.A.N. Relief Trust Fund Donations.

The Trustees of the R.A.N. Relief Trust Fund desire to acknowledge the receipt of the following donations to the Fund, and to express their appreciation of these generous gifts which will assist in keeping down to reasonable limits the waiting list periods attaching to Housing and Furniture loans—

	£
New South Wales Fleet Club	1,000
H.M.A.S. MELBOURNE—Ship's Fund	1,000

(D.P.S. 212/54/4.)

UNCLASSIFIED.

59.—Ratings—Training and Employment of Artificer Apprentices on Leaving the R.A.N. Apprentice Training Establishment.

The third year of training of Naval Artificer Apprentices at the R.A.N. Apprentice Training Establishment H.M.A.S. NIRIMBA was completed in June, 1959. Accordingly, the first group of apprentices entered into the scheme in July, 1956, have now commenced the Advanced Training Phase which comprises a further twelve months' training.

2. E.A. apprentices pass out from H.M.A.S. NIRIMBA at the end of 3½ years' training and E.R.A., O.A. and N.S. apprentices at the end of the fourth year.

3. On completion of the fourth year of training in June, 1960, the first Artificer apprentices will be advanced to the 5th Class rate.

4. It is desirable that all concerned should be acquainted with the progress of the Naval Artificer Apprentice training scheme and be fully aware of the commitment of ships and establishments to take an active part, in due course, in the responsibility for furthering the training of these ratings subsequent to their passing out from H.M.A.S. NIRIMBA.

5. *Ex* apprentices will be appropriated to undergo the Petty Officer's Leadership course after advancement to the Petty Officer rate.

6. The following is a brief summary of the training and employment of the various categories of Artificer Apprentice—

(*a*) *Naval Shipwright.*

(i) Ratings undergo four years' training as an apprentice at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated Naval Shipwright 5th Class.

(iii) After advancement to 5th class they will be appropriated to sea for a minimum of twelve months.

(iv) During service in the 5th class, ratings will be borne additional to complement for training and experience in practical application of their trade. If considered capable of passing during the period ratings will be permitted to take the examination for award of a Certificate of Competency appropriate to the Acting 4th Class rate. (*See* A.B.R.10, Article 1522.)

(v) Ratings will qualify for advancement to Acting Naval Shipwright 4th Class on satisfactory completion of twelve months' service in the 5th Class, subject to having completed a minimum of five years' service from date of entry.

(*b*) *Engine Room Artificer.*

(i) Ratings undergo four years' training as apprentices at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated E.R.A. 5th Class.

(iii) After advancement to 5th Class they will be appropriated to sea for a minimum of twelve months.

(iv) During service in the 5th Class, ratings will be borne, additional to complement, for training and experience in accordance with a prescribed syllabus relating primarily to Auxiliary Machinery Watchkeeping and Boiler Room Watchkeeping. If considered capable of passing during this period, ratings will be permitted to take the examination for award of an Auxiliary Machinery Watchkeeping Certificate and a Boiler Room Watchkeeping Certificate. (*See* A.B.R. 10, Articles 1467 and 1468 respectively.)

(v) Ratings will qualify for advancement to Acting Engine Room Artificer 4th Class on passing the prescribed oral examinations and on completion of twelve months' service in the 5th class, subject to having completed a minimum of five years' service from date of entry.

(*c*) *Ordnance Artificer.*

(i) Ratings undergo four years' training as apprentices at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated Ordnance Artificer 5th Class.

(iii) After advancement to the 5th Class they will undergo twelve months' training as supernumeraries. This training will include five months application training divided between the firing ranges at H.M.A.S. CERBERUS (West Head) and H.M.A.S. WATSON.

(iv) Ratings will be eligible for advancement to Ordnance Artificers 4th Class on completion of this training subject to having completed a minimum of five years' service from date of entry.

(v) Successful completion of training at (iii) above qualifies ratings professionally for subsequent confirmation as Ordnance Artificer 4th Class and for advancement up to and including Ordnance Artificer 1st Class.

(*d*) *Electrical Artificer.*

(i) Ratings undergo three years and six months' training as apprentices at H.M.A.S. NIRIMBA.

(ii) During the first half of the fourth year training apprentices will undergo final trade test, standard A.B.C.D. (at H.M.A.S. PENGUIN) and " passing out ".

(iii) Subject to " passing out " at the end of 3½ years, apprentices will be appropriated to H.M.A.S. CERBERUS and will undergo advanced training. The first group of E.A. apprentices will join H.M.A.S. CERBERUS in January, 1960. At the end of the fourth year, apprentices will be rated Electrical Artificer 5th Class.

(iv) After advancement to the 5th Class, they will remain at H.M.A.S. CERBERUS and will be borne, additional to complement for training and experience in their trade, for a period of nine months. Ratings will then be appropriated as supernumeries to sea-going ships for practical experience for a minimum period of three months.

(v) Ratings will be eligible for advancement to Acting Electrical Artificer 4th Class on completion of twelve months' service in the 5th Class subject to having completed a minimum of five years' service from date of entry.

7. The appropriate chapters of A.B.R.10 will be amended in due course to provide instructions for the advancement of apprentices.

(H.P.B. 303/35/8.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

60.—Boilers—Furnace Fuel Oil Sprayer Bodies—Modifications.

It is possible to connect a pattern 2080 Silvoflex hose to sprayer bodies pattern 6300 in a manner which appears correct when, in fact, it is *not* and, in use may allow finely-atomised fuel oil to be sprayed into the boiler room.

2. A new Silvoflex hose, pattern 12388, longer than that now in use, and which embodies a lengthened spigot (to prevent incorrect assembly in sprayer bodies) and an angled coupling-shank has been introduced and added to the Rate Book and Authorised List of Naval Stores under class B, group 8, part B, to be used in lieu of pattern 2080. Development of the new hose and the necessary resiting of fuel

coupling-blocks and hose parking-clamps on boiler fronts, to allow hose radii to be more than 5-in. minimum, have already been covered by Navy Order. Hose pattern 2080 will be marked " X " in the Rate Book. Hose pattern 12388 also will be marked " X " as the register for which it is required will not be perpetuated in new construction.

3. In connection with the supply of pattern 12388 hose and to ensure it remaining untwisted when fully retracted certain modifications are required to sprayer bodies pattern 6300. The sprayer bodies for Daring Class Destroyers have already been modified and these vessels are supplied with hoses, pattern 12388. The following modifications, as detailed in Navy Order Diagram Issue 2/60 are required to pattern 6300 sprayer bodies for Battle Class Destroyers—

(*a*) Fit to each a modified jack-screw, and a ⅛-in. spring steel clip to prevent the jack-screw becoming detached.

(*b*) Provide spanner flats adjacent to the hose coupling slot for holding sprayer while unscrewing jack-screw.

(*c*) Extend slots in body to line up with the hose spigot seating face on the sprayer body, to ensure that neck of hose is clear of sprayer body when jack-screw is tightened.

4. The work of modification to sprayer bodies is to be carried out as a defect.

5. It is important that the sprayer bodies are modified before the new hoses, pattern 12388, are received. Hoses pattern 2080, can be used with sprayer bodies with new or modified jack-screws.

6. Existing stocks of pattern 2080 hoses are to be used in H.M.A.S.'s TOBRUK and ANZAC until exhausted after which pattern 12388 hoses will be used. Arrangements have been made to ensure that, before issue, the pattern 2080 hoses will have their spigot lengths increased to $\frac{17}{32}$-in.

(D.M.E. 4505/80/186.)

UNCLASSIFIED.

61.—Evaporating and Distilling Plant—Peacock and Smith Type—40 Tons per Day Capacity—Combined Pump.

Two failures in the valve chests of the above-mentioned pumps resulting in extensive damage to guards, valves and chests, have been reported.

2. The failures have been attributed to either fracture of the valve stud pins, or the working loose of the stud nuts.

3. In order to minimise the risk of further failures, the following modifications are to be carried out at the first suitable opportunity the work being treated as a defect—

(*a*) The studs are to be made of aluminium bronze. (*See* Navy Order 980 of 1959.)

(*b*) The ends of the threaded portions adjoining the collar are to be radiused and not undercut, the matching portions in the valve guard and seat being recessed to suit.

(*c*) Split pins (as shown on the drawing) are to be fitted, care being taken not to overtighten the nuts.

(*d*) Relevant drawings held are to be modified in accordance with the foregoing quoting this order as authority.

(D.M.E. 1221/51/1.)

(*Navy Order* 980 *of* 1959.)

1111/51

UNCLASSIFIED.

62.—Planned Maintenance—Ordnance Engineering Master Record Introduction.

(*A.F.O.* 997/1959.)

The Ordnance Engineering Master Record has been introduced for the purpose of bringing together under one cover a complete summary of information concerning the ship's weapon equipments. It makes readily available and presents clearly such details of each weapon equipment or component the Ordnance Engineer Officer may require.

2. Description.—The record comprises the following sheets, held in a Kalamazoo loose leaf binder, size 17-in. x 10½-in.—

A.S. 2024 (46)—*Ordnance Engineering Master Record*—Instructions for compilation and use.

A.S. 2024 (47)—*Ship Information*—For recording refits, modernisation and general ship structure information concerning the equipment.

A.S. 2024 (48)—*Inspection Record*—For recording the inspection of the record by the Administrative Authority and the six-monthly inspection by the Commanding Officer.

A.S. 2024 (49)—*Index Sheet*—For listing on the top sheet all the equipments/systems fitted in the ship. Succeeding sheets are available if required for indexing all units of a similar type/mark or pattern where this would facilitate the use of the record.

A.S. 2024 (50)—*Record of Hours Run*—For use where continuously running items are fitted such as gyro or pump units.

A.S. 2024 (51)—*Master Sheet* (coloured pink)—For use with equipment (or system) to record identification details, general " as fitted " information and as an index of units or major items in the equipment/system.

A.S. 2024 (52)—*Reference Sheet*—For recording reference to important tests, trials and failure reports (both electrical and mechanical) rendered on Forms A.S.2022.

A.S. 2024 (53)—*Data Sheet*—For recording data obtained from important inspections, tests, trials and routines.

A.S. 2024 (54)—*A's and A's and Modification Sheet*—For use with equipments as an index and record of completion of all mechanical and electrical approved A's and A's and Modifications.

A.S. 2024 (55)—*Important Defect Sheet*—For use with equipments to include information on repetitive defects and non-standard repairs.

A.S. 2024 (56)—*Equipment/System Unit Sheet* (coloured yellow)—For recording identification details, A's and A's, modifications, important defects, &c., of smaller equipments or units of a system, e.g., 40-mm. Mk. 7 A.F.C.C., E.C.U., A.L.O. Sight, Torpedo A/S Sight, Torpedo Calculator, Bathythermograph, &c.

A.S. 2024 (57) (*Series*)—*Torpedo History Sheet*—For use with torpedoes to record manufacturing details, initial settings modifications, major tests, examinations and details of runs.

Note.—Blank sheets A.S.2024 (65) are to be used as depth charge pistol history sheets to record modifications and major overhauls and repairs to all marks of pistols.

In the absence of stocks of sheets A.S.2024 (46 to 57) blank sheets A.S.2024 (65) (66) can be substituted.

3. Records to be Compiled.—The following records are to be compiled—

(*a*) *Ship Information Forms*—A.S.2024 (47)–(50) inclusive.

One set of records using sheets 47–50 as required.

(*b*) *Equipment Forms.*—A.S.2024 (51)–(56) inclusive—

(i) One set of records for each gun mounting larger than single 40-mm. calibre, or bomb lift, using sheets 51–55 as required. (*See* note 1 below for hoists on fixed structure.)

(ii) One set of records for each A/S Mortar, Torpedo tube mounting, A/S Mortar power loading gear, A/S Directing gear or Hull Outfit using sheets 51–55 as required.

(iii) One set of records for each Gunfire control, Gun Direction, A/S Weapon Control, Torpedo Control, system fitted using sheets 51–53 and 56 as required. All Directors are to be treated as an equipment as in (1) above, records being inserted immediately behind the relevant system sheet 53.

(iv) One set of records for each Torpedo (sheet 57 series) and each depth charge pistol (sheet 65).

Note.—Sheet 56 is to be used for all equipments not included in the above, e.g., F.S. Hoists, 40-mm. Mark 7 A.F.C.C., E.C.U., A.L.O. Sight, Torpedo A/S Sight, Torpedo Calculator, Bathythermograph, &c.

4. Entries.—All entries in the Master Record are to be made clearly in ink or typed.

5. Preparation of the Master Record.—

(*a*) *Ships Building or Converting*—

(i) The initial preparation of the record will be carried out at Navy Office and forwarded through the appropriate Gunnery Equipment Stores Officer to the installation authority three months before the ship's completion date.

(ii) The responsibility for raising and inserting the initial details of equipments, other than torpedoes and D.C. pistols, rests with the officer responsible for the installation, assisted by ship's officers, and information given by the officer responsible for supplying the equipment (*see* (*a*) (iii) below).

(iii) The responsibility for raising and inserting the initial details on the sheets for torpedoes and depth charge pistols rests with the supply authorities concerned. (*See* paragraph 14.) Reference to these will be made in Index Sheets (49) during initial preparation of the record at Navy Office and ship's officers will be responsible for placing sheets 57 and/or 65 as appropriate in the section of the record on receipt.

(*b*) *Ships in Service*—

(i) The initial preparation of the record will be carried out at Navy Office and forwarded through the appropriate Gunnery Equipment Stores Officer to Commanding Officers of Ships. Ship's Officers will be responsible for entering the details particular to the equipments/systems on the sheets, using the information contained in existing records where possible, or in the case of torpedoes and D.C. pistols adding the necessary sheets. (*See* 5 (*a*) (iii).)

(ii) A report is to be forwarded to Navy Office on the preparations of the Master Record being completed. If sufficient information to complete the Master Record is not available in the ship the appropriate Supply Authorities should be requested to supply the outstanding details.

(iii) The existing Weapon Equipment Logs (form S.1151 series), which contain the history of all weapon equipments fitted in a ship, should be retained and kept up to date pending the introduction of the Master Record to the ship.

(iv) When the report on the completion of the Master Record is rendered as in (ii) above, existing records on forms S.1151 are to be destroyed.

(v) Existing Torpedo History Sheets are to be retained until forms A.S.2024 (57 series) are issued when relevant details are to be transcribed and the existing original history sheets (0 series) forwarded through the Administrative Authority to R.A.N.T.E.

6. Instructions for Keeping the Master Record in Ships.—The record sheets are to be kept up to date as follows—

By the Ordnance Engineer Officer or if not complemented or borne, by an Officer appointed by the Captain assisted by the Senior Ordnance Rating.

7. Reports on Gunnery Equipment Only.—

(*a*) Reports are to be forwarded on 1st March each year through the Administrative Authority to the Secretary, Department of Navy, giving a list of all three to five yearly examinations, modifications and alterations and additions (Ship's Staff and Dockyard) carried out during the preceding year and quoting the schedule and routine numbers for examinations with registered numbers of equipments or units concerned.

(*b*) *Ships Commissioning, Modernisation Refits or Long Refits*—Commanding Officers are to include in their first annual report a retrospective list of all modifications that have been carried out. Subsequent reports are to include the information required in paragraph 7 (*a*) above.

8. Inspection.—The Ordnance Engineering Master Record is to be produced for examination—

(*a*) Whenever an inspection is carried out by the Administrative Authority.

(*b*) By the Commanding Officer in March and September of each year.

9. Demands for Forms.—Demands for forms for ships and other authorities concerned with keeping records are to be made on the Superintending Naval and Air Store Officer, Sydney.

10. Accounting.—Master Record sheets and binder are to be included in Ordnance Engineer's List of Equipment.

11. Security Classification.—Where necessary, individual sheets of the Master Record are to bear security classifications appropriate to the type of information inserted on each sheet. When the Master Record is compiled the cover is to be stamped with a security classification for the volume. The current security regulations are to be observed in the handling and custody of the Master Record.

12. Procedure on Landing or Transfer of Equipments, Units or Sub-Assemblies.—In the case of equipments, units or sub-assemblies transferred or landed from a ship having an Ordnance Engineer's Master Record, the record sheets which are to accompany the equipment throughout its life are to be forwarded when equipments or units are transferred to the Gunnery Equipment depots, Dockyards or other authorities. The record sheets should be forwarded under separate cover and receipt acknowledged. Where no separate record sheet is held any relevant information noted in the record should be transcribed to a Unit Sheet (56) and forwarded to the recipient of the equipment. It is the responsibility of the holders of equipments, units or sub-assemblies to keep the relevant record sheets up to date.

13. Instructions for the Preparation and Issue of Forms A.S.2024 Series by G.E.S.O.'s.—As the S.1151 series Weapon Equipment Log will eventually be superseded throughout the R.A.N. by the A.S.2024 series Ordnance Engineers Master Record the following interim instructions apply—

(*a*) When an equipment, unit or sub-assembly having S.1151 series history sheets is to be issued to a ship supplied with a Master Record, the Gunnery Equipment Stores Officer is to transcribe the existing details from the S.1151 series to the A.S.2024 series. The S.1151 series history sheets are then to be destroyed.

(*b*) When an equipment, unit or sub-assembly having A.S.2024 series history sheets is issued to a ship or establishment not supplied with a Master Record the A.S.2024 series history sheets are to be inserted in the existing S.1151 weapon equipment log.

(*c*) Supply of equipments, units or sub-assemblies to ships or establishments having S.1151 series weapon equipment logs, will continue to be effected as detailed in current instructions.

14. Instructions for Preparation and Issue by Supply Authorities of Forms A.S.2024 (57)—Torpedo History Sheet and A.S.2024 (65)—Depth Charge Pistol History Sheet.—

(*a*) *Mk.* 9 *Torpedoes*—

(i) History sheets A.S.2024 (57) are to be raised by R.A.N.T.E. for torpedoes already supplied to service and for all future supply. The existing duplicate (0 series) history sheets are to be retained. for all Mk. 9 torpedoes.

(ii) Forms A.S.2024 (57) are to be completed as necessary with details extracted from the existing (0 series) duplicate history sheets, Initial entries on the reverse of forms A.S.2024 (57) are to be as follows—

Routine: Date of last depot routine and date next Air Vessel Test is due.

Run: Date torpedo is first issued after new form is raised followed by " Total runs to date ".

(iii) All movements of torpedoes are to be noted by an entry made at the bottom of the space for " Special Fittings " on the front of form A.S.2024 (57) as in the following example—

" From R.A.N.T.E. to H.M.A.S. ANZAC 28.8.58 ".

(*b*) *Mk.* 20 *and Mk.* 30 *Torpedoes.*—History sheets A.S.2024 (57A to F) are to be raised by R.A.N.T.E. for all torpedoes comprising of a separate form, for each major component. These forms will accompany the torpedo or component throughout its life. No duplicate record is to be retained by R.A.N.T.E.

(*c*) *Depth Charge Pistols.*—For all future supply of depth charge pistols, history sheets A.S.2024 (65) are to be issued. Relevant details are to be transcribed from existing history sheets (0 series) before issue.

(*d*) For procedure on receipt of forms A.S.2024 (57) and (65) in ships *see* paragraph 5 (*b*) (v).

15. Issue of Kalamazoo Binders to Supply Authorities.—Gunnery Equipment Stores Officers, Naval Armament Stores Officers and the Royal Australian Navy Torpedo Establishment will be supplied with Kalamazoo Binders for compiling the appropriate A.S.2024 series history sheet of equipments, units or sub-assemblies held.

(D.O.U.W. 464/54/6.)

UNCLASSIFIED.

63.—Admiralty Fire Control Clock Mk. 12—Modifications to Tallies on Top of Clock.

The following A.F.C.C. Mk. 12 modification is approved—

(*a*) *Ships, authorities and establishments concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Type and mark of equipment*	A.F.C.C. Mk. 12, all mods.
(*c*) *Parts of equipment affected*	Top cover of clock.
(*d*) *Purpose of modification*	To enable new drill to be introduced whereby the Range Operator presses the appropriate push whenever a corrected Salvo is fired thus enabling the Control Team to know when a range or line corrected salvo is falling.
(*e*) *Nature of modification* ..	(i) " Guns Fired " push to be retallied " Range corrected ". (ii) " Corrected Salvo " push to be retallied " Line Corrected ".
(*f*) *Drawing number or C.N.O. diagram*	Not necessary. The new tallies should conform to the existing external dimensions of the old tallies.
(*g*) *By whom to be done* ..	Dockyards. Ships' staffs should however affect a temporary modification with cardboard tallies to enable the new drill to be brought into force.
(*h*) *When to be done* ..	(i) Ships. At first available opportunity. (ii) Establishments and Store Depots. By arrangement with the nearest dockyard.

2. To be recorded as Modification A.N.1.

(D.O.U.W. 1624/13/14.)

? Ind. Stm and exercises

UNCLASSIFIED.

64.—Calibration of Guns by Radio Doppler Type 900c Muzzle Velocity Measuring Equipment.

(*A.F.O.* 1557/1959.)

Prolonged trials have proved that type 900c Muzzle Velocity Measuring Equipment is the most accurate means available to the Fleet of obtaining muzzle velocities, and when type 900c measurements are available, they are to be used in preference to the M.V./Wear curve.

Location, Maintenance and Operation of Equipment.

2. (*a*) Two sets of type 900c are held at R.A.N.T.E., Sydney, under the control of D.I.N.O. (Sydney). They are maintained and operated by the staff of D.I.N.O. (Sydney).

(*b*) It is the intention that eventually ships' staffs will carry out their own calibration, drawing the equipment as necessary from D.I.N.O. (Sydney), who will continue to maintain the equipment whilst not actually in use. To this end Inspecting Officers will instruct ships' staffs in the use of the equipment as opportunity offers during calibrations.

Frequency of Calibration.

3. Ships concerned are to calibrate—

(*a*) On commissioning, re-commissioning or as early as practicable in the Work Up.

(*b*) As soon as practicable after two series inspections.

At present it is only intended to calibrate ships fitted with 4.5-in. guns.

Requests for Calibration.

4. When a calibration is required a signal to this effect is to be sent to Captain of the Port, Sydney, giving as much notice as possible. At least 48 hours notice is required. Whenever possible an Inspecting Officer will visit the ship before a calibration in order to arrange details.

5. In the Royal Navy ships' staffs are responsible for carrying out their type 900c calibration themselves. Therefore, when serving in the Strategic Reserve, ships of the R.A.N. should include a request for technical assistance in their signals asking for the equipment.

Calibration Procedure.

6. Ideally, guns should fire three series, each on a different day, to eliminate " Day to Day " variations in Muzzle Velocity. However, ships may carry out a complete calibration in as little as one day provided that the firings are made independent by—

(*a*) Re-aligning measuring apparatus.

(*b*) Cooling and cleaning of the gun barrel between firings.

(*c*) Re-checking of propellant temperatures.

An interval of about three hours should be allowed between series. Each series for each gun will consist of one warmer round followed by five calibration rounds. A sixth calibration round may be fired if the Inspecting Officer considers it necessary owing to the spread of observed velocities in the series. One twin mounting can be calibrated in about ten minutes. In a Daring Class destroyer, all three mountings should complete one series in 45 minutes. As guns are normally measured for wear before and after a type 900c calibration (*see* paragraph 11 below) it is not desirable for ships to carry out other firings between these two wear measurements.

Embarkation of the Equipment.

7. The equipment should be embarked the day before the first calibration firing. The loading will be expedited if the ship is under a crane. This is essential in the case of a ship not fitted with davit seatings on gunhouses. A suitable davit can be supplied with the equipment. One or two T/R (Aerials) unit will be bolted to the seatings on gunhouses, depending on the class of ship being calibrated, as follows—

Daring Class.—One T/R unit on " B " gunhouse to calibrate " A " and " B " guns. A second T/R unit on " X " gunhouse to calibrate " X " guns.

Battle Class.—One T/R unit on " B " gunhouse to calibrate " A " and " B " guns.

In addition the following equipment will be embarked—

The display unit, the main A/C unit and main Power unit. These will be placed on board in some convenient place, under shelter. When selecting a site for these units it should be borne in mind that adequate power supplies of stabilised 240-volt A.C. to 110-volt A.C. will be required and that communication with the bridge is necessary. In Daring Class ships, the radio maintenance room has been found suitable.

Preparations by the Ship.

8. (*a*) The ship is to initiate the normal action regarding application for a firing area.

(*b*) Twenty-one rounds per gun will be required for the full calibration. One mark of shell only is to be used for any given calibration.

(*c*) Dry bulb temperatures of the charge stowage are to be recorded for 48 hours before each series is fired.

(*d*) Guns are to be prepared as follows before each series firing—

(i) Clean out bore using paraffin.

(ii) Dry out bore with a clean non-fluffy rag.

(iii) Soak a clean rag in oil AP 950 so that it is saturated, wrap it round a piasaba brush and pull through the bore three times.

(iv) Immediately prior to firing, wrap a clean dry rag round a piasaba and pull through once.

Calibration Team.

9. This will normally consist of an Inspecting Officer and two civilians. They will embark, align and check the equipment and will carry out the calibration.

Provision of Ammunition.

10. Ammunition allowed for type 900C calibration is in addition to the normal practice allowance.

Shell.—The following shell are suitable for Doppler calibration; *see also* paragraph 8 (*b*) above—

4.5-in. Practice SU(D) Mk. N1, N2, N3 and N4 fused 230 H.E. Mk. N3, N10 or N12 fused 230.

In peacetime, for reasons of economy, SU(D) shell should be used if available.

Charges.—It is important that the entire calibration of a ship should be done with one propellant lot. In order to avoid temperature changes, charges should be left in their magazines until required for each series.

Measurement of Guns.

11. The Deputy Inspector of Naval Ordnance, Sydney will arrange for 1-in. C. of R. measurements to be taken before and after the calibration. If the ship's movements permit, measurements after each series may be taken.

Calculation of M.V.'s.

12. M.V.'s will be calculated by the Inspecting Officer from the photographic records obtained by the equipment. Accurate M.V.'s will be passed to the ship, by signal if necessary, as soon as possible after the calibration.

Calibration Report.

13. This will be compiled by the Deputy Inspector of Naval Ordnance, Sydney, and will be forwarded to the Australian Commonwealth Naval Board (for the Director of Ordnance and Underwater Weapons), the Flag Officer Commanding Her Majesty's Australian Fleet and the ship.

Use of M.V. obtained from Calibration.

14. The detailed procedure for the use of velocities derived from calibration will be promulgated separately.

(D.O.U.W. 739/51/1.)

UNCLASSIFIED.

65.—Gun Mountings—4.5-in. Mark 6 and 6* Mountings—Modifications to Reflector Sight Drives (Mod. No. 88).

(*A.F.O.* 2781/1959.)

(*a*) *Ships, establishments and authorities concerned*	All Ships and authorities holding mountings with un-modified reflector sight drives.
(*b*) *Types and marks of mountings*	4.5-in. mark 6 and mark 6* mountings.
(*c*) *Parts of mounting affected*	Reflector sight drive.
(*d*) *Purpose of modification* ..	To provide a more efficient means of vernier adjustment in the reflector sight drive than at present fitted. (B.R. 2014C. Plates 49 and 49A refer.)
(*e*) *Nature of modification* ..	(i) To manufacture, and fit, a special taper pin, locking the existing adjusting worm assembly to the shaft (items 35, 36 and 37/N.39343). (ii) To reduce the length of the intermediate shaft from 30.15-in. to 28.775-in. (item 29/N.39343). (iii) To manufacture and fit a special vernier coupling assembly (items 30, 31, 32, 33 and 34/N.39343) to replace the intermediate coupling (item 9/N.39343).
(*f*) *Drawing numbers*	N.39343 and N.39345.
(*g*) *By whom to be done* ..	Dockyards.
(*h*) *When to be done*	Ships—At first opportunity of Dockyard Refit. Authorities—As soon as possible.

2. This modification will be carried out on R.A.N. mark 6* mountings as part modification A.N. 81.

(D.O.U.W. 736/59/40.)

RESTRICTED.

66.—Control and Direction of Aircraft—Method of Ordering Turns.

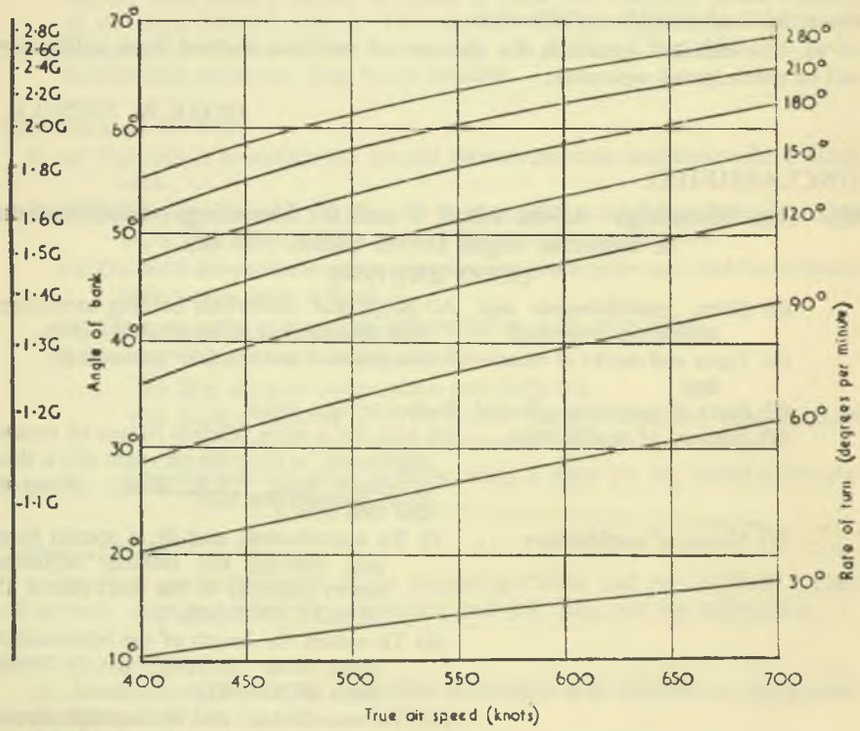
(*A.F.O.* 2846/1959.)

In passing orders for turns to aircraft it has been the practice to use " rate of turn " whenever particular accuracy was called for.

2. In modern aircraft the pilot no longer has a rate of turn indicator and will use " angle of bank " to regulate his turn. " Angle of bank " is therefore to be used in ordering turns.

3. " Angle of bank " in level turn is directly connected with the amount of " g " that the pilot may impose and there is a direct relationship between " angle of bank " and " rate of turn " at any given true air speed regardless of the type of aircraft. The graphs below show these relationships.

CONVERSION OF ANGLE OF BANK TO RATE OF TURN



GRAPH A.

Graph (*A*).

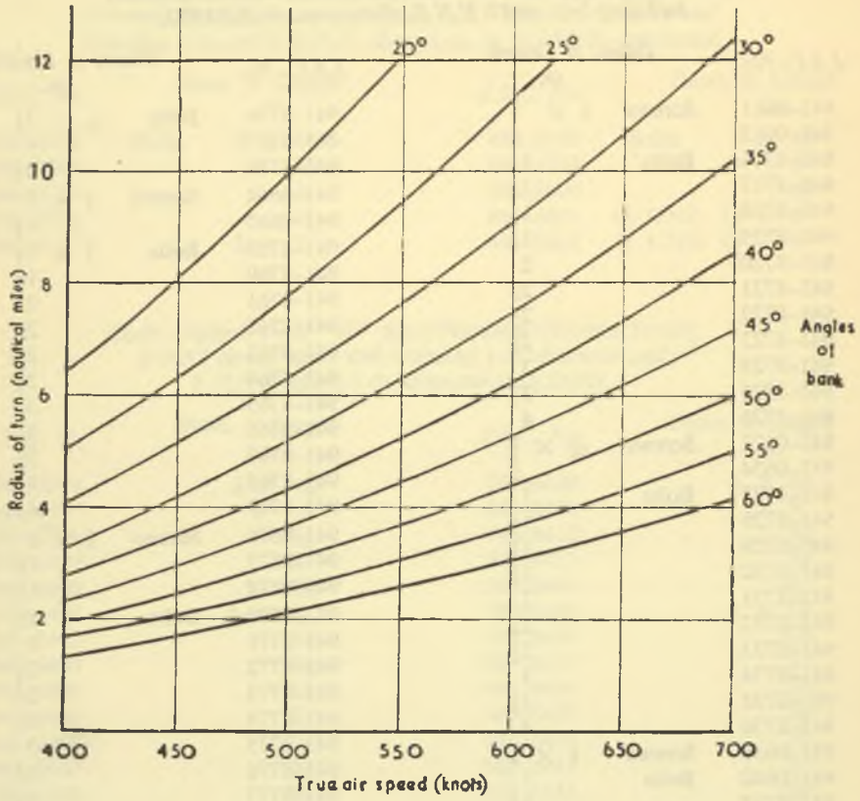
This shows the rate of turn against true air speed for various angles of bank and the values of " g ". It may be used either—

(i) to extract the correct " angle of bank " for a predetermined " rate of turn " the graph permitting exit from the intersection of " true air speed " and " rate of turn " along a horizontal line;

or

(ii) to extract the " rate of turn " for a given " angle of bank " by selecting the nearest " rate of turn " line at the intersection of " angle of bank " and " true air speed ". When this is required accurately interpolation between the " rate of turn " lines is necessary.

CONVERSION OF ANGLE OF BANK TO RADIUS OF TURN



GRAPH B.

Graph (*B*).

This shows the " radius of turn " against " true air speed " for various " angles of bank ", and is drawn so that the radius of turn can be read accurately.

(D.A.W.O.T. 1624/2/8.)

1311/57 13

UNCLASSIFIED.

67.—Naval Stores (General) (Class B, Group 2D)—Precision Bolts, Studs and Screws, Normal Series, Unified Coarse Thread—Introduction.

(*A.F.O.* 2629/1959.)

Further to Navy Order 624 of 1958, the unified fasteners detailed in the Appendix are introduced and will be added to the Rate Book of Naval Stores under class B, group 2D. These will eventually supersede similar items with B.S.F. and Whitworth threads. The accounting classification is consumable.

Appendix.

Bolts and Screws, Unified, Code " R " Steel, Precision (Normal Series), Hexagonal Head, B.S.1768, U.N.C. up to and including 1-in. and 8 U.N.S. above 1-in. to B.S.1580.

J.S.C. No.		Diam. × Length in.
941–0611	Screws	$\frac{1}{4} \times \frac{1}{2}$
941–0613		$\frac{3}{4}$
941–8716	Bolts	1
941–8717		$1\frac{1}{4}$
941–8718		$1\frac{1}{2}$
941–8719		$1\frac{3}{4}$
941–8720		2
941–8721		$2\frac{1}{4}$
941–8722		$2\frac{1}{2}$
941–8723		$2\frac{3}{4}$
941–8724		3
941–8725		$3\frac{1}{2}$
941–8726		4
941–0622	Screws	$\frac{5}{16} \times \frac{1}{2}$
941–0624		$\frac{3}{4}$
941–8727	Bolts	1
941–8728		$1\frac{1}{4}$
947–8729		$1\frac{1}{2}$
941–8730		$1\frac{3}{4}$
941–8731		2
941–8732		$2\frac{1}{4}$
941–8733		$2\frac{1}{2}$
941–8734		3
941–8735		$3\frac{1}{2}$
941–8736		4
941–0638	Screws	$\frac{3}{8} \times \frac{3}{4}$
941–0640	Bolts	1
941–8737		$1\frac{1}{4}$
941–8738		$1\frac{1}{2}$
941–8739		$1\frac{3}{4}$
941–8740		2
941–8741		$2\frac{1}{4}$
941–8742		$2\frac{1}{2}$
941–8743		$2\frac{3}{4}$
941–8744		3
941–8745		$3\frac{1}{4}$
941–8746		$3\frac{1}{2}$
941–8747		4
941–8748		$4\frac{1}{2}$
941–0653	Screws	$\frac{7}{16} \times 1$
941–8749	Bolts	$1\frac{1}{4}$
941–8750		$1\frac{1}{2}$
941–8751		$1\frac{3}{4}$
941–8752		2
941–8753		$2\frac{1}{4}$
941–8754		$2\frac{1}{2}$
941–8755		3
941–8756	Bolts	$\frac{7}{16} \times 3\frac{1}{2}$
941–8757		4
941–8758		$4\frac{1}{2}$
941–0664	Screws	$\frac{1}{2} \times 1$
941–0665		$1\frac{1}{4}$
941–8759	Bolts	$\frac{1}{2} \times 1\frac{1}{2}$
941–8760		$1\frac{3}{4}$
941–8761		2
941–8762		$2\frac{1}{4}$
941–8763		$2\frac{1}{2}$
941–8764		$2\frac{3}{4}$
941–8765		3
941–8766		$3\frac{1}{4}$
941–8767		$3\frac{1}{2}$
941–8768		4
941–8769		$4\frac{1}{2}$
941–0676	Screws	$\frac{5}{8} \times 1$
941–0677		$1\frac{1}{4}$
941–0678		$1\frac{1}{2}$
941–8770	Bolts	$1\frac{3}{4}$
941–8771		2
941–8772		$2\frac{1}{4}$
941–8773		$2\frac{1}{2}$
941–8774		$2\frac{3}{4}$
941–8775		3
941–8776		$3\frac{1}{4}$
941–8777		$3\frac{1}{2}$
941–8778		4
941–8779		$4\frac{1}{2}$
941–8803	Screws	$\frac{3}{4} \times 1$
941–8804		$1\frac{1}{2}$
941–8805		$1\frac{3}{4}$
941–8780	Bolts	2
941–8781		$2\frac{1}{4}$
941–8782		$2\frac{1}{2}$
941–8783		$2\frac{3}{4}$
941–8784		3
941–8785		$3\frac{1}{4}$
941–8786		$3\frac{1}{2}$
941–8787		4
941–8788		$4\frac{1}{2}$
941–8806	Screws	$\frac{7}{8} \times 2$
941–8789	Bolts	$2\frac{1}{4}$
941–8790		$2\frac{1}{2}$
941–8791		$2\frac{3}{4}$
941–8792		3

Appendix—*continued.*

Bolts and Screws, Unified, Code " R " Steel, Precision (Normal Series), Hexagonal Head, B.S.1768, U.N.C. up to and including 1-in. and 8 U.N.S. above 1-in. to B.S.1580—continued.

J.S.C. No.		Diam. × Length in.
941–8793	Bolts	$\frac{7}{8} \times 3\frac{1}{4}$
941–8794		$3\frac{1}{2}$
941–8795		4
941–8796		$4\frac{1}{2}$
941–8797		1×3
941–8798	Bolts	$1 \times 3\frac{1}{2}$
941–8799		4
941–8800		$4\frac{1}{2}$
941–8801	(8 UNS)	$1\frac{1}{8} \times 4$
941–8802	(8 UNS)	$1\frac{1}{4} \times 4$

Studs, Unified, Code " R " Steel Precision (Normal Series), U.N.C. thread up to and including 1-in. diameter and 8 U.N.S. above 1-in. diameter (B.S.2693).

J.S.C. No.	Diam. × Length in.
943–6396	$\frac{1}{4} \times \frac{3}{4}$
943–6397	1
943–6398	$1\frac{1}{2}$
943–6399	2
943–6400	$2\frac{1}{2}$
943–6401	$\frac{5}{16} \times 1$
943–6402	$1\frac{1}{4}$
943 6403	$1\frac{1}{2}$
943–6404	$1\frac{3}{4}$
943–6405	2
943–6406	$2\frac{1}{4}$
943–6407	$2\frac{1}{2}$
943–6408	3
943–6409	$\frac{3}{8} \times 1$
943–6410	$1\frac{1}{4}$
943–6411	$1\frac{1}{2}$
943–6412	$1\frac{3}{4}$
943–6413	2
943–6414	$2\frac{1}{4}$
943–6415	$2\frac{1}{2}$
943–6416	3
943–6417	$\frac{7}{16} \times 1\frac{1}{2}$
943–6418	$1\frac{3}{4}$
943–6419	2
943–6420	$2\frac{1}{4}$
943–6421	$2\frac{1}{2}$
943–6422	3
943–6423	$3\frac{1}{2}$
943–6424	4
943–6425	$\frac{1}{2} \times 1\frac{1}{2}$
943–6426	$1\frac{3}{4}$
943–6427	2
943–6428	$2\frac{1}{4}$
943–6429	$2\frac{1}{2}$
943–6430	$\frac{1}{2} \times 2\frac{3}{4}$
943–6431	3
943–6432	$3\frac{1}{4}$
943–6433	$3\frac{1}{2}$
943–6434	4
943–6435	$\frac{5}{8} \times 1\frac{1}{2}$
943–6436	$1\frac{3}{4}$
943–6437	2
943–6438	$2\frac{1}{4}$
943–6439	$2\frac{1}{2}$
943–6440	$2\frac{3}{4}$
943–6441	3
943–6442	$3\frac{1}{4}$
943–6443	$3\frac{1}{2}$
943–6444	4
943–6445	$\frac{3}{4} \times 2\frac{1}{4}$
943–6446	$2\frac{1}{2}$
943–6447	$2\frac{3}{4}$
943–6448	3
943–6449	$3\frac{1}{4}$
943–6450	$3\frac{1}{2}$
943–6451	4
943–6452	$4\frac{1}{2}$
943–6453	$\frac{7}{8} \times 2\frac{1}{2}$
943–6454	$2\frac{3}{4}$
943–6455	3
943–6456	$3\frac{1}{4}$
943–6457	$3\frac{1}{2}$
943–6458	4
943–6459	$4\frac{1}{2}$
943–6460	5
943–6461	6
943–6462	1×3
943–6463	$3\frac{1}{4}$

APPENDIX—*continued.*

Studs, Unified, Code " R " Steel, Precision (Normal Series), U.N.C. thread up to and including 1-in. diameter and 8 U.N.S. above 1-in. diameter (B.S.2693)—continued.

J.S.C. No.	*Diam. × Length in.*	*J.S.C. No.*	*Diam. × Length in.*
943–6464	1 × 3½	943–6470	(8 UNS) 1⅛ × 4
943–6465	4	943–6471	(8 UNS) 4½
943–6466	4½	943–6472	(8 UNS) 5
943–6467	5	943–6473	(8 UNS) 1¼ × 4
943–6468	6	943–6474	(8 UNS) 4½
943–6469	(8 UNS) 1⅛ × 3½	943–6475	(8 UNS) 5

Studs, Unified, Chrome Molybdenum (EN20A/20B), U.N.C. thread up to and including 1-in. diameter and 8 U.N.S. above 1-in. diameter (B.S.2693).

J.S.C. No.	*Diam. × Length in.*	*J.S.C. No.*	*Diam. × Length in.*
943–6476	7/16 × 1¾	943–6493	⅝ × 4¾
943–6477	2	943–6494	¾ × 2¾
943–6478	½ × 2	943–6495	3
943–6479	2¼	943–6496	3¼
943–6480	2¾	943–6497	3½
943–6481	3¼	943–6498	4
943–6482	3¾	943–6499	4¼
943–6483	⅝ × 2	943–6500	⅞ × 3¼
943–6484	2¼	943–6501	3½
943–6485	2½	943–6502	3¾
943–6486	2¾	943–6503	4
943–6487	3	943–6504	1 × 4
943–6488	3¼	943–6505	4¼
943–6489	3½	943–6506	4½
943–6490	3¾	943–6507	(8 UNS) 1⅛ × 4½
943–6491	4	943–6509	(8 UNS) 1¼ × 5¾
943–6492	4½		

(D.N.A.S. 4505/23/120.)

(*Navy Order 624 of* 1958.)

UNCLASSIFIED.

68.—Naval Stores (General) (Class B, Group 10, Part B)—Washers, Pattern B10B/8840 Series—Re-allocation of Pattern Numbers.

(*A.F.O.* 2735/1959.)

To eliminate a duplication of pattern numbers under class B, group 10, of the Rate Book and Authorised List of Naval Stores, the pattern numbers of certain washers under class B, group 10, part B have been amended as follows—

Old Pattern No.	*New Pattern No*
B10B/8840	B10B/16158
B10B/8841	B10B/16159
B10B/8842	B10B/16160

2. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 506/61/39.)

UNCLASSIFIED.

69.—Naval Stores (General) (Class F, Groups 3 and 4)—Radiac Instruments—Fresh Water Monitoring Facilities.

(*A.F.O.* 1962/1959.)

To provide facilities within the Fleet for testing fresh water for radioactive contamination, the undermentioned items have been introduced and will be added to the Rate Book and Authorised List of Naval Stores, as shown—

Class/ Group.	*Pattern No.*	*Description.*	*Ship's Accounting Classification.*
F.4 ..	000–2886	Valve, electronic CV. 2886	Consumable
F.3 ..	911–0057	Calculator, water contamination (NATO Group Class 6665)	Consumable
F.3 ..	911–0097	Calibration Jig and Source (NATO Group Class 6665)	Permanent.

2. Pattern F.4/000–2886 valve, electronic (liquid counter), is used in conjunction with the contamination meter No. 1 mk. 2, pattern F.3/911–0107 and is fitted in place of the normal geiger counter for the purpose of water monitoring. Associated jig and source, pattern F.3/911–0097, is required for necessary calibration of the contamination meter. Water contamination calculator, pattern F.3/911–0057, is designed to enable the readings of the contamination meter to be interpreted in terms of hazard, since due regard must be paid to the time after burst at which the measurements are made. The water contamination calculator is accurate only for the reading of one burst when the actual time of detonation is known.

3. Allowances and first outfit quantities of the above items, are shown in the appendix to this order. Supply will be confined, in the first instance, to ships and establishments already holding or authorised to hold the contamination meter, No. 1 mk. 2 pattern F.3/911–0107 and calibrating jig and source, pattern F.3/911–0099. Demands from ships and establishments concerned should be forwarded to Storing Yards in the normal manner. Supply to ships under construction and modernisation and conversion will be arranged by the appropriate Storing Yard. Demands should not be hastened as some time may elapse before stocks are available.

4. Detailed instructions regarding the use and stowage of the new instruments will be included in the Radiac Instruments Handbook.

5. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Ship or Establishment.	Allowances		
	F.4/000–2886 *Valve Electronic CV. 2886.**	F.3/911–0037 *Calculator, Water Contamination.**	F.3/911–0097 *Calibration Jig and Source.*
H.M.A.S. MELBOURNE	3	3	1
Destroyers (all classes)	2	2	1
Frigates (all classes)	2	2	1
B.W.V.'s, Tugs (Sea-going)	1	1	1
R.A.F.A.'s	2	2	1
G.M.G.I.D.	6	6	1
G.M.W.D.	6	6	1
H.M.A.S. PENGUIN	2	2	1
H.M.A.S. LEEUWIN } For A B C D School	1	1	1
F.N.D. } For A B C D School	1	1	1
F.N.D. " L " School	1	1	1
Other Ports under Naval Authority	..	..	..
Spectacle Island, Maribyrnong, Newington and other Naval Armament establishments	3	3	1
Victualling Yards and Naval Store Depots ..	3	3	1

* *First Outfit Quantities.*

(D.N.A.S. 517/51/41.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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COMMONWEALTH

NOTE - C.N.O's 55-69/60 and 71-130/60 not yet received for Distribution.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

408/60.

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FOR OFFICIAL USE ONLY. C.N.O. 70/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
4th February, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

408/60.

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70.—Books—Distribution of Non-accountable Publications During November, 1959.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C. " Series, contained in the Appendix to this order, have been distributed to ships and services during November, 1959.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date or Amendment No.*
Aeroplane	4th September, 1959.
Aeroplane	11th September, 1959.
Aeroplane	18th September, 1959.
Aeroplane	25th September, 1959.
Aeroplane	2nd October, 1959.
Aircraft	Volume 39, No. 2, November, 1959.

AUSTRALIAN JOINT SERVICE CATALOGUE OF TELECOMMUNICATION COMPONENTS AND VALVES.

Publication.	*Date or Amendment No.*
Serial No. 39, Section 22	Issue No. 3, October, 1959.
Serial No. 40	Amendment No. 1, October, 1959.
Serial No. 41, Section 21	Amendment No. 1, Issue No. 3, October, 1959.
D.A.R.D. Technical Circular	No. 212, dated 6th November, 1959.
Flight	4th September, 1959.
Flight	11th September, 1959.
Flight	18th September, 1959.
Flight	25th September, 1959.
Flight	2nd October, 1959.
Flight	9th October, 1959.
Flight	16th October, 1959.
A Guide to Optimum Frequencies, November, December, 1959 and January, 1960	S.100/59, Correction No. 1.
List of Propellant Lots	Amendment No. 5.
N.A.M.A.N.	N.1995–N.2005 (31.10.59).
United Nations Review	Volume 6, No. 3, September, 1959.
United Nations Review	Volume 6, No. 4, October, 1959.
United States Naval Institute Proceedings	Volume 85, No. 10, October, 1959.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.T.P. 10 (Australian Supplement)	Change No. 1.
B.R. 16	Amendment No. 37.
A.B.R. 17	Amendment No. 1.
A.B.R. 19	Australian Amendment No. A.N. 1.
B.R. 31	Chapter 42.
B.R. 31	Q.R. 1/59.
B.R. 70	July, 1959, Supplement.
B.R. 70	August, 1959, Supplement.
B.R. 125	Supplement No. 3, September, 1959.
B.R. 125	New Entries No. 3, September, 1959.
B.R. 128 (1)	Supplement No. 2, September, 1959.
B.R. 667	Third Cumulative Supplement, (25.9.59).
B.R. 667	Noter-up No. 3 (25.9.59).
B.R. 671/1955	Amendment No. 8.
B.R. 1332 (1)	Amendments 6, 7, and 8.
B.R. 1332 (2)	Amendments 5, 6, and 7.
B.R. 1332 (4)	Amendments 4, 5, and 6.
B.R. 1332 (12)	Amendments 3, 4, and 5.
B.R. 1437	Amendment 5.
B.R. 1617	5.
B.R. 1665/1956	6.
B.R. 1692	68.
B.R. 1705 (6)	8.
B.R. 1706	6.
B.R. 1736 (32)	1.
B.R. 1822 (11B)	4.
B.R. 1837 (3), Division R, Section R.A.	2.
B.R. 1837 (3), Division R, Section R.D.	4.
B.R. 1837 (3), Division R, Section R.G.	4.
B.R. 1837 (3), Division R, Section R.J.	4.
B.R. 1837 (3), Division R, Section R.K.	4.
B.R. 1837 (3), Division R, Section R.P.	2.
B.R. 1837 (3), Division R, Section R.Q.	4.
B.R. 1837 (3), Division R, Section R.X.	4.
B.R. 1837 (3), Division R, Section R.Y.	4.
B.R. 1837 (3), Division S, Section S.V.	2.
B.R. 1837 (3), Division S, Section S.W.	3.
B.R. 1837 (4), Division U, Section U.L.	4.
B.R. 1837 (4), Division U, Section U.N.	5.
B.R. 1837 (7), Division J, Introduction	15.
B.R. 1837 (7), Division L, Introduction	22.
B.R. 1837 (8), Division M, Introduction	16.
B.R. 1837 (8), Division M, Section M.G.	13.
B.R. 1847	8.
B.R. 1921 (49)	56.
B.R. 1935	6.
B.R. 1958	6.
B.R. 1986	19.
B.R. 2014C/1957	1.
B.R. 2050 (399A)	4.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 2050 (402C)	3.
B.R. 2050 (402B)	3.
B.R. 2050 (581)	4.
B.R. 2050 (641)	1.
B.R. 2050 (644)	1.
B.R. 2050 (686)	1.
B.R. 2097	4.
B.R. 2101 (1)	8.
B.R. 2101 (3)	5.
B.R. 2101 (4)	5.
B.R. 2111 (7)	1.
B.R. 2125 (3)	6.
B.R. 2125 (4)	5.
B.R. 2125 (7)	3.
B.R. 2125 (8)	3.
A.C.P. 121 C	Change No. 2.
A.C.P. 198 D	Change No. 2

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
B.R. 1971	S.C. 18/59, Correction No. 8.
B.R. 1978	S.C. 16/59, Correction No. 6.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
1086, Book 3, Part 2 (2nd Edition)	A.L. 120.
1086, Book 10 (2nd Edition)	A.L. 89.
1181, Vol. 2	(A.L. 82)–B.71
	(A.L. 88)–B.75
	(A.L. 89)–B.76
	(A.L. 90)–B.77.
1182(N), Vol. 1	A.L. 20.
1182(N), Vol. 2	(A.L. 74)–C.23.
1182A, Vol. 2, Part 1	C.34
	C.35
	D.12.
1182C, Vol. 2	(A.L. 76)–F.15.
1182C, Vol. 4, Parts 2 and 6	A.L. 21 and 22.
1275A, Vol. 2	(A.L. 87)–C.18.
1275B, Vol. 2	(A.L. 48)–D.22.
1275E, Vol. 2, Part 1	(A.L. 202)–H.53 (Alt. 1 inc.).
1275T, Vol. 2	(A.L. 18)–Z.3.
1492A, Vol. 2	(A.L. 40)–C.2.
1538, Vol. 1	A.I.L. 1/59.
1664A (2nd Edition), Vol. 1, Book 1	A.L. 9, 10, 11 and 12.
1664A, Vol. 2, Part 1	A.112
	D.18.
1664A (2nd Edition), Vol. 2, Part 3, Book 1	A.L.9, 10, 11, 12 and 13.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1664A (2nd Edition), Vol. 2, Part 3, Book 2	A.L.9, 12, 13 and 14.
1803, Vol. 2, Part 1	D.149
	E.121
	E.123.
2239A, Vol. 1	A.L. 80.
2240A, Vol. 2, Part 1	No. 114
	No. 115.
2534N, Vol. 3	A.L. 14 and 15.
2538HA, Vol. 2	(A.L. 121)–B.76.
2550B, Vol. 2, Part 1	No. 20 (A.L.2).
2898D, Vol. 2	(A.L. 23)–B.16 (Alt. 1)
	(A.L. 22)–B.17 (Alt. 1 inc.).
3158, Vol. 2	(A.L. 449)–F.3 (Alt. 14 inc.)
	(A.L. 448)–F.5 (Alt. 7 inc.).
3192B	Correction No. 41B (13.10.59)
	Correction No. 42B (20.10.59)
	Correction No. 43B (27.10.59)
	Correction No. 44B (3.11.59).
4099J, Vol. 2	(A.L. 323)–B.15
	(A.L. 325)–B.16.
4269C, Vol. 1	A.I.L. 1/59
	A.L. 64.
4288, Vol. 1, Part 2 and Vol. 5	A.L. 72.
4288, Vol. 2	(A.L. 293)–B.216
	(A.L. 305)–B.226
	(A.L. 306)–B.227
	(A.L. 307)–B.228.
4303C, Vol. 1	A.L. 113.
4303C, Vol. 2, Part 1	(A.L. 9)–B.6.
4340, Vol. 4, Part 6, Book 2 (2nd Edition)	A.L. 2.
4343B, Vol. 2	(A.L. 127)–S.2
	(A.L. 129)–S.3
	(A.L. 128)–Z.12.
4343C, Vol. 2	(A.L. 35)–C.10.
4343D, Vol. 2	(A.L. 48)–U.6
	(A.L. 49)–Z.13.
4343D, Vol. 4, Part 6	A.L. 42 and 44.
4343E, Vol. 4, Part 6	A.L. 18.
4343G, Vol. 2	(A.L. 17)–Z.5.
4343X, Vol. 2	(A.L. 44)–A.5
	(A.L. 42)–C.4
	(A.L. 47)–C.6.
4360B and D, Vol. 4, Part 3 (N) (Issue 2) (Office and Working Copies)	A.L. 9 and 10.
4360C, Vol. 5, Part 2 (N)	A.L. (RAN) 5.
4487A, B, D and E, Vol. 5, Part 2 (N) (Issue 3)	R.A.N. Supplement.
4515B, Vol. 3, Part 1	A.L. 23.
4707A, Vol. 1	A.L. 2.
A.P. (N) 378	A.L. 121 (Corrigendum).
A.P. (N) 1023 (8)	A.I.L. 2.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.P. (N) 1025	A.L. 18, 19, 19 (Erratum) and 20.
A.P. (RAN) 101	A.L. 22 and 23.
N.A.M.O. Gannet	L.7 (Issue 2) (4.8.59).
N.A.M.O. General	A.L. 73 G.30 (Issue 5) (30.7.59).
N.A.M.O. Sea Vampire	A.22 (28.7.59).
N.A.M.O. Sea Venom	X.36 (Issue 3) (4.8.59) STI/174 (23.7.59) STI/174 Diagram.
N.A.M.O. Westland Whirlwind	A.8 (Issue 2) (28.7.59).
R.A.N.A.M.O. Gannet	A.19 (September, 1959) A.20 (October, 1959) STI/RAN/65 (October, 1959) STI/RAN/75 (October, 1959).
R.A.N.A.M.O. General	A.34 (October, 1959) I.2 (Issue 3) (October, 1959) I.49 (October, 1959) R.66 (October, 1959) R.67 (October, 1959).
R.A.N.A.M.O. Ghost	SI/RAN/3 (September, 1959).
R.A.N.A.M.O. Leonides	SI/RAN/3 (October, 1959).
R.A.N.A.M.O. Sea Venom	STI/RAN/68 (September, 1959) STI/RAN/70 (October, 1959) SI/RAN/23 (October, 1959) SI/RAN/25 (October, 1959).
R.A.N.A.M.O. Sycamore	STI/RAN/37 (October, 1959).
R.A.N.A.M.O. Vampire Trainer ..	SI/RAN/19 (October, 1959).
Alvis Leonides Operation Maintenance and Overhaul Handbook	A.L. 18.
Auster Schedule of Spare Parts	A.L.9.
D.C.A. Aeronautical Information Publications	C.O.M. A.L. 24 General A.L. 32 R.A.C./3 (A.L. 19).
D.C.A. Airways Operations Instructions, Vol. 2	A.L.6 (with Corrigenda).
D.C.A. Notams	No. 10/1959 (26.10.59).
D.C.A. Operations Letters	A.T.C. 290, C.O.M. 175 (20.10.59).
R.A.F. Flight Information Publications—Catalogue of Charts—Terminal Approach Procedures	A.L. 9.
R.A.F. Flight Information Publications—Terminal Approach Procedure Charts, Far East Area, High and Low Altitude	A.L. 17 and 18 Combined Check List and Order Form (Corrected 31.10.59).
A.A.P. No. 2, A.B.C.S.C., Class 5821 ..	Sub A.L. 3 (A.L. 10402).
A.A.P. No. 2, A.B.C.S.C., Class 5825 ..	Sub A.L. 3 (A.L. 10431).
A.A.P. No. 2, A.B.C.S.C., Class 5826 ..	Sub A.L. 3 (A.L. 10400).
A.A.P. No. 2, A.B.C.S.C., Class 5830 ..	Sub A.L. 3 (A.L. 10571).
A.A.P. No. 2, A.B.C.S.C., Class 5835 ..	Sub A.L. 3 (A.L. 10434).
A.A.P. No. 2, A.B.C.S.C., Class 5840 ..	Sub A.L. 2 (A.L. 10331) Sub A.L. 4 (A.L. 10160).
A.A.P. No. 2, A.B.C.S.C., Class 5841 ..	Sub A.L. 2 (A.L. 10352).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, A.B.C.S.C., Class 5845 ..	Sub A.L. 4 (A.L. 10436).
A.A.P. No. 2, A.B.C.S.C., Class 5910 ..	Sub A.L. 3 (A.L. 10297).
A.A.P. No. 2, A.B.C.S.C., Class 5930 ..	Sub A.L. 3 (A.L. 10393).
A.A.P. No. 2, A.B.C.S.C., Class 5940 ..	Sub A.L. 3 (A.L. 10445).
A.A.P. No. 2, A.B.C.S.C., Class 5977 ..	Sub A.L. 4 (A.L. 10410).
A.A.P. No. 2, A.B.C.S.C., Class 5985 ..	Sub A.L. 3 (A.L. 10459).
A.A.P. No. 2, A.B.C.S.C., Class 5990 ..	Sub A.L. 3 (A.L. 10423).
A.A.P. No. 2, A.B.C.S.C., Class 5999 ..	Sub A.L. 3 (A.L. 10462).
A.A.P. No. 2, A.B.C.S.C., Class 6940 ..	Sub A.L. 3 (A.L. 10513).
A.A.P. No. 2, Table of Contents, (12th Edition)	Sub A.L. 92 (A.L. 10596).
A.A.P. No. 2, Group E, Section 7R (3rd Edition)	Sub A.L. 19 (A.L. 10458).
A.A.P. No. 2, Group F, Section 14A (12th Edition)	Sub A.L. 53 (A.L. 10175) Sub A.L. 53 (A.L. 10175) Erratum.
A.A.P. No. 2, Group G, Section 5F (6th Edition)	Sub A.L. 27 (A.L. 10650).
A.A.P. No. 2, Group G, Section 5U, Vol. 1 (5th Edition)	Sub A.L. 23 (A.L. 10611).
A.A.P. No. 2, Group G, Section 5U, Vol. 2 (4th Edition)	Sub A.L. 30 (A.L. 10498).
A.A.P. No. 2, Group G, Section 6A (13th Edition)	Sub A.L. 43 (A.L. 10437).
A.A.P. No. 2, Group G, Section 6B (10th Edition)	Sub A.L. 33 (A.L. 10386).
A.A.P. No. 2, Group G, Section 6C, Vol. 1 (2nd Edition)	Sub A.L. 42 (A.L. 10440).
A.A.P. No. 2, Group G, Section 6D (8th Edition)	Sub A.L. 37 (A.L. 10514).
A.A.P. No. 2, Group G, Section 6E (6th Edition)	Sub A.L. 20 (A.L. 10582).
A.A.P. No. 2, Group G, Section 6F (6th Edition)	Sub A.L. 21 (A.L. 10508).
A.A.P. No. 2, Group G, Section 106A (8th Edition)	Sub A.L. 30 (A.L. 10706).
A.A.P. No. 2, Group H, Section 128F, Vol. 1 (3rd Edition)	Sub A.L. 39 (A.L. 10161).
A.A.P. No. 2, Group H, Section 128F, Vol. 2 (3rd Edition)	Sub A.L. 36 (A.L. 10454).
A.A.P. No. 2, Group H, Section 128F, Vol. 3 (3rd Edition)	Sub A.L. 27 (A.L. 10467).
A.A.P. No. 2, Group I, Section 1 (5th Edition)	Sub A.L. 30 (A.L. 10576).
A.A.P. No. 2, Group T, Section 27B (8th Edition)	Sub A.L. 29 (A.L. 10626).
A.A.P. No. 2, Group T, Section 27F (8th Edition)	Sub A.L. 28 (A.L. 9633).
A.A.P. No. 2, Group T, Section 27G (8th Edition)	Sub A.L. 20 (A.L. 10628).
A.A.P. No. 2, Group W, Section 4C (10th Edition)	Sub A.L. 49 (A.L. 10602).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group W, Section 4D (7th Edition)	Sub A.L. 33 (A.L. 10528).
A.A.P. No. 2, Group Y, Section 10AL (5th Edition)	Sub A.L. 14 (A.L. 10569).
A.A.P. No. 2, Group Y, Section 10F (8th Edition)	Sub A.L. 32 (A.L. 10379).
A.A.P. No. 2, Group Y, Section 10H (8th Edition)	Sub A.L. 32 (A.L. 10333).
A.A.P No. 2, Group Y, Section 10K (6th Edition)	Sub A.L. 19 (A.L. 10322).
A.A.P. No. 2, Group Y, Section 10S (10th Edition)	Sub A.L. 21 (A.L. 10351).
A.A.P. No. 2, Group Y, Section 110A (5th Edition)	Sub A.L. 24 (A.L. 10416).
A.A.P. No. 2, Group Y, Section 110BB (7th Edition)	Sub A.L. 17 (A.L. 10343).
A.A.P. No. 2, Group Y, Section 110KB (7th Edition)	Sub A.L. 23 (A.L. 10428).
A.A.P. No. 2, Group Y, Section 110L (6th Edition)	Sub A.L. 23 (A.L. 10553).
A.A.P. No. 2, Group Y, Section 110LB (6th Edition)	Sub A.L. 11 (A.L. 10506).
A.A.P. No. 2, Group Y, Section 110M (4th Edition)	Sub A.L. 18 (A.L. 10380).
A.A.P. No. 2, Group Y, Section 110P (6th Edition)	Sub. A.L. 12 (A.L. 10487).
A.A.P. No. 2, Group Y, Section 110SB (6th Edition)	Sub A.L. 22 (A.L. 10332).
A.A.P. No. 2, Group Y, Section 110T (5th Edition)	Sub A.L. 11 (A.L. 10488).
A.A.P. No. 2, Group Y, Section 110U (7th Edition)	Sub A.L. 13 (A.L. 10360).
A.A.P. 121	A.L. 2 and 4.
A.A.P. 719.31, Vol. 3, Part 1 (2nd Edition)	A.L. 7.
A.A.P. 750.00, Vol. 2, Part 2	A.L. 123, 126 and 127.
R.A.A.F. M/T. Maintenance Instructions, Vol. 2	A.L. 13 and 14.
R.A.A.F. Repair and Maintenance General Instructions	A.L. 290, 291, 291 (Corrigendum), 292, 293, 297 and 302.
R.A.A.F. Special Technical Instructions ..	Armament—Bombing Equipment/10 Armament—Bombing Equipment/11 Armament—Gunnery/8 Armament—Rocket Equipment/6 Armament—Rocket Equipment/7 Fuels and Lubricants/9 Gas Turbine Fuel Equipment/6 Goblin/17 Goblin/18 Helicopter/20 Helicopter/21 Helicopter/22

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
R.A.A.F. Special Technical Instructions—*continued.*	Helicopter/23 Helicopter/24 Safety Equipment/20 Twin Row Wasp P.P./7, 8 Vampire/22 Vampire/23 Vampire/24 Vampire/25 Viper/5 Viper/6 Viper/7 Wasp Junior/7 Winjeel/18.

Title.	*Date.*
Lloyds Shipping Index	2nd November, 1959.
Lloyds Shipping Index	9th November, 1959.
Lloyds Shipping Index	16th November, 1959.
Lloyds Shipping Index	23rd November, 1959.
Lloyds Shipping Index	30th November, 1959.

(D.N.A.S. 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

408/60.—2

Title.	Date.
Lloyds Shipping Index	2nd November, 1959.
Lloyds Shipping Index	9th November, 1959.
Lloyds Shipping Index	16th November, 1959.
Lloyds Shipping Index	23rd November, 1959.
Lloyds Shipping Index	30th November, 1959.

(D.N.A.S.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar Mr 11/2

FOR OFFICIAL USE ONLY. C.N.O. 71/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
8th February, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

410/60.

UNCLASSIFIED.

71.—H.M.A. Ships and Naval Establishments—Gunnery and Underwater Weapon Equipment, Fittings, Spare Gear, Tools and Accessories—Accounting Instructions.

TABLE OF CONTENTS.

APPENDIXES.

This order promulgates instructions for the accounting of gunnery and underwater weapon equipments and spare gear in H.M.A. ships and naval establishments. These instructions supersede all previous instructions on ships' accounting for gunnery and underwater weapon equipment and all appropriate orders and instructions will be amended.

Responsibility.

2. The Ordnance Engineer Officer when appointed solely for Ordnance duties shall be responsible for meeting the requirements of the Gunnery and T.A.S. Officer (or officers detailed for these duties) for the charge and accounting of all the equipments and fittings concerned, and of the associated mechanical spare gear, tools and accessories; an officer appointed in a dual Ordnance and Marine Engineering capacity shall be responsible to the Captain for meeting these requirements; the ship's Electrical Officer shall be responsible to the Captain for meeting these requirements for the charge and accounting of the electrical spare gear, tools and accessories associated with these equipments or fittings.

3. The Gunnery material covered by this order is as follows—

(*a*) *Weapons.*—All gun and rocket mountings, inclusive of their associated auto " on " and " off " mounting electrical equipment.

(*b*) *Control.*—Directors, Director firing gear, gun-sighting telescopes and binoculars, stabilization equipment, and all fire control equipment specifically employed for gun and rocket weapons and target indication gear, inclusive of the associated auto " on " and " off " mounting electrical equipment.

4. The T.A.S. material covered by this order is as follows—

(*a*) *Weapons.*—All ahead throwing weapons, torpedo tubes, torpedo dischargers, and depth charge equipment inclusive of their associated " on " and " off " mounting electrical equipment, but excluding items shown in the Warrant of Naval Armament Stores.

(*b*) *Control.*—All torpedo, ahead throwing weapon and depth charge control equipments, together with the associated electrical equipments.

5. The officers required to undertake the responsibility for the custody and accounting of this material, as defined more precisely in paragraph 6, will vary in different classes of ships, but the following may be taken as a general guide—

(*a*) *Mechanical.*

(i) In ships where an Ordnance Engineer Officer or Officer appointed for O/E duties, is allowed by complement and is borne—
The Ordnance Engineer Officer.

(ii) In ships in which the O/E Officer or officer appointed for O/E duties is allowed by complement, but is not yet borne, and in all remaining ships—
An officer to be detailed by the Captain assisted by the senior Ordnance Rating.

(*b*) *Electrical.*

(i) In ships where an Electrical Officer is borne—
The Electrical Officer.

(ii) In remaining ships—
An officer to be detailed by the Captain assisted by the senior rating of the Electrical Branch.

(*c*) Where an officer is appointed to a ship " and for Fleet or Squadron Duties " he is not to be the Stores Accounting Officer.

(*d*) In ships where no Ordnance or Electrical Officer is borne, the Captain should give preference to an officer of the Gunnery and T.A.S. branches when selecting the officers required in paragraphs 5 (*a*) (ii) and 5 (*b*) (ii) above.

6. The following general principles should be observed for the charge of the equipments and fittings, and for the division of responsibility for the associated spare gear, tools and accessories—

(*a*) The officer named in sub-paragraphs 5 (*a*) (i) and (ii) shall have the charge of all equipments and fittings irrespective of whether or not the equipments or fittings are wholly or mainly of an electrical nature or contain electrical items or components.

(*b*) This officer shall have the custody of drawings, film negatives and prints, documents, maintenance handbooks, catalogues, pamphlets and test sheets, special tools and accessories associated with the proper upkeep and maintenance of the mechanical portion of the equipments and fittings.

(*c*) The Electrical Officer or officer named in sub-paragraphs 5 (*b*) (i) and (ii) shall have the charge and custody of all special tools, accessories and spare gear required for the proper upkeep and maintenance of the electrical portion of the equipment and fittings.

(*d*) Where drawings, film negatives and prints, documents, maintenance hand books, catalogues, pamphlets and test sheets are supplied separately for the electrical portion of the equipments and fittings, they shall be on the charge of the officer named in sub-paragraph 5 (*b*). Wherever the above are supplied bound, in composite form, to serve both the mechanical and electrical portions of the equipments and fittings, they are to be retained on the charge of the officer as in sub-paragraph 5 (*a*).

The Account.

7. An account of all receipts, returns, and stock balances must be maintained. These records are to consist of the " List of Equipment, &c." (A.D.787/A.S.473 Series) supported by ledger pages (A.S.151).

8. All accounting records (inclusive of forms A.S.151) and records of forms A.S.134, A.S.549 and A.S.331, &c., are to be held available for audit and inspecting officers and for production at periodical inspections by administrative authorities.

The Ledger—A.S. 151.

9. When an initial transaction of an item of spare gear, portable fitting or equipment shown in the forms A.D.787G, H and J occurs, accounting officers should raise a ledger page. It is not necessary to have a ledger page for every item of spare gear carried in accordance with the authorized allowances shown in the forms A.S.473/A.D.787 series, but a ledger page must be created when an initial transaction takes place, a separate page being completed for each item, all subsequent transactions for the items concerned being recorded on the same page. Form A.S.151—" Ledger

Page for Consumable Stores "—is to be used for this purpose and a notation is to be made in the " List of Equipment, &c." of the creation of each such page and its serial number. The top line of the stock sheet would show—

(*a*) In column 3 under " Received "—

The quantity allowed initially in the " List of Equipment, &c." unless this figure differs from the stock actually on board at the time. Where this differs, supporting documents should show the actual stock.

(*b*) In column 4 under " Issued "—

The quantity of the item expended or returned to the Gunnery Equipment Store.

(*c*) In column 5 under " Remains "—

The stock remaining on board.

10. All headings, &c., applicable on the A.S.151 should also be filled in.

11. Ledger pages raised to support transactions in items not included in the List should be guarded separately as an " Occasional " ledger.

12. Ledger pages are to show—

(*a*) Authorized allowance as shown in the List of Equipment.

(*b*) Receipts and issues as they occur.

(*c*) Adjustments consequent on stocktaking.

(*d*) Stock balances.

13. When stores are received on board as a result of a Stores Demand (form AS.134) the date and the voucher number should be entered and the stock balance calculated.

14. Posting of the account is the duty of the officer-in-charge of the stores, subject to the control of the Commanding Officer.

15. All entries are to be made in ink and are to be clearly legible. Postings are to be made as far as possible on the same day as the stores are received and vouchers are to be dated in ship's series. The ledger folio serial number is to be endorsed in the appropriate column of the voucher.

16. Erasures and overwritings are not to be made in the ledgers. If any alteration is necessary and the mistake is discovered before the next posting is made, the original entry is to be ruled through without making it illegible and the correct entry written on the line immediately below it and initialled.

17. If an incorrect posting is discovered after another posting has been made on the ledger sheet and involves a series of incorrect " Remains " (*see* example below), the following procedure is to be followed—

(*a*) Strike through and initial the first incorrect " Remains " with a vertical line.

(*b*) Strike through subsequent " Remains " resulting therefrom.

(*c*) Strike through and initial the last incorrect " Remains ".

(*d*) Insert correct " Remains " on the line immediately below.

Initials.		Denom. of Qty.....Rate.....			
Date.	Voucher No.	Received.	Issued.	Remains.	Date.
2.1.57	G7/57	58	—	58	
8.2.57	Appropriated	—	10	Initial –4|6–	
12.2.57	G22/57	2	—	4|8	
17.3.57	Appropriated	—	6	4|2	
19.3.57	G36/57	14	—	–5|6– Initial	
—	—	—	—	58	

18. Forms A.S.151 required for Gunnery and Underwater Weapons Equipment accounting are to be demanded on form A.S.134 from the Gunnery Equipment Stores Officer, Sydney, and accounted for in the same was as spare gear.

LIST OF EQUIPMENTS, PORTABLE FITTINGS, SPARE GEAR, DRAWINGS, ETC.—A.D.787/A.S.473 SERIES.

(Short title: Lists of Equipment, &c.)

19. A List of Equipment, Portable Fittings, Spare Gear, &c., will be issued to ships on completion of construction, modernization or conversion. They will be prepared by the General Manager, Garden Island Dockyard (G.E.S.O.).

20. A List of Equipment will also be issued to establishments as applicable. These Lists of Equipment are to be initially prepared by the General Manager, Garden Island Dockyard (G.E.S.O.) for establishments in New South Wales, all others as directed by Navy Office.

21. Lists in draft form will be forwarded to Navy Office for approval prior to printing and distribution.

22. The following information is provided by the List of Equipment, &c.—

(*a*) The List of Equipment, &c., provides accounting officers with a record of the equipment, portable fittings, spare gear drawings, instruction books, test sheets, statistics files, &c., which they have in their charge on board.

(*b*) They are compiled from allowance shown in the B.R.226A, B and C series and B.R.227 as well as from preliminary lists of spare gear and other lists, &c., when B.R.'s, &c., have not been issued. These lists also include items which experience has shown need to be carried and which have been approved by the Naval Board.

(*c*) Authorized allowance which must be accounted for are shown on forms A.D.787G, A.D.787H, A.D.787J.

(*d*) Items are designated, where appropriate, by the letters " R " (returnable to the supplying authority when a replacement is demanded), or " C " (consumable—return to supplying authority is not required).

23. " Custody Lists " can be prepared by the accounting officer for any portable fittings on his charge which are in the custody of a " user ". This is to be prepared in duplicate for use by the accounting officer and the " user ".

24. Definitions and instructions for the use of forms comprising the List of Equipment are as follows—

Form.	*Identity No.*	*Instructions for Use.*
(*a*) Memorandum of instructions	A.D.787A/A.S.473A	To be inserted inside the cover of the List.
(*b*) Index	A.D.787B	To be arranged with main classes of equipment in alphabetical order.
(*c*) Certificate A .. (First Charge)	A.D.787C/A.S.473C	To be signed on the date of acceptance of the vessel.
(*d*) Certificate B .. (Transfer between accounting officers)	A.D.787D/A.S.473D	Reports of stocktaking are to be rendered upon supersession of accounting officers.
(*e*) Certificate C .. (Transfer to dockyard control)	A.S.787E/A.S.473E	When a List of Equipment, &c., is closed, a survey and stocktaking of equipment, &c., on board is to be carried out by dockyard officers in association with ship's officers. Certificate C is to be completed, and the accounting officer is to furnish an explanation of differences. All drawings held are to be returned to the dockyard.
(*f*) Statement of Drawings and Instruction Books	A.D.787G	To include all drawings, instruction books, &c., supplied. To be arranged alphabetically with standard nomenclature.
(*g*) Schedule of Ship's Equipment	A.D.787H	To include a description of each equipment installed in the ship whether or not fittings and spare parts are recorded in the List of Spare Gear (A.D.787J). To be arranged in alphabetical order with standard nomenclature. Equipment Comprising a set or installation are to be detailed under the heading of the set or installation. Accessories and special tools are to be listed following the equipment to which they belong.

Form.	*Identity No.*	*Instructions for Use.*
(*h*) Itemized List of Spare Gear	A.D.787J	To include all items allowed as " C " spares. To be detailed under the general headings of equipment shown in the Schedule of Equipment (Form A.D.787H).

25. Distribution of the Ordnance Engineer's and Electrical Officer's Part (II) List of Equipment, &c., is as follows—

Copy No. 1 (Master Copy) ..	Navy Office.
Copy No. 2 (Yard Copy) ..	Gunnery Equipment Stores Officer, Garden Island.
Copy No. 3 (Fair Copy) ..	Ship or Establishment.
Copy No. 4 (Working Copy) ..	Ship or Establishment.

26. Other authorities may obtain No. 2 copies on loan from the Gunnery Equipment Stores Officer, Garden Island Dockyard, when they are required.

27. Copies being raised for the first time are to be in the hands of the responsible accounting officers as early as possible to enable checking to take place before acceptance of the ship.

28. Deficiencies on the " List of Equipment, &c." first being raised and mustered are to be listed on separate sheets, numbered, signed, dated and attached to the Certificate of Acceptance, forms A.D.787C/A.S.473C.

Amendment of Lists of Equipment, etc., and as " As Fitted " Drawings.

Section 1—H.M.A. Ships.

Action by Ship's Staff consequent on Alterations and Additions.

29. Amendments to Electrical Officer's (Part II) and Ordnance Engineer's Lists of Equipment, &c., consequent upon alterations and/or additions carried out by ship's staff (C.O.R. Article 288 refers) are to be reported by Commanding Officers to the General Manager, Garden Island, on form A.S.197/A.D.526 in triplicate. Serial number of an alteration and addition item, or other authority causing amendment is to be quoted on the relevant amendment voucher.

30. When alteration and addition action is to be effected by a refitting authority, the Captain is to allocate and insert a form A.S.197/A.D.526 ship's serial number against the alteration and addition item recommended to be undertaken during the refit period (C.O.R. Article 288, clause 5 refers). The ship's serial number allocated will be utilized by the refitting authority in the raising of the subsequent amendment voucher (form A.S.197/A.D.526).

Action by Refitting Authorities consequent on Alterations and Additions.

31. Amendments, consequent upon alterations and/or additions carried out by refitting authorities, are to be reported by refitting authorities to the General Manager, Garden Island, on form A.S.197/A.D.526. Refitting authorities are to enter the ship's serial number as allocated in paragraph 30 on the relevant form A.S.197/A.D.526.

32. On receipt in H.M.A. ships of the triplicate copy of form A.S.197/A.D.526, the accounting officer concerned is to verify such amendments and acquaint the refitting authority of any discrepancies between the items shown on the amendment sheets and those actually added or abated. After investigation, revised amendment sheets, if found necessary, are to be raised by the refitting authority and forwarded to the General Manager, Garden Island, for distribution.

Allowance of special stores and spare gear.

33. When the completion of an alteration and/or addition affects special or other stores or spare gear carried on board or kept in reserve, or on deposit in dockyards, action is to be taken—

(*a*) to arrange for modification of the items as necessary by ship's staff or by the dockyard, or

(*b*) to forward proposals for the utilization or disposal of stores or spare gear no longer suitable or required for the purpose for which provided.

Errors and Ambiguities.

34. Errors and ambiguities, other than those referred to in paragraph 32, are to be reported on form A.S.197/A.D.526 (copies as indicated, paragraph 29) to the General Manager, Garden Island, showing the corrections considered necessary to the List of Equipment, &c. The necessity for the corrections is to be concisely explained. The form A.S.197/A.D.526, together with remarks, if necessary, of dockyard officers, who are to sign amendments concurred in, is then to be forwarded to Navy Office for consideration. If approval is given to the correction of the List of Equipment, &c., the form will be distributed from Navy Office.

Distribution of Forms A.S.197/A.D.526.

35. Amendment vouchers (form A.S.197/A.D.526) will be distributed as follows—

Original —to Navy Office for insertion in Navy Office copy of List of Equipment, &c.

Duplicate—to General Manager, Garden Island, for insertion in yard copy of List of Equipment, &c.

Triplicate—to ship for insertion in ship's copy of List of Equipment, &c.

Co-ordinating Authority.

36. The General Manager, Garden Island, is the recording and co-ordinating authority for Lists of Equipment, &c., for H.M.A. ships.

Section 2—Establishments.

Additions and Abatements.

37. Additions to and abatements from Lists of Equipments, &c., are to be reported on form A.S.197/A.D.526 in triplicate to the Secretary, Department of the Navy, by the Captain or officer-in-charge showing the amendments to be made in the Lists of Equipment, &c. The authority supporting an amendment is to be quoted.

Errors and Ambiguities.

38. Errors and ambiguities are to be reported on form A.S.197/A.D.526 in triplicate showing the corrections considered necessary to the Lists of Equipment, &c. The necessity for the corrections is to be concisely explained.

Distribution of Forms A.S.197/A.D.526.

39. Amendment vouchers (form A.S.197/A.D.526) will be distributed as follows—

Original —to be inserted in Navy Office copy of the List of Equipment, &c.

Duplicate—to General Manager, Garden Island, for insertion in the Gunnery Equipment Depot copy of the List of Equipment, &c.

Triplicate—to establishment for insertion in the establishment copy of List of Equipment, &c.

Section 3—" As Fitted " Drawings.

Amendment of " As Fitted " drawings.

40. When " As Fitted " drawings require amendment consequent upon an alteration and addition to existing arrangements, drawings are to be returned to the refitting authority where, after co-ordinating action, they will be corrected together with Navy Office and yard copies. Form A.S.549 is to be used for transfer of the custody of the drawings during this action.

Section 4—General Instructions.

41. A manuscript return, raised in duplicate in respect of each List of Equipment, &c., is to be rendered half-yearly in January and July by Captains and officers-in-charge, the original being forwarded to the Secretary, Department of the Navy, and the duplicate copy to the General Manager, Garden Island. It is to include the following data—

(*a*) Serial numbers on forms A.S.197/A.D.526 raised or allocated during the preceding half-year together with a precis of the amendments.

(*b*) Serial numbers of forms A.S.197/A.D.526 raised or allocated prior to the preceding half-year, approved triplicate copies of which have not been received. Known reasons for non-receipt are to be remarked upon.

(*c*) Serial numbers of reports of stocktaking rendered during the preceding half-year.

(*d*) Serial numbers of reports of stocktaking rendered but not yet approved.

(*e*) Changes in accounting officers.

Nil returns are required.

42. When items are transferred to or from Lists of Equipment, &c., from or to Naval Store or other account, the registered numbers of forms A.S.549 or other transfer vouchers are to be quoted on forms A.S.197/A.D.526 raised to amend the Lists of Equipment, &c.

43. When items are transferred from one List of Equipment, &c., to another, separate Forms A.S.197/A.D.526 are to be raised to amend each List of Equipment, &c. The page and line of the other List affected is to be shown on each form A.S.197/A.D.526 in addition to the page and line of the List amended thereby.

44. The body and index of Lists of Equipment, &c., are to be kept corrected.

45. Lists of Equipment, &c., are to be amended in ink in accordance with approved form A.S.197/A.D.526 immediately after receipt of the forms. An approved form is one that has either been signed by the appropriate dockyard officer and countersigned by the General Manager, Garden Island, or approved at Navy Office. The serial number and date of the approved A.S.197/A.D.526 is to be inserted in the remarks column of the List of Equipment, &c., adjacent to the amendment made.

46. When the action has been completed, the forms A.S.197/A.D.526 are to be inserted and guarded in the envelope at the back of the List of Equipment, &c., for production when the account is audited.

47. If the alteration to the List of Equipment, &c., adds to the quantity of items allowed, accounting officers are to raise Demand forms (A.S.134) and forward them to the nearest Gunnery Equipment Depot to enable their stock to be brought to the approved allowance.

48. If the alteration to the List of Equipment, &c., abates equipment from the stores carried, forms A.S.331—Requisition for Survey—are to be raised and the stores returned as soon as possible to the nearest Gunnery Equipment Depot. The form is to state the reason for return of the stores quoting the serial number of the form A.S.197/A.D.526.

49. Page and line in, or allocated for insertion in, the List of Equipment, &c., are to be shown opposite each item on form A.S.197/A.D.526.

LANDING ON DEPOSIT OF EQUIPMENT, PORTABLE FITTINGS, SPARE GEAR, ETC.

50. Ship's equipment, portable fittings, spare gear, &c., are not to be landed on deposit without Naval Board approval, except where immediate action is necessary when covering approval of the Naval Board is to be sought as early as practicable.

51. As a general principle, approval will not be given to the landing on deposit, or the removal from their proper positions, of fittings which have been installed as a result of war or sea-going experience. Such fittings comprise depth charge fittings, shell racks, stowage fittings and articles of a similar nature.

52. Items landed temporarily for any purpose whatsoever are not to be abated from ship's Lists of Equipment, &c., form A.S.197/A.D.526 is, however, to be raised in the usual manner by the responsible ship's accounting officer for all items landed on deposit and a suitable notation is to be made against the particular item in the List of Equipment, &c.

53. Items approved to be landed on deposit are not to be considered as compensating weights for alterations and additions.

RENEWAL OF LISTS OF EQUIPMENT, ETC. AND " AS FITTED " DRAWINGS.

Lists of Equipment, &c., for H.M.A. Ships.

54. When renewal of a List of Equipment, &c., is considered necessary, an item for the work is to be included by the ship concerned in the Main Defect List.

55. On completion of reprinting, the new List of Equipment, &c., is to be forwarded to and distributed by the General Manager, Garden Island, as co-ordinating authority.

Lists of Equipment, &c., for Establishments.

56. When renewal of a List of Equipment, &c., is considered necessary, the matter is to be reported to the Secretary, Department of the Navy.

" As Fitted " Drawings.

57. When renewal of a drawing is considered necessary, an item for the work is to be included by the ship concerned in the Main Defect List.

DEMANDS AND SUPPLY PROCEDURE—GENERAL INSTRUCTIONS—SHIPMENT ISSUES AND DIRECT ISSUES.

58. All ships and establishments should use form A.S.134—Stores Demand—for demanding all equipment and related spare parts. Only items for one equipment may be demanded on one form A.S.134. The procedure to be adopted by the demanding service is given below.

SHIPMENT ISSUES.

59. Raise form A.S.134 in quintuplicate (copies no. 1, 2, 3, 4 and 5) referring as necessary to the appropriate part or folio of the B.R.226 Series—Establishment of Spare Parts, Tools and Accessories for Gunnery Equipment. Particular attention should be given to the following points—

(*a*) All forms A.S.134 should be numbered serially throughout each calendar year. The serial number of all forms A.S.134 is to be prefixed by the following departmental group letters—

G. .. Gunnery Mechanical.
U.W. .. Underwater Mechanical.
G.L. .. Electrical connected with gunnery equipment.
U.W.L. .. Electrical connected with underwater equipment.

These group letters will be included in the marking on the outside of the package in which the gear is supplied and will facilitate identification on receipt.

(*b*) The reason for demand and/or special authority should be shown clearly and briefly in the space provided.

(*c*) Separate demands should be raised for items of equipment lost by accident, neglect, or otherwise. Such demands must be signed by the Commanding Officer and forms A.S.126 raised (*see* paragraphs 93 to 100) the serial numbers of these forms being quoted on the corresponding forms A.S.134.

(*d*) Each article demanded should be given an item number in the column provided, item numbers commencing with " 1 " on each demand.

(*e*) When a series of demands is forwarded as a batch to the same supplying authority, only the last demand of the series (except for demands for articles lost or not allowed by establishment) need be signed by the demanding officer. The serial numbers of the demands comprising the entire batch should be indicated on the copy which is signed. Each of the remaining demands should bear a cross reference to the serial number of the signed demand.

(*f*) All alterations should be initialled by the demanding officer.

(*g*) To prevent misuse of a partly filled form, the unused space is to be cancelled by drawing a horizontal line beneath the last item and joining this to the base of the form with a diagonal line.

(*h*) Note details of the demand in ship's accounting records (*see* also paragraphs 9 to 18).

(*i*) Send copies no. 1, 2, 3 and 4 of form A.S.134 to the appropriate Gunnery Equipment Depot.

(*j*) Retain copy no. 5 of form A.S.134 as ship's copy. This is to be retained in the pad. These copies constitute a convenient and ready reference to all items of equipment demanded (i.e. " dues in ").

(*k*) Any items not understood or cancelled will be referred back to the demanding service on form A.D.479—Demand Rejection Note.

(*l*) When—

(i) The " date required by " cannot be met, or

(ii) The demand cannot be satisfied locally, such demands will be forwarded by the Gunnery Equipment Store to the Director of Ordnance and Underwater Weapons (" Q " Section) for necessary action and a stores demand observation (form A.D.479A) forwarded to ship concerned giving details of the delay.

(*m*) When the items to be supplied have been packed and the necessary shipping arrangements have been made, the supplying authority will forward copy no. 4 of form A.S.134 giving details of the arrangements. On receipt, check this with copy no. 5 of form A.S.134 and file temporarily for reference.

(*n*) Copy no. 3 of form A.S.134 should be received at the same time as the package containing the items of equipment. Where possible the form will be placed in a waterproof envelope (A.P.4632) and tacked underneath the lid of the container.

Notes.—(1) When one form A.S.134 covers the contents of more than one package, copy no. 3 of the A.S.134 will be placed in the package containing the largest number of items, the number of the package in which the vouchers have been enclosed being noted on the packing notes enclosed in the other packages concerned.

(2) When items are despatched loose, the vouchers may be forwarded to the consignee by post.

(3) When an order is fulfilled in instalments, copy no. 3 of form A.S.134 will be enclosed with the first consignment and a notation made on it of the number of each item actually supplied. At the same time a transcript A.S.134 will be made out by the Depot for the balance of the items due to complete the order. Copy no. 3 of this transcript A.S.134 will be enclosed with the second consignment, again with a notation of the number of items supplied if this does not complete the order, and a transcript A.S.134 will again be made out for the balance. This procedure will be continued until the order is finally completed.

(*o*) Check contents of the package with copy no. 3 of form A.S.134.

(*p*) Compare copies no. 3 and 4 of form A.S.134.

(*q*) Complete certificate on the reverse of copy no. 4, form A.S.134, and return immediately to the supplying Gunnery Equipment Store.

(*r*) Complete action as regards ship's accounting (enter in A.S.151, &c.).

(*s*) The number of the ledger page of each item demanded must be inserted adjacent to the item on the no. 3 copy of the A.S.134 to enable ready checking by auditors.

(*t*) File copy no. 3 of form A.S.134 in serial number order and retain for the remainder of the commission.

(*u*) When the demand is fully satisfied, mark copy no. 5 of form A.S.134 " transactions completed " and retain until a change is completed in accounting officers.

DIRECT ISSUES.

60. When personal application for items of equipment is made, the procedure to be followed is similar to that outlined in paragraph 59, i.e.—

(*a*) As sub-paragraphs 59 (*a*) to (*g*).

(*b*) As sub-paragraph 59 (*h*).

(*c*) As sub-paragraph 59 (*i*), except that the demand will be taken by hand to the supplying depot. If it is not convenient to issue the item of equipment at the time of handing in the demand, the supplying store or depot will inform the demanding service when the item is ready for collection.

(*d*) As sub-paragraph 59 (*j*).

(*e*) As sub-paragraph 59 (*k*).

(*f*) The person collecting the item of equipment must give a temporary receipt on copies no. 1 and 2 of form A.S.134.

(*g*) Receive the item of equipment and copies no. 3 and 4 of form A.S.134. Copy no. 4 which will bear the " issue authorized " stamp, is to be used in lieu of a pass note and, if necessary, is to be produced for inspection by the yard or depot police. It should not, however, be surrendered to the police but is to be taken on board with the equipment.

(*h*) The accounting officer is to check items of equipment against copy no. 3 of form A.S.134.

(*i*) After comparing quantities and descriptions shown on copies nos. 3 and 4, the accounting officer is to complete certificate on the reverse of copy no. 4 and return it to the supplying authority immediately.

(*j*) Complete action as regards ship's accounting (form A.S.151, &c.).

(*k*) File copy no. 3 of form A.S.134 in serial number order.

61. The following points apply to both shipment issues and direct issues—

(*a*) The administrative authority may nominate particular stores or depots to which a demanding service should forward demands. When in doubt concerning the correct store or depot to which demands should be forwarded, ships should request instructions from their administrative authority. Ships on passage should not demand supplies on intermediate ports of call unless the requirement is extremely urgent.

(*b*) Before raising a demand, regard should be given to the local fleet facilities for the repair of a defective item. It should be borne in mind that the time taken to obtain a replacement for a defective item may necessarily be longer than the time required to render the item fully serviceable within the Fleet's own resources. In cases of doubt, the ship's administrative authority should be consulted.

(*c*) Care should be taken that demands are made on the appropriate supplying source, e.g., demands for naval store items which are rate book articles and which may be components of machinery equipments are to be made through the Supply Officer or other storekeeping officer on an R.A.N. Store Depot. Machinery assemblies which may contain naval store components need not be broken down but should be demanded from a Gunnery Equipment Store.

(*d*) When items of a ship's " C " spares are appropriated for work undertaken by a dockyard, demands for replacements should be raised by the ship concerned and not by the dockyard. All such demands should be overstamped or endorsed by the ship " For.....Dockyard Account " and " Defect List Item No.....". Against the latter the date and colour of the defect list should be given.

(*e*) The " date required by " panel should be used to indicate the priority of requirements. The following procedure should be used—

(i) *Urgent demands*—These should be limited to requirements affecting the fighting efficiency of the ship. If delivery is required within ten days the demand should be signalled, unless the demand can be satisfied as a direct issue. When action by signal is necessary, Form A.S.134 should first be raised and the demand serial number quoted in the signal with all the necessary details from the form A.S.134. A copy of the signal should be passed to the administrative authority for information. All copies of the form A.S.134 should be clearly marked " This demand confirms my..... (D.T.G. of signal) ".

If action by signal is not necessary, the specific calendar date by which delivery is required should be underlined in red.

(ii) *Demands for refit purposes*—A specific calendar date should be given.

(iii) *Other demands*—For non-urgent demands (including, for example, routine demands to replace spares appropriated) either the panel may be left blank or an approximate date (e.g., mid-June, early December) should be inserted. Demands which have the panel left blank will be treated as requiring satisfaction within two or three months.

(iv) *Indefinite priorities*—Indefinite priorities such as " urgently required " or " as soon as possible " should not be used.

(*f*) Details of the quantities allowed by establishment and of the stocks remaining on board must be inserted in the space provided on form A.S.134. When no establishment has been promulgated, the word " NONE " should be inserted in the appropriate panel. Demands will be returned by the supplying authority if this instruction is not complied with.

(*g*) To ensure the utmost economy and the distribution of available stocks to the best advantage of the Fleet as a whole, **demands must not be made in excess of established allowances and hoarding of stocks against possible emergency is to be avoided.** Unless reasonably explained on the form A.S.134, when the sum of the quantity demanded and the quantity remaining is in excess of the quantity allowed by establishment, the supply authority will amend the quantity demanded to create the correct balance.

(*h*) When items have special protective wrappings which should not be broken until the items are required for use, it should be assumed, for accounting purposes, that these packages contain the items indicated on the identification label on the outside.

(*i*) Any items or part quantities which cannot be supplied immediately will be transcribed to separate single line forms A.S.134 by the supplying yard or depot. The registered numbers of the transcripts concerned will be shown on the " parent " demand in the transcript number panel.

(*j*) Should it be necessary to send hasteners or enquiries to a depot or store concerning equipment demanded on form A.S.134, the serial number of the demand and the item number of the description and, when known, the depot registered number and package number, must be quoted. Form A.S.143 is to be used for this purpose, unless signal action is justified.

(*k*) Forms A.S.134 should be signed by the technical department officer who has custody of the spare gear. Where no such officer is borne, the Commanding Officer, or another officer delegated by him, should sign.

(*l*) When goods are despatched in a case marked " Not to be opened until required for use ", the forms A.S.134 will be attached to the outside of the case by means of a metal cover. For accounting purposes, until the case is opened, it is to be accepted that the case contains the items shown on the form A.S.134.

62. When the stores are to be taken on charge, they are first to be physically checked against the voucher which is then posted to the ledger. The ledger page no. is to be noted on the voucher (e.g. 28/3) adjacent to the appropriate item and the voucher then guarded in form A.S.128 (Guard Book for Supplies).

63. When seals of packages are unbroken, the contents as stencilled or labelled are to be taken as correct. If, when opened, the contents of a package are found to differ from the label, the latter is to be returned to the supplying authority with particulars of the discrepancies.

64. If delay occurs in the receipt of vouchers, certificate vouchers on form A.S.549 should be raised and posted to the ledger. On receipt of the official voucher, it should be guarded with the certificate voucher after annotation of appropriate details.

65. When stores are taken off charge, the vouchers are posted to the ledger. The ledger page no. is to be noted on the voucher adjacent to the appropriate item and the voucher then guarded in form A.S.129 (Guard Book for Returns).

Supply Between H.M.A. Ships.

66. When H.M.A. ships in company are remote from a supplying depot and one ship urgently requires stores which another ship has in stock and can and will supply, the supplying ship is to raise forms A.S.549—" Demand, Supply or Receipt Note for Occasional Supplies "—in quintuplicate, boldly endorsed " GUNNERY EQUIPMENT SPARES ".

67. These forms are to be serially numbered throughout the year in a similar manner to forms A.S.134 as in sub-paragraph 59 (*a*).

68. Separate vouchers are to be prepared for returnable and consumable items.

69. The five vouchers are to be marked and used as follows—

(*a*) Copy no. 1 is to be marked " Supply Note " and retained by the consignee for debiting the store account.

(*b*) Copies nos. 2, 3 and 4 are to be marked " Receipt Note " and signed by the consignee and returned to the consignor. Copy no. 2 is to be retained by the consignor with the " Ship's Copy " (*see* sub-paragraph (*c*) below). Copies nos. 3 and 4 are to be forwarded to the Director of Ordnance and Underwater Weapons, Department of the Navy, Victoria Barracks, Melbourne.

(*c*) Copy no. 5 is to be marked " Ship's Copy ", and retained by the consignor with the signed " Receipt Note " which should be used for crediting the store account. If, however, there is liable to be delay in obtaining a receipt from the consignee, the ledger (A.S.151) should be posted from the ship's copy, in which case the ship's copy should be held outstanding until the receipted copy no. 2 has been received and compared with it. This procedure enables the ledger page to remain a practical stock record.

70. The transfer of returnable items from one ship to another is to be made only in exceptional circumstances and with the approval of the appropriate administrative authority. If in an emergency the approval cannot be obtained before the transaction takes place, it is to be obtained subsequently.

Supply to H.M. Ships, Merchant Ships or other Repayment Services.

71. When the supply of Gunnery Equipment by H.M.A. ships is to a service other than the Royal Australian Navy, two additional copies of the A.S.549 are to be raised and forwarded with copies 3 and 4 (*see* paragraph 69 (*b*)) to the Director of Ordnance and Underwater Weapons, Department of the Navy, Victoria Barracks, Melbourne, to enable repayment to be claimed from the demanding authority. (Attention is drawn to Naval Financial Regulations and Instructions, article 218.)

Return Procedure.

72. When an item or spare part is demanded and the defective item or spare part is to be returned, form A.S.331—Requisition for Survey—is to be used. This form is also to be used when returning items carried in excess of establishment, e.g. on de-storing or found during muster or stocktaking. Only items relating to one equipment or sub-assembly should be returned on one form A.S.331. Consumable non-accountable items *vide* Navy Order 58 of 1959, are not to be included on forms A.S.331. The procedure to be adopted is as follows—

(*a*) Raise form A.S.331 in sextuplicate (copies no. 1, 2, 3, 4, 5 and 6). Particular attention should be given to the following points—

(i) All forms A.S.331 should be numbered serially throughout each calendar year.

(ii) The reason for applying for the survey should be shown clearly and briefly in the space provided.

(iii) When the item is retained on board until a replacement is received, the serial number of the relevant form A.S.134 for the replacement demanded must be quoted on all copies of the form A.S.331.

(iv) Each separate description should be given an item number in the column provided, item numbers commencing with " 1 " on each form A.S.331.

(v) When a series of forms A.S.331 is forwarded as a batch to the same supplying authority only the last demand of the series need be signed by the returning officer. The serial numbers of the forms comprising the entire batch should be indicated on the A.S.331 which is signed; each of the remaining forms should bear a cross reference to the serial number of the signed form.

(vi) All alterations should be initialled by the returning officer.

(*b*) Note details in the ship's accounting records (form A.S.151, &c.).

(*c*) Forward copies no. 1 and 2 of form A.S.331 to the depot or authority supplying the replacement or, alternatively, to the appropriate Gunnery Equipment Store.

(*d*) Send the items and copies no. 3, 4 and 5 of form A.S.331 to the return store of the appropriate store or depot.

(*e*) Retain copy no. 6 of form A.S.331 as ship's copy.

(*f*) Receive copy no. 4 of form A.S.331 from the depot, &c., and file as temporary receipt.

(*g*) Receive copy no. 3 of form A.S.331 from the depot, &c., as final receipt. Any discrepancies should be raised at once with the depot.

(*h*) Clear transaction in ship's accounting records (form A.S.151, &c.).

(*i*) Destroy copy no. 4 of form A.S.331 and file copy no. 3 of form A.S.331 permanently in serial number order.

73. Special care should be taken that all standing orders are strictly adhered to when serviceable or defective valuable articles, or items of a secret, confidential or restricted nature are returned. In no circumstances should such articles be included in packages containing general items. Whenever practicable they should be taken by hand to the appropriate return store and a receipt obtained from the person in charge. Alternatively they should be despatched by registered post or some other equally secure method.

74. The preservation and packing of defective items are generally to be carried out with as much attention as for new equipment. In many instances additional care in packing a damaged item is necessary to prevent further damage in transit.

75. Shipping should be arranged in conjunction with the local N.S.O. Packages should be clearly marked to the Gunnery Equipment Stores Officer.

76. All defective items classified " returnable " and returned on form A.S.331 must be clearly identified and a label giving all available information attached to each item.

77. Defective " consumable " spares should be brought to produce on board and useful salvage or arisings disposed of in accordance with local orders.

78. Forms A.S.331 should be signed by the technical departmental officer who has custody of the spare gear. Where no such officer is borne the Captain or another officer delegated by him, should sign.

Returnable Items.

79. When a returnable item is appropriated to make good a defect, the defective item is to be returned to the ship's store in exchange for the serviceable one.

80. The defective item may be recorded in a book kept for the purpose. This book would not be an account but a convenient record of defective spare gear, which can be amended if the item is repaired by ship's staff and replaced in stock.

Package Markings.

81. Gunnery equipments and associated gear are normally landed at the Gunnery Equipment Store of the nearest dockyard for onward despatch if necessary. On rare occasions the need may arise for despatch to be arranged by the ship. Careful attention to the package markings is essential to ensure safe delivery and to facilitate the task of the Naval Store Officer at a yard or base who co-ordinates all local transport arrangements. He receives all consignments arriving at the yard and then distributes them as necessary. He also co-ordinates all out-going consignments to ensure economical use of transport. He will, if necessary, obtain the allocation of any shipping space.

82. After the gear has been packed ready for despatch, the local Naval Store Officer should be contacted.

83. In all cases, stores are to be clearly marked or labelled as follows—

(*a*) Name of ship returning the stores.

(*b*) Depot or base to which the stores are consigned.

(*c*) Date of despatch and authority (if any).

The markings are to be legible; chalk must not be used.

Conveyance Notes.

84. It is important that on all occasions when stores are handed to a third party for conveyance to their destination, a receipt of all packages and loose articles (if any) is to be obtained at the time of the transaction.

85. In a locality where there is no Gunnery Equipment Stores Depot, the local Naval Stores Officer will normally be the authority who arranges onward transport of the stores of their destination, but if ships are required to arrange their own transport, the following forms are to be used—

(*a*) *By Sea*—
- Form A.D.78 .. Shipping Notes.
- Form A.D.79 .. Bill of Lading.

(*b*) *By Rail*—
- Form A.D.80 .. Consignment Note.
- Form A.S.559Z .. Railway Consignment Note.

(*c*) *By Air or Road*—
- Form A.S.559Y .. Cartage Warrant.
- Form A.D.80 .. Consignment Note.

86. As an extemporized receipt for occasions where paragraph 84 does not apply, form A.S.331 can be adapted.

87. When stores are despatched by rail, the following particulars are to be included on the consignment note (form A.S.559Z) in addition to the other information called for—

Truck Number.
Name of Ship (destination).
Date of Despatch.

88. Consignment notes are to be forwarded on the same day as the stores are despatched.

Stores received after trans-shipment en route.

89. When stores from a Gunnery Equipment Depot or other source of supply are delivered to an establishment after trans-shipment *en route* by a local agent acting for the Department of the Navy, a receipt is to be transmitted to the agent without delay stating the number of packages, &c., received and specifying any damage or deficiency. This receipt is additional to the endorsement on the bill of lading or other receipt required by the master of the freight ship, carrier, &c., or by the original sender of the stores.

Stores Received for Conveyance Only.

90. When stores are shipped in one of H.M.A. ships for conveyance only, either from a depot or from another ship, they are not to be taken on charge but a receipt is to be given for the packages and loose articles taken on board.

91. If the stores are subsequently trans-shipped to another of H.M.A. ships or to another vessel for conveyance to the consignee, the officer transferring the stores is to clear his responsibility by obtaining from the officer to whose charge they are transferred, a receipt on a bill of lading (form A.D.79) or other form of conveyance note.

92. On the stores being landed at a Gunnery Equipment Depot, the name of the ship from which they were originally issued is to be stated clearly on the conveyance notes.

Losses.

Losses by Accident.

93. All accidental losses of stores are to be recorded in the form A.S.151 on the page applicable to the item, as an expenditure. They are to be written off charge by the use of form A.S.126 in accordance with established procedure.

94. In the case of important articles or any the value of which exceeds £5, the accounting officer is to ensure that the circumstances of the loss are reported to the administrative authority (Q.R. & A.I., article 4841). Reference to the report is to be made in the form A.S.151.

Losses by Neglect.

95. When Gunnery Equipment and Underwater Weapon Stores are lost or damaged by neglect or misconduct, an amount is to be assessed by the Captain in accordance with Q.R. & A.I., article 4606. All losses under £10 and the names of the personnel involved are to be recorded. Losses of an original value in excess of £10 are to be reported to the Naval Board. Any disciplinary action taken in connection with losses due to negligence should be reported, including cases under £10.

96. Vouchers in these cases are to be made out in triplicate on form A.S.126 and disposed of in accordance with instructions printed thereon. The accounting officer is to ensure that losses of stores are entered in the ship's log.

Losses due to theft, &c.

97. In the event of a loss being due to theft or presumed theft, the matter is to be reported at once to the Commanding Officer in order that the necessary action may be taken to comply with Q.R. & A.I., article 4842, and C.O.R., article 417.

98. In addition for naval establishments where the original value of the stores exceed £10, the local auditor is to be notified of the loss and his remarks requested at the same time as the report is made to the Naval Board. A copy of the notification is to be forwarded with the report for the information of the Naval Board. A copy of the remarks of the local auditor should be forwarded to Navy Office when received. Regarding such losses in H.M.A. ships (sea-going), the Naval Board will inform the Auditor-General.

99. If there is no direct evidence of theft but the circumstances preclude any other explanation of the loss, the case is to be dealt with as a loss by theft.

Value of Stores.

100. When stores' valuations are required for any purpose, the current replacement value is to be obtained from Navy Office. In urgent cases where action is outstanding from paragraphs 93 to 99, a signal requesting the value may be sent.

Stocktaking.

On Change of Accounting Officer.

101. The stocktaking is to be conducted by the officer giving up charge and the officer taking charge or an independent officer appointed by the Captain. They are to certify that the ledger remains agrees with the quantities found at stocktaking.

102. It is important that both the outgoing and incoming officers should take part in the stocktaking, but if either is not available, another officer is to be substituted.

103. When a change occurs in accounting officers, a muster of all important and valuable items, and items classified " R ", is to be held by the incoming officer or an officer nominated by him. He is also to verify that routine stocktaking is being satisfactorily carried out.

104. On completion of the muster of stores for transfer of accounting officers, form A.D.787D/A.S.473D " Certificate of Transfer between Accounting Officers for Equipment, &c." is to be raised in duplicate and the original sent to the Secretary, Department of the Navy, for insertion in the Navy Office copy of the " List of Equipment, &c.". The other copy, signed by the Commanding Officer, is to be inserted in the ship's copy of the List of Equipment, &c.

105. When the stock muster discloses discrepancies, three copies of form A.S.148 (outside and inside) " Report of Stocktaking " are to be prepared and distributed as follows—

Original and Duplicate ..	To be forwarded with form A.D.787/A.S.473D to the Secretary, Department of Navy. The duplicate will be returned with the covering approval to adjust the discrepancies disclosed or with any instructions as to any action required. After the necessary amendment, the duplicate copy is to be filed on board separately from the accounts as a record of stocktaking carried out.
Triplicate	To be guarded as a supporting voucher to the provisional adjustment of the ledgers which should be made immediately.

Continuous Stocktaking.

106. In addition to the mustering of stock on supersession of accounting officers, stocktaking should be carried out continuously and should be so organized that all the stock is sighted over a period of eighteen months.

107. On the first day of January, April, July and October of each year, accounting officers are to insert a certificate in the front of the List of Equipment, &c., stating the proportion of the equipment, spare gear, &c., mustered each quarter. This is to be countersigned by the Captain. At the same time a return, on form A.S.148, detailing the relevant information is to be furnished to Navy Office. Nil reports on form A.S.148, are required if applicable, on the first day of January each year only.

Stocktaking—General.

108. When as a result of the continuous muster, discrepancies are disclosed, they are to be investigated immediately and reported quarterly on a Report of Stocktaking (form A.S.148), as in paragraph 105, and the ledgers provisionally adjusted. Before the ledgers are adjusted and the forms A.S.148 forwarded to Navy Office, it should be ascertained that the ledger balances are correct and it is to be definitely established

that the items discrepant on muster cannot be accounted for. In the case of differences in part/reference/drawing numbers or description, the correct designation should be established beyond doubt.

109. Serious discrepancies should be provisionally reported to Navy Office and not held up till the end of the quarter.

110. In instances arising in H.M.A. establishments, in ships attached thereto, in ships in reserve and in course of paying off into reserve, where the original value of the stores lost or deficient exceeds £250, the Report of Stocktaking is to be referred to the local auditor for remarks prior to being forwarded to Navy Office. A copy of the remarks of the local auditor should be forwarded to Navy Office when received. In all other cases the Naval Board will inform the Auditor-General.

111. Separate Reports of Stocktaking (forms A.S.148) and Change of Accounting Officer Certificate (forms A.D.787D, Certificate B) are to be forwarded in respect of each List of Equipment, &c., or Part thereof.

112. Where a ledger account is maintained and on the date of stocktaking, the stock of any items differs from the quantity shown in the List of Equipment, &c., or on the relevant ledger page, as appropriate, the quantity so discrepant is to be included on Report of Stocktaking (form A.S.148).

113. Where a ledger account is not maintained and on date of stocktaking, the stock of any item differs from the quantity shown in the List of Equipment, &c., the quantity so discrepant, other than that expended in making good defects and not replenished, is to be included on Report of Stocktaking (forms A.S.148).

114. Discrepancies previously reported on Reports of Stocktaking (form A.S.148) which are still under consideration are not to be reported again as discrepant on later Reports of Stocktaking (form A.S.148).

115. Outstanding Reports of Stocktaking (form A.S.148) are to be reported in half-yearly returns. (Paragraph 41 refers.)

Period Allowed for Transfer between Accounting Officers.

116. Subject to the exigencies of the service, the following periods may be allowed for the handing over of gunnery and underwater weapon equipment and spare gear on charge of accounting officers. If the officer taking charge has not been associated with the stocktaking, the reason for this is to be stated in the report forwarded to Navy Office. Time allowed (in days) for—

Class of Ship.	*Gunnery.*		*Underwater Weapons.*	
	Ordnance.	*Electrical Part II.*	*Ordnance.*	*Electrical Part II.*
Aircraft Carriers ..	5	5	1	1
Darings	4	4	3	3
Battles	4	4	3	3
Destroyers	3	3	1	1
Type 15 Frigates ..	1	1	2	2
Type 12 Frigates ..	2	2	2	2
Frigates (A/A) ..	1	1	½	½
Frigates (other than A/A)	1	1	½	½
Ocean Minesweepers ..	1	1	½	½
Miscellaneous ..	½	½	½	½

117. Forms A.S.134 and A.S.331 as reprinted in a revised form are to be used for the procedure outlined in this order.

List of Forms Used.

118. The following are a list of the forms used—

A.S.134	Stores Demand.
A.S.331	Requisition for Survey.
A.S.549	Demand Supply or Receipt Note for Occasional Supplies.
A.S.126	Loss of Stores (Accident or Neglect).
A.S.151	Ledger page.
A.S.155	Ledger cover.
A.S.473/A.D.787 series ..	List of Equipment, &c.
A.S.197/A.D.526 ..	Alterations to List of Equipment, &c.
A.D.479	Demand Rejection Note.
A.D.479A	Stores Demand Observations.
A.S.143	Stores Hastener.
A.D.78	Shipping Notes.
A.D.79	Bill of Lading.
A.D.80	Consignment Note.
A.S.559Y	Cartage Warrant.
A.S.359Z	Railway Consignment Note.
A.S.128	Guard book for Supplies.
A.S.129	Guard book for Returns.
A.P.4632	Waterproof envelope.

Appendix A.

GLOSSARY OF TERMS.

(*a*) Transaction ..	Is a movement of stock. This includes receipts, issues, returns, appropriations and losses.
(*b*) Account	Is a record of transactions supported by vouchers.
(*c*) Ledger	Is a collection of accounts in book or loose leaf (card) form.
(*d*) Invoice	Is an advice note giving the description and quantity of goods supplied, together with other relevant information.
(*e*) Voucher	Is a document establishing the accuracy of a transaction.
(*f*) Balance	Is a total remaining in the ledger after all outstanding transactions have been posted. It is sometimes referred to as " remains ".
(*g*) Posting	Is the act of recording a transaction in the ledger.
(*h*) Credit	An account is said to be " credited " when a transaction involving a return or appropriation is posted.
(*i*) Debit	An account is said to be " debited " when a receipt transaction is posted.

APPENDIX A—*continued.*

(*j*) Guarding .. .. Is the act of filing an accounting document in a specified cover for reference.

(*k*) Returnable .. An item is said to be " returnable " if, when defective—
- (i) it can be economically repaired for use in its original capacity.
- (ii) it is required as a pattern for the manufacture of a replacement.
- (iii) serviceable components can be salvaged from it.

(*l*) Quasi-permanent .. An item is said to be " quasi-permanent " if it is of an " attractive " nature and requires the return to store on board ship of a defective item before the issue of a replacement; e.g., ball and roller bearings.

(*m*) Consumable .. An item is said to be " consumable " if, when defective—
- (i) it cannot be economically repaired for use in its original capacity.
- (ii) it is of small value and standard character, and not required as a sample.

(*n*) Dues In .. .. Items which have been demanded but have not yet been supplied.

(*o*) Dues Out .. .. Items which have been returned but for which official receipts have not been supplied.

APPENDIX B.

Type of Transaction.	*Shipment Demands (Form A.S.134).*	*Direct Demands (Form A.S.134).*	*Returns (Form A.S.331).*
For Action			
Copy No. 1	To be forwarded to supply authority.	To be taken to supply authority.	To be forwarded to surveying authority.
Copy No. 2	To be forwarded to supply authority.	To be taken to supply authority.	To be forwarded to surveying authority.
Copy No. 3	To be forwarded to supply authority.	To be taken to supply authority.	To be forwarded with items requiring survey.
Copy No. 4	To be forwarded to supply authority.	To be taken to supply authority.	To be forwarded with items requiring survey.
Copy No. 5	Retain temporarily as ship's copy.	Retain temporarily as ship's copy.	To be forwarded to surveying authority.
Copy No. 6	.....	.....	Retain temporarily as ship's copy.

APPENDIX B—*continued.*

	Type of Transaction.	*Shipment Demands (Form A.S.134).*	*Direct Demands (Form A.S.134).*	*Returns (Form A.S.331).*
After Action	Copy No. 1	Retained by supply authority.	Receipted by person receiving stores. Retained by supply authority.	Retained by surveying authority.
	Copy No. 2	Retained by supply authority.	Receipted by person receiving stores. Retained by supply authority.	Retained by surveying authority.
	Copy No. 3	Returned with consignment. To be checked against copy no. 4 and filed in S/No. order after posting to ledger.	Handed back with stores stamped "Issue authorized". To be filed in S/No. order after posting to ledger.	Returned as final receipt for items for survey. Filed in S/No. order after posting to ledger.
	Copy No. 4	Forwarded to supply authority as soon as stores are packed and shipment arranged. Certificate on reverse side to be signed and returned to supply authority (with copy no. 3 of A.S.134 if discrepancies are reported).	Handed back with stores stamped "Issue authorized". To be used as pass note. Certificate on reverse side to be signed and returned to supply authority.	Returned as temporary receipt for items for survey. File temporarily pending receipt of No. 3 copy. Destroy after check with no. 3 copy.
	Copy No. 5	When transaction is completed, destroy.	When transaction is completed, destroy.	Retained by surveying authority.
	Copy No. 6	.....	.....	When copy no. 4 is received, destroy after check.

APPENDIX C.

	Type of Transaction.	*Occasional Supplies (Form A.S.549).*	*Occasional Issues (Form A.S.549).*	*Loss by Accident (Form A.S.126).*	*Loss by Neglect (Form A.S.126).*	*Loss by Theft (Form A.S.126).*	*Local Purchase.*	
							(Treasury Form 11)	*(Treasury Form 13).*
For Action	Copy No. 1	Forwarded by issuing officer with stores as supply voucher.	Forwarded to receiving officer with stores as supply voucher.	Submitted to Commanding Officer after investigation of loss.	Submitted to Commanding Officer after investigation of loss.	Submitted to Commanding Officer after investigation of loss.	Signed by Commanding Officer as approval of purchase.	Taken to firm supplying stores together with form A.S.22 (Claim).
	Copy No. 2	Forwarded by issuing officer with stores.	Forwarded to re-receiving officer with stores.	Submitted to Commanding Officer after investigation of loss.	Submitted to Commanding Officer after investigation of loss.	Submitted to Commanding Officer after investigation of loss.	(On plain paper.) Retained by requisitioning officer.	Taken to firm supplying stores.
	Copy No. 3	Forwarded by issuing officer with stores.	Forwarded to receiving officer with stores.	Retained temporarily by store accounting officer.	Retained temporarily by store accounting officer.	Retained temporarily by store accounting officer.	—	Retained by requisitioning officer.
	Copy No. 4	Forwarded by issuing officer with stores.	Forwarded to receiving officer with stores.	—	—	—	—	—
	Copy No. 5	Retained by issuing officer.	Retained temporarily by issuing officer as "Dues Out" record.	—	—	—	—	—

APPENDIX C—*continued.*

Type of Transaction.		*Occasional Supplies (Form A.S.549).*	*Occasional Issues (Form A.S.549).*	*Loss by Accident (Form A.S.126).*	*Loss by Neglect (Form A.S.126).*	*Loss by Theft (Form A.S.126).*	*Local Purchase.*	
							(*Treasury Form* 11)	(*Treasury Form* 13).
After Action	Copy No. 1	Retained by receiving officer as supply voucher Guarded in form A.S.128.	Retained by receiving officer.	Given to pay office after Captain's signature, if a charge is to be made.	Given to pay office after Captain's signature, if a charge is to be made.	Given to pay office after Captain's signature, if a charge is to be made.	Retained by supply officer.	Returned to ship with completed form A.S.22 (Claim) and goods Retained by Supply Officer.
	Copy No. 2	Receipted and returned to issuing officer.	Retained by issuing officer as receipt note. Guarded in form A.S.129.	Returned to store accounting officer to credit account. Retained and guarded in form A.S.129.	Returned to store accounting officer to credit account. Retained and guarded in form A.S.129.	Returned to store accounting officer to credit account. Retained and guarded in form A.S.129.	Attached to copy no. 3 of form A.S.22 retained by store accounting officer.	Retained by firm supplying stores.
	Copy No. 3	Receipted and returned to issuing officer.	Forwarded to Navy Office.	Destroy when copy no. 2 received.	Destroy when copy no. 2 received.	Destroy when copy no. 2 received.	—	Amended to conform to copy no. 1. Retained by accounting officer and guarded in form A.S.128 with no. 2 copy of Treasury form 11 (plain paper).
	Copy No. 4	Receipted and returned to issuing officer.	Forwarded to Navy Office.	—	—	—	—	—
	Copy No. 5	—	Destroy when copies nos. 2, 3 and 4 are received.	—	—	—	—	—

(*Navy Order* 58 *of* 1959.)

(D.O.U.W. 700/51/7.)

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C.N.O.'s 72-103/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
11th February, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

411/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

72.—Accidents—Dangers of Handling Electrical Equipment—Need for Immediate Artificial Respiration in Event of Apparent Death by Electric Shock.

(*A.F.O.* 2757/1959.)

The attention of all those who work with or use electrical equipment, is drawn to the potential danger of electric shock from live apparatus. Factors which can contribute to this danger are—

(*a*) the use of unearthed portable appliances, usually of commercial origin;

(*b*) power interlocks being rendered inoperative for test purposes and then being left inoperative.

2. Electric shock results from the passage of electric current through the body and very small currents can be dangerous; currents at about 100 milliamps can be fatal. The body resistance of individuals will vary but may be as low as 300 ohms and in a ship there is every possibility of good electrical contact between the body and bare metal at earth potential under possible damp conditions. Furthermore, clothes and footwear which are damp with perspiration will have a low electrical resistance. Under a combination of such adverse conditions it must therefore be assumed that it is dangerous to touch live metal with any part of the body if the live metal is at any voltage higher than 50 volts. For the same voltage, A.C. is more dangerous than D.C.

3. Should an accident occur, it is of the utmost importance to apply immediate and continuous artificial respiration until medical advice is available.

(M.D.G. 177/51/9.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

73.—Advancement to the Able Rate—Award of Time Gained for Educational Subjects.

In accordance with the provisions of A.B.R.10, article 0206 (2) it is possible, within the first two years of service, for ratings to " gain time ", towards advancement to the able rate, in respect of educational qualifications as follows—

H.E.T. (one subject only) ..	2 months.
E.T.1 Certificate	½ month (but not in addition to the two months awarded for H.E.T. subject).

2. It has been decided to vary the above provisions for award of " time gained " for educational subjects as follows—

H.E.T. Certificate (1st Class pass)	2 months.
H.E.T. Certificate (2nd Class pass)	1½ months.
H.E.T. (one subject only)	1 month.
E.T.1 Certificate	½ month.

3. This new scale becomes effective from the date of this order.

4. Ratings will be eligible for the award of " time gained " in respect of H.E.T. Certificate 1st Class and 2nd Class only where such certificates are obtained subsequent to the date of this order.

5. Although a rating may qualify at any number of the educational qualifications listed in paragraph 2 and in any order, he will only be eligible to reckon " time gained " towards advancement to the Able rate, as is appropriate to the highest educational qualification held.

6. Ratings who qualified for " time gained " under the provisions stated at paragraph 1, prior to the date of this order, will remain eligible to reckon such " time gained " awarded up to a maximum of two months, towards advancement to the able rate.

H.P.B. (316/4/5.)

UNCLASSIFIED.

74.—Funds—Herbert Lott Naval Trust Fund—Awards.

(*A.F.O.* 2649/1959.)

The following awards to individual Naval personnel from the Herbert Lott Naval Trust Fund have been approved for inventions and modifications which have contributed to the improvement of Naval fighting appliances—

	£
Engineer Sub-Lieutenant (ME) P. J. Clough, R.A.N. ..	9
Engineer Sub-Lieutenant (ME) J. W. E. Green, R.A.N. ..	3
Lieutenant H. H. E. Dalrymple, R.A.N.	3
Modifications to Distilling Plant. (C.P. Patents 10325/59.)	

2. Finance authority covering approval to payment of the award to the members concerned will be issued by the Director of Navy Accounts on receipt of the requisite Admiralty authority.

(D.T.S.R. 211/51/9.)

RESTRICTED.

75.—Instructional Films and Film Strips—S.A.1114 " Introduction to R.A.T.T."—Distribution.

Navy Order 341 of 1959 is to be amended as follows—

Delete Paragraph 5 and *insert* in its stead—

" The superseded filmstrip S.A.611 is to be withdrawn from service and destroyed ".

(D.N.A.S. 519/56/50.)

(*Navy Order* 341 *of* 1959.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

76.—Aircraft Brake Fires.

Evidence exists that there is a danger of an explosion when the wheels of an aircraft become overheated as a result of severe brake application, and when C.O.2, water or foam is used as a fire extinguishing medium.

2. Should a wheel fire occur as a result of overheated brakes, dry chemical fire extinguishers should, if possible, be used. These extinguishers are carried on crash tenders and rescue vehicles. As chemical dry powder may cause corrosion to aluminium alloy structures, care should be taken to limit application to the fire area, and the minimum amount of powder necessary to extinguish the fire should be used.

3. If a fire definitely exists, the important thing is to extinguish it by whatever means are available, as soon as possible. Even if smoke is being emitted, an actual fire may not exist, and the brake should be allowed to cool by itself, the fire fighting equipment being held in readiness. Personnel and other aircraft should keep a safe distance away during the cooling period, as an overheated brake should always be regarded as extremely dangerous.

4. When a fire definitely exists, an approach should be made from the front or the rear. After extinguishing the fire, the immediate area should be evacuated for at least 30 minutes. If dry chemical extinguishers are not immediately available and flames develop from the wheel, the C.O.2 extinguishers should be used, and the extinguisher operated either in front or rear of the wheel and the end of the discharge hose held 4 to 5 feet away from the brake, thus decreasing the possibility of wheel failure.

(D.A.M.R. 47/221/1.)

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UNCLASSIFIED.

77.—Display Outfit J.W.—Damage to C.R.T. Pattern C.V.1976 and Plane Mirror " C ".

A report has been received which indicates the possibility of damage to cathodic ray tube, C.V.1976 and the plane mirror " C " fitted in the optical box of Display Outfit J.W. associated with radar type 960 when removing or replacing the C.R.T. pattern C.V.1976.

2. Personnel responsible for the maintenance of Displays Outfits J.W. fitted in H.M.A. ships and establishments, when removing or replacing C.R.T. Pattern C.V.1976 in the optical box, are to ensure that the protuberances around the periphery of the glass envelope of the C.R.T. are kept clear of the edge of the hole in the plane mirror " C " through which the C.R.T. protrudes.

(D.E.E. 1213/52/111.)

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RESTRICTED.

78.—Teletype Equipment—Types 14 and 15—Teletype Motors Part No. 122295 and Part No. 122297—Replacement Armatures.

Reports have been received which indicate that difficulty is being experienced with replacement armatures for Teletype motors fitted in Teletype equipment type 14 and type 15.

2. The motors fitted in Teletype equipment type 14 and type 15 are of two types. These two types are physically and electrically interchangeable as a whole but the armatures are not interchangeable between the two types of motors.

3. When demanding spare armatures for Teletype motors in types 14 and 15 Teletype equipment, care is to be taken to include in the demand full details of the armature required, including the Teletype part number of the armature and the parent Teletype motor, to ensure that the correct armature is supplied.

4. For Teletype motor, part No. 122295, the correct armature is Teletype part No. 122296 and for Teletype motor part No. 122297, the correct armature is Teletype part No. 122298.

(D.E.E. 1426/51/69.)

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RESTRICTED.

79.—Machinery—Lister-Hamworthy and Lister-Reavel Diesel Generator Air Start Compressors—Rigid/Resilient Shock Mountings.

(*A.F.O.* 1814/1959.)

The original method of installing Lister-Hamworthy and Lister-Reavel diesel generator air start compressors utilized shock mountings incorporating shearing strips.

2. Ships concerned should examine these sets and where the original type of shock mountings are still fitted, these should be replaced at the earliest opportunity by Admiralty type F (Rigid/Resilient) Shock Mountings.

3. Navy Diagram Issue 3/60 shows the arrangement and details of the revised scheme for mounting these sets.

(D.M.E. 1128/51/3.)

UNCLASSIFIED.

80.—Accounting for Consumable Naval Armament Stores.

The following Navy Orders are to be amended as shown—

(*a*) *Navy Order* 35 *of* 1958—

Paragraph 71—

Add: " Non accountable items *vide* Navy Order 421 of 1958 are not to be included on return notes."

(*b*) *Navy Order* 36 *of* 1958—

Paragraph 64—

Add: " Non accountable items *vide* Navy Order 421 of 1958 are not to be included on return notes."

(*c*) *Navy Order* 76 *of* 1958—

Paragraph 78—

Add: " Non accountable items *vide* Navy Order 421 of 1958 are not to be included on return notes."

(*d*) *Navy Order* 421 *of* 1958—

Paragraph 3—

Add: " If non accountable items are returned to a Naval Armament Depot for any reason they are not to be included on return notes."

(D.O.U.W. 700/51/7.)

(*Navy Orders* 35, 36, 76 *and* 421 *of* 1958.)

UNCLASSIFIED.

81.—Accounting for Gunnery Equipment and Underwater Weapons Stores Spare Gear in H.M.A. Ships and Commissioned Establishments.

Navy Order 58 of 1959 is to be amended as follows—

Add: " 4. If consumable non-accountable items are returned to a Gunnery Equipment Depot for any reason, they are not to be included on form A.S.331."

(D.O.U.W. 700/51/7.)

(*Navy Order* 58 *of* 1959.)

RESTRICTED.

82.—Gun Direction and Fire Control Radar—Periodical Performance Checks.

From the analyses of Gunnery practices it is apparent that gun direction and fire control radars are not always in a satisfactory operating condition at the time of carrying out practices.

2. Attention is drawn to Confidential Navy Order 32 of 1959 as to the method of conducting radar performance checks and to the minimum acceptable ranges to be obtained from such checks.

3. These checks should be carried out fortnightly as a matter of routine or whenever the performance of radars concerned is in doubt.

4. To ensure co-ordination with the users when they carry out these performance checks, an item will be added to the planned maintenance schedules for these radars. This will be to the effect that fortnightly or whenever otherwise necessary, re-tuning or other adjustments are to be carried out as a result of the performance check and as part of the complete action required.

5. The stores listed in paragraph 5 of Confidential Navy Order 32 of 1959 if not already held by ships entitled, are to be demanded forthwith.

(D.T.S.R. 1624/211/17.)

(*Confidential Navy Order* 32 *of* 1959.)

UNCLASSIFIED.

83.—Naval Stores (Technical) Asdic and Echo-Sounding Sets—Containers and Formers for Paper Rolls, Patterns A1266, A1277 and A1288.

Empty " metal-ended " containers and ebonite centres (formers) of Asdic and Echo-sounding paper rolls, patterns A1266, A1277 and A1288 are no longer required to be returned to the nearest (Superintending) Naval Store Officer.

2. Navy Order 347 of 1958 is hereby cancelled.

(D.N.A.S. 518/52/33.)

(*Navy Order* 347 *of* 1958.)

RESTRICTED.

84.—T.A.R.T. Stowage H.M.A. Destroyers and Frigates.

Experience has shown that it is not essential to stow the T.A.R.T. between decks when not in use provided it is stowed in its box, raised 4-in. to 6-in. off the deck, in a position which is relatively free from heavy salt spray.

2. The existing fittings for stowage of individual ships T.A.R.T. and battery servicing platform are to be removed and a new horizontal stowage provided—

(*a*) In any convenient Upper Deck or between deck position in the after part of the ship.

(*b*) If (*a*) above is impracticable then its stowage in the Mortar Handling Room is acceptable.

3. The work is to be undertaken by defect list action and H.M.A. ships concerned are to raise items accordingly, quoting this order as authority.

4. On completion of the item, dockyards are to report the net weight removed and the location of the new stowage positions in each ship.

5. Separate action will be taken in ships under construction.

(D.N.C. 1224/266/4.)

? Quickmatch

UNCLASSIFIED.

85.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier H.M.A.S. MELBOURNE—

Class List Item No. 105. *Classification* " *A* ".

Item:

To fit one in No. mk. 20 telephone pattern 13344 in Lower Operations Room on D.O.'s desk—starboard forward corner below desk level.

To be connected direct to a mk. 20 telephone to be fitted in Upper Operations Room above table 2 in present position of K.H.B. headset stowage. Headset stowage redundant.

Approximate length of run 30 feet. Pattern No. of cable A.P.9742., 24V. D.C. supply for call-up circuit to be taken from J.B.3 in A.1.C operational telephone circuits in Lower Operations Room (one spare pair available) to mk. 20 telephone to be fitted in Lower Operations Room.

Voice pipe from A.S.D.P. to Upper Operations Room to be removed.

References:

H.M.A.S. MELBOURNE'S proposed alteration and addition item T.D.L. " B.L.".

Navy Office letter 64609 dated 8th June, 1959.

F.O.I.C.E.A. memorandum N.20/14/51 dated 18th August, 1959.

Garden Island Drawing 525/184.

(D.C.C. 1213/52/71.)

UNCLASSIFIED.

86.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 108. *Classification* " *A* ".

Item:

(*a*) To fit Common Aerial Working Outfit EAL 3 No. Whip Aerial Outfits AWN and one Open Wire Aerial together with associated receiver outfits CAY and CAZ.

(*b*) To remove all redundant receiving aerials and receivers.

Remarks: Saving in weight to be reported to Navy Office upon completion.

References:

Navy Office Letter No. 77002 dated 30th September, 1958.
F.O.I.C.E.A. Memorandum 6/59/38 dated 12th March, 1959.
Navy Office Letter No. 61181 dated 8th May, 1959.
F.O.I.C.E.A. Memorandum CR 6/59/38 dated 28th July, 1959.

(D.C.C. 1213/52/14.)

UNCLASSIFIED.

87.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 112. *Classification* " *A* ".

Item: " To extend the fan trunking in the main telephone exchange and to provide ventilation punkah at the manual exchange position in the main exchange ".

References:

H.M.A.S. MELBOURNE'S proposed alteration and addition item T.D.L. " BD ".
Navy Office Letter No. 7600 dated 27th April, 1959.
F.O.I.C.E.A. memorandum N20/14/37 dated 14th October, 1959.
Garden Island Drawing No. 238/51.

(D.C.C. 1213/52/13.)

UNCLASSIFIED.

88.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 116. *Classification* " *A* ".

Item:

To fit and wire 3 No. five amp switch sockets in the Bosun's Store.
2 No. in the forward space of the Bosun's Store and 1 No. in the after section.
Supply to be run from fuse box G2–72–D21 3A, station 15, centre line, fuses 7 and 8, and fuse box F1–72–D21 Fuse 8.

References:

H.M.A.S. MELBOURNE'S proposed alteration and addition item. T.D.L. " BV."
Navy Office letter No. 67523 dated 9th July, 1959.
F.O.I.C.E.A. memoranum N20/14/50 dated 14th October, 1959.

(D.C.C. 1213/52/16.)

UNCLASSIFIED.

89.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 117. *Classification* " *A* ".

Item:

To fit remote " on-off " push button control unit to 7G hangar spray pump motor unit to be fitted at 4 deck level adjacent to access hatch.
Approximate length of run 50 feet of pattern 7014D cable.

References:

H.M.A.S. MELBOURNE'S proposed alteration and addition item T.D.L. " BM ".
Navy Office letter No. 67025 dated 3rd July, 1959.
F.O.I.C.E.A. memorandum N20/14/67 dated 6th October, 1959.

(D.C.C. 1213/52/3.)

UNCLASSIFIED.

90.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE.

Class List Item No. 118. *Classification* " *A* ".

Item: " 1 in No. 5-in. exhaust fan to be fitted at after end of present Admiral's office, port side aft. No. 2 deck ".

References:

H.M.A.S. MELBOURNE'S proposed alteration and addition item T.D.L. " BY ".
Navy Office letter 14212 of 23rd July, 1959.
F.O.I.C.E.A. memorandum N20/14/63 dated 27th October, 1959.
Garden Island Drawing No. 260/51.
Garden Island Drawing No. 561/588.

(D.C.C. 1213/52/38.)

UNCLASSIFIED.

91.—Alteration and Addition Item—Ammunition Carrier—H.M.A.S. WOOMERA.

The following alteration and addition item is approved for Ammunition Carrier, H.M.A.S. WOOMERA.

Class List Item No. 107. *Classification* " *A* ".

Item:

" To fit battery fed emergency navigation lanterns.

	Pattern No.
1 Port Bow	17248
1 Starboard Bow	17249
2 N.U.C.	17251
1 Overtaking	17251
1 Anchor	17251
1 Steaming	17250

Remote control switch to be fitted in wheelhouse for steaming light.
Lanterns to be fitted to existing seatings."

References:

(i) Navy Order 139 of 1959.
(ii) H.M.A.S. WOOMERA'S proposed alteration and addition item temporary distinguishing letter " J ".

(D.C.C. 1240/56/12.)

(*Navy Order* 139 *of* 1959.)

UNCLASSIFIED.

92.—Alteration and Addition Item—Daring Class Destroyer—H.M.A.S. VOYAGER.

The following alteration and addition item is approved for Daring Class Destroyer H.M.A.S. VOYAGER.

Class List Item No. 29. *Classification* " *A* ".

Item:

" (*a*) To transfer microphones and loudspeakers at the after torpedo sights (port and starboard) and the torpedo tubes (Roundhouse only) from the armament broadcast to the T.A.S. intercommunication system.

(*b*) To transfer the existing microphone and loudspeaker in the A/S Mortar Handling Room from the armament broadcast to the T.A.S. intercommunication system."

References:

(i) H.M.A.S. VOYAGER'S proposed alteration and addition item T.D.L. " V ".
(ii) Navy Office letter 14213 of 23rd July, 1959.
(iii) F.O.I.C.E.A. memorandum CR6/61/16 of 2nd October, 1959.

Remarks: As the item is not applicable to H.M.A. ships VENDETTA and VAMPIRE, separate " G " and T.A.S. communication systems being fitted in these ships, it is to be entered in ships' copies of " Record of Alterations and Additions " with appropriate notation.

(D.C.C. 1215/55/23.)

UNCLASSIFIED.

93.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 30. *Classification* " *A* ".

Item: " Air blowers for servicing inflatable liferafts. Arrangements are being made to provide an air blower type 4A/2345, for the servicing of inflatable liferafts and the provision of a suitable power supply for its operation is to be made as follows—

A 230 volts, 60 cycles, 1 phase A.C. supply terminated in a pattern 18047 switch—socket fed from the spare way on the 230 volts switch fuse box fitted in the 2nd Wireless Office—is to be wired to a sheltered position on ' X ' Gun Deck aft of the gun mounting."

References:

(i) Navy Office letter 18950 of 9th September, 1959.
(ii) G.M.W.D. memorandum 238/63/77 (2758) of 27th October, 1959.
(iii) F.O.I.C.E.A. memorandum N20/1/19 of 29th October, 1959.

(D.C.C. 1215/51/27.)

UNCLASSIFIED.

94.—Naval Stores (General) (Class E, Group 7)—Anti-Corrosive Metal Primers—Supply.

Consequent on the results of long term trials of priming paints carried out in the Royal Australian Navy, it has been decided to introduce yellow zinc chromate as an anti-corrosive metal primer. The primer will be accounted for under class E, group 7 as like pattern 5362, primer, zinc chromate, yellow to C.P.C. approval 5.

2. Either yellow zinc chromate or red oxide zinc chromate may be generally used as metal primers. Wherever practicable yellow zinc chromate is to be used on aluminium.

3. A.B.R.19/1956 will be amended.

4. Navy Order 847 of 1959 is hereby cancelled.

(D.N.C. 512/80/18.)

(*Navy Order* 847 *of* 1959.)

UNCLASSIFIED.

95.—Naval Stores (General) (Class E, Group 12)—Deodorizer, Evaporator Type and Deodorant—Introduction.

(*A.F.O.* 1043/1959.)

A wick type deodorizer and deodorant have been introduced for use in the wards of Naval hospitals and sick quarters of establishments.

2. The items which are classified as consumable, are to be accounted for under class E, group 12, as follows—

Pattern.	*Description.*
Like 9178	Deodorizer, wick evaporator type.
Like 9179	Deodorant for wick evaporator bottles.

3. First outfit quantities for Naval hospitals and sick quarters ashore will be procured on the following basis—

(*a*) Deodorizers, wick type, per ward .. .. .. 2 No.

(*b*) Deodorant fluid, per ward .. .. 1 Pint.

4. Demands, limited to essential requirements, should be forwarded to the appropriate (S) N.S.O.

5. When not in use behind a screen in the ward, the cap is to be screwed back on to the container to conserve the fluid deodorant.

(D.N.A.S. 514/62/12.)

UNCLASSIFIED.

96.—Ships' Complement of Boats.

The appendix to this order shows the authorized complement of boats for all H.M.A. ships and small craft.

2. As the result of a review of the types of pulling and sailing craft in use in H.M.A. ships and establishments, it has been decided to standardize on five types only, as shown in the appendix. Obsolescent types will continue to be supplied until stocks are exhausted. Ships holding or being supplied with these obsolescent types are to retain them unless otherwise directed by the Naval Board.

APPENDIX.

Class of Ship.	Standard Range of Boats for Supply to Ships.												
	35-ft. Fast Motor Boat.	30-ft. Fast Motor Boat.	32-ft. Motor Cutter.	27-ft. Motor Whaler.	25-ft. Motor Cutter.	34-ft. Survey Motor Boat.	17-ft. 6-in. Motor Dinghy.	17-ft. 4-in. Motor Boom Boat.	27-ft. Whaler (N.O. Spec. 111A/33B).	16-ft. Skiff Dinghy (N.O. Spec. 111A/197).	14-ft. Sailing Dinghy (N.O. Spec. 111A/39B).	10-ft. Dinghy (N.O. Spec. 111A/62 and 63).	8-ft. 6-in. Pram Dinghy.
Aircraft Carrier	A	3A	3	—	—	—	—	—	2	—	3	—	—
Type 12 Frigate	—	—	—	1	1	—	—	—	—	—	1	—	—
Daring Class ..	—	—	—	—	2	—	—	—	1	—	1	—	—
Battle Class ..	—	—	—	—	2	—	—	—	1	—	1	—	—
Tribal Class ..	—	—	—	—	2	—	—	—	1	—	1	—	—
"Q" Class ..	—	—	—	—	2	—	—	—	—	—	1	—	—
A/S Frigate (River) ..	—	—	—	—	1	—	—	—	1	—	1	—	—
A/A Frigate (River) ..	—	—	—	—	1	—	—	—	1	—	1	—	—
O.M.S. ..	—	—	—	—	—	—	1	—	1	—	1	—	—
Survey Vessels— WARREGO, BARCOO	—	—	—	—	1S	2	—	—	1	1	1	—	2
Cadet Training Ship (SWAN)	—	—	—	—	2	—	—	—	2	—	2	—	—

APPENDIX—*continued.*

Class of Ship.	Standard Range of Boats for Supply to Ships.												
	35-ft. Fast Motor Boat.	30-ft. Fast Motor Boat.	32-ft. Motor Cutter.	27-ft. Motor Whaler.	25-ft. Motor Cutter.	34-ft. Survey Motor Boat.	17-ft. 6-in. Motor Dinghy.	17-ft. 4-in. Motor Boom Boat.	27-ft. Whaler (N.O. Spec. 111A/33B).	16-ft. Skiff Dinghy (N.O. Spec. 111A/197).	14-ft. Sailing Dinghy (N.O. Spec. 111A/39B).	10-ft. Dinghy (N.O. Spec. 111A/62 and 63).	8-ft. 6-in. Pram Dinghy.
Boom Working Vessels ..	—	—	—	—	—	—	1	1	—	1	—	—	—
KOOKABURRA	—	—	—	—	—	—	1	—	—	—	—	—	—
Oceangoing Tug	—	—	—	—	1B	—	—	—	—	—	1	—	—
WOOMERA ..	—	—	—	—	—	—	1	—	—	1	—	—	—
93-ft. Diesel Tug	—	—	—	—	—	—	C	—	—	2C	—	—	—
120-ft. Motor Lighter ..	—	—	—	—	1D	—	—	—	—	—	2	—	—
85-ft. MSL, 75-ft. GPV, 80-ft, SDB, WARREN	—	—	—	—	—	—	—	—	—	—	—	1	—
Diving Boats— OTTER, SEAL, S.A.R.'s Tow Boats	—	—	—	—	—	—	—	—	—	—	—	—	1E
1,200 ton O.F.L.	—	—	—	—	—	—	—	—	—	1	—	—	—

Note. A—Or 1 no. 35-ft. FMB plus 2 no. 30-ft FMB when Admiral is carried.

B—26-ft. motor whaler (U.S.N. type) to be used until beyond economical repair.

C—Or 1 no. 17-ft. 6-in. motor dinghy and 1 no. 16-ft. skiff dinghy.

D—1 no. 25-ft. motor cutter(s) when employed on surveying duties.

E—If fitted for and required.

S—25-ft. motor cutter fitted for surveying duties.

old number

(D.N.C. 3211/1/184.)

UNCLASSIFIED.

97.—Naval Stores (Class F, Group 3)—A.B.C.D.—Introduction and Allowances of Radiac Instruments.

A range of radiac instruments to detect and measure radioactivity is being introduced into the Rate Book and Authorized List of Naval Stores under Class F, Group 3 (or as otherwise indicated).

2. *Types of Radiac Instruments and Their Functions.*

(*a*) *Meter, Survey, Radiac No.* 2. (J.S.C. 6665–110130.)

Direct reading—dose rate. Battery operated. Three alternative scales, 0–3 r/hr., 0–30 r/hr., 0–300 r/hr. Basically Gamma detector—it can, by removal of base plate, expose Beta Window and detect Beta radiation.

Batteries.—The following batteries are required for each instrument:

Battery, dry, 1½V.—J.S.C. 6135–101101—Quantity 2.

Battery, dry, 9V.—J.S.C. 6135–101162—Quantity 1.

Battery, dry, 30V.—J.S.C. 6135–101163—Quantity 1.

(*b*) *Meter, Dose Rate, Portable Trainer No.* 1. (J.S.C. 6665–110227.)

Identical in appearance with above, but uses Geiger tube instead of an ion chamber and is sensitive to much lower degrees of radiation.

Scale: 0–0.3 mr/hr.

Batteries.—The following batteries are required for each instrument:

Battery, dry 1½V.—J.S.C. 6135–101101—Quantity 1.

Battery, dry 30V.—J.S.C. 6135–101164—Quantity 4.

(*c*) *Contamination Meter No.* 1 *Mark* 2. (J.S.C. 6665–110107.)

For assessing personal contamination.

Scale: 0–10 mr/hr.

The power supply for this instrument can be either:

(i) Two 150V. dry batteries, J.S.C. 6135–101165, in battery holder No. 1, J.S.C. 6665–110030.

(ii) Vibrator unit No. 1, J.S.C. 6665–110029, with four 1.35V. batteries, J.S.C. 6135–101172; or

(iii) Power unit, mains, J.S.C. 6665–110028 from 115V. or 230V. A.C. supply.

To give aural indication of contamination, the following item is provided for this instrument:

Receiver, headgear, J.S.C. 5965–400046.

(*d*) *Quartz Fibre Dosimeters.*

Reading total dose directly against a graduated scale. Five types are available:

(i) No. 1, 0–0.5r (J.S.C. 6665–110001.)	For training purposes.
(ii) No. 2A, 0–5r (J.S.C. 6665–110101.)	For use in areas of low intensity.
(iii) No. 3, 0–50r (J.S.C. 6665–110003.)	General use by leaders of monitoring teams, O.O.Q.'s, &c.
(iv) No. 4A, 0–150r (J.S.C. 6665–110269.)	
(v) No. 5, 0–500r (J.S.C. 6665–110228.)	For a limited number of personnel in exposed positions.

(*e*) *Charging Unit* for quartz fibre dosimeters. (J.S.C. 6665–110004.)

3. *Ancillary Equipments.*

(*a*) *Radioactive Luminous Discs.* (Pattern E2/1069.)

For training purposes, supplied in metal boxes containing up to 24 discs.

(*b*) *Source Type B.* (J.S.C. 6665–110016.)

Cobalt source of 1/10 millicurie for training purposes.

(*c*) *Source Type C.* (J.S.C. 6665–110017.)

Cobalt source of 1 millicurie—supplied to A.B.C.D. schools and available for temporary issue to ships.

(*d*) *Source Type D.* (J.S.C. 6665–110018.)

Cobalt source of 5 millicuries—supplied to A.B.C.D. schools for outdoor training. Previously included in the Rate Book under Ref. 5CG/0018.

(*e*) *Jig Calibration.* (J.S.C. 6665–110098.)

Cobalt source Type G of 5 millicuries (J.S.C. 6665–110041) for calibrating survey meter No. 2 on low range only.

(*f*) *Jig Calibration.* (J.S.C. 6665–110099.)

Includes Type H of 100 micro-curies for calibrating contamination meter No. 1, Mark 2.

(*g*) *Radiac Slide Rules.* (J.S.C. 6665–110027.)

For calculating the duration of a hazard to be expected after a nuclear attack. Previously included in the Rate Book under Ref. 5CG/0027.

(*h*) *Radiac Graphs.* (Forms S.1650.)

Designed for use in conjunction with the radiac slide rule.

Safe Handling and Stowage of Radioactive Sources.

4. Attention is drawn to Navy Order 951 of 1958.

5. Instruments should be handled with care, particularly those having a Geiger tube as the sensitive element. They should be stowed, when not in use, on the rack provided in the A.B.C. store with all batteries removed. Periodical tests of calibration should be carried out to ensure the components are functioning correctly.

6. Dessicators should be inspected regularly and replaced every six months, or as soon as the colour changes to pink, whichever is the earlier.

Maintenance, Calibration and Testing of Instruments.

7. Responsibility for the calibration and maintenance of radiac instruments rests, in H.M.A. ships and commissioned establishments, with the Electrical Officer, and in civil establishments with the appropriate dockyard Electrical Department. An instruction manual is in course of preparation in the United Kingdom. In a addition to existing general electronic and electrical test equipment (valve testers, avometers, valve voltmeters and D.C. multipliers, &c.), the following equipment required for calibrating, testing and maintenance will be supplied as indicated in the appendixes:

(*a*) *Measuring Set High Resistance.* (J.S.C. 6625–110014.)

For measuring the values of very high value resistors contained in radiac instruments.

(*b*) *Calibration Test Set, No.* 2. (J.S.C. 6665–110112.)

For calibrating the survey meter No. 2 on the two high ranges (0–30 r/hr and 0.300 r/hr).

(*c*) *Seal Test Equipment.*

For checking efficiency of the seal of the sealed and dessicated instruments. This is under development.

8. Defects are to be reported on Form A.S.2061 " Record of Defect " or on Form A.S.1183 " Report of Defective Electrical Equipment ", according to the nature of the defect.

Supply.

9. All the above-mentioned radiac instruments will be classified as permanent sea stores with the exception of luminous discs which are classified as consumable items.

10. Sufficient radiac instruments are being procured for H.M.A. ships in commission with their full war reserves, A.B.C.D. and Electrical Schools, as indicated in the appendixes to this order. Allowances have been made for Naval establishments but will not be issued at the moment. The policy will be reviewed annually. Where allowances differ from those shown in the relevant Establishments of Sea Stores they are to be regarded as R.A.N. special allowances. Demands for stores to complete to the allowances should be forwarded to the appropriate (S) N.S.O. Supply of outstanding requirements should not be hastened as in some instances the instruments are not yet obtainable from the United Kingdom. Demands for ships under construction or undergoing conversion, &c., will be prepared by the storing yards concerned.

11. The date of activation of each radioactive source is marked on the container of each source. Re-activation is necessary after three to five years and instructions on the procedure for return of sources when this is necessary will be issued in due course.

12. Navy Order 879 of 1958 is hereby cancelled.

Appendix A.

Code Letters.	*Ship or Establishment.*
A	Carriers.
C	Destroyers (All Classes).
D	Frigates (All Classes).
F	B.W.V.'s Tugs (Seagoing).
G	R.A.F.A.'s.
H	Major dockyards: Sydney, Williamstown.
I	Other ports under naval authority.
J	Spectacle Island, Maribyrnong, Newington and other Naval Armament establishments.
K	Victualling Yards and Naval Store Depots.
L	H.M.A.S. PENGUIN.
M	A.B.C.D. School at Flinders Naval Depot and H.M.A.S. LEEUWIN.
N	Electrical School at Flinders Naval Depot.
O	Uniformed Naval establishments with complements of over 1,000.
P	Uniformed Naval establishments with complements of under 1,000.

Note.—Allowances for Cruisers and Ocean Minesweepers are no longer promulgated consequent upon the decision to dispose of ships of these classes. The distinguishing letters " B " and " E " previously allotted to these classes, have been retained as spares.

Appendix B.

	J.S.C. 6665. Dosimeters Q.F.					*Charging Unit.*
Code Letter.	0–0.5*r* 110001.	0–5*r* 110101.	0–50*r* 110003.	0–150*r* 110269.	0–500*r* 110228.	110004.
A ..	6	12	25	25	12	4
C ..	2	4	15	15	4	2
D ..	2	4	10	10	3	2
F ..	—	2	4	4	1	1
G ..	—	4(*a*)	5(*a*)	5(*a*)	1	1(*a*)
H ..	10	50	100	—	—	3
I ..	—	—	—	—	—	—
J ..	3	40	80	—	—	3
K ..	2	20	40	—	—	2
L ..	26	5	15	2	2	4
M ..	20	5	10	2	2	2
N ..	6	6	—	—	—	1
O ..	6	12	24	—	5	4
P ..	2	6	12	—	2	3

(*a*) Minimum scale, large ships to be supplied on a scale applicable to nearest warship equivalent.

Appendix C.

Dose Rate Meters and Accessories.

Code Letter.	*Meter Radiac Survey No.* 2 0–300 *r/hr. J.S.C.* 6665–110130.	*Meter Dose Rate Portable Trainer No.* 1, 0–0.3 *mr/hr. J.S.C.* 6665–110227.	*Contamination Meter No.* 1 *Mk.* 2, 0–10 *mr/hr. J.S.C.* 6665–110107.	*Receiver Head Gear Contamination Meter J.S.C.* 5965–400046.	*Mains Power Unit Contamination Meter J.S.C.* 6665–110028.	*Vibrator Unit Contamination Meter J.S.C.* 6665–110029.	*Battery Holder No.* 1 *for Contamination Meter J.S.C.* 6665–110030.
A	12	4	6	6	3	1	1
C	4	2	3	3	2	1	1
D	3	2	3	3	1	1	1
F	1	—	1	1	—	1	1
G	1	—	3	3	2	1	1
H	12	3	12	12	4	8	8
I	—	—	—	—	—	—	—
J	6	—	6	6	2	4	4
K	6	—	6	6	2	4	4
L	4	10	4	4	4	1	1
M	2	5	2	2	1	1	1
N	1	1	1	1	1	1	1
O	12	4	6	6	4	2	2
P	4	2	3	3	2	1	1

Appendix D.

	Ancillary Equipment. J.S.C. 6665.					*J.S.C.* 6625.
Code Letter.	*Radiac Slide Rule*–110027.	*Calibration Test Set No.* 2–110112.	*Jig Calibration Survey Meter* (+ *G Source*) –110098.	*Jig Calibration Contamination Meter* (+ *H Source*) –110099.	*Seal Test Equipment.*	*Measuring Set High Resistance* 110014.
A	3	1	1	1		
C	2	1	1	1		
D	2	1	1	1		
F	1	—	—	—		
G	1	—	—	—		
H	4	1	1	1	1	1
I	—	—	—	—	—	—
J	2	1	1	1	—	—
K	1	1	1	1	—	—
L	10	1	2	2	—	1
M	5	1	1	1	—	—
N	—	1	1	1	1	1
O	2	1	1	1	—	—
P	2	1	1	1	—	—

APPENDIX E.

Code Letter.	Discs Luminous Patt. E2/1069.	Radioactive Sources. J.S.C. 6665.		
		Type B.110016 (in container 110021) 10 per container.	Type C.110017 (in container–110022).	Type D.110018 (in container–110023).
A	20	10	—	—
C	5	5	—	—
D	4	5	—	—
F	—	—	—	—
G	—	—	—	—
H	20	15	—	—
I	—	—	—	—
J	10	5	—	—
K	5	5	—	—
L	20	20	12	5
M	10	10	6	2
N	5	5	—	—
O	20	10	—	—
P	10	5	—	—

(D.T.S.R. 519/253/1.)

(*Navy Orders* 879 *and* 951 *of* 1958.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

98.—Laundry Charges in H.M.A. Ships.

It has been decided that uniform charges shall apply to the laundering of Departmental property in ships' laundries to defray the costs of detergents used.

2. A flat rate of 6d. per dozen articles is to be charged to public funds, in respect of all Service articles laundered as from 1st January, 1960.

(D.V. 900/51/4.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

RESTRICTED.

99.—Books—B.R.100 (1958) and C.D. Pamphlet No. 11C (1958) Rules for the Arrangement of Structures and Fittings in the Vicinity of Magnetic Compasses and Chronometers.

(*A.F.O.* 118/1959.)

B.R.100 (1958) and C.D. Pamphlet No. 11C (1958) " Rules for the Arrangement of Structures and Fittings in the vicinity of Magnetic Compasses and Chronometers " have been distributed.

2. These publications superseded B.R.100 (1958) and C.D. Pamphlet No. 11C (1956) respectively. Considerable changes have been made in the main text, the figures for " safe distances " of a number of items tested in the past two years have been included, and in the case of B.R.100, minor alterations and additions have been made to appendix IV.

3. B.R.100 is " Restricted ", C.D. Pamphlet No. 11C is the unclassified version of B.R.100 and is not likely to be of interest to holders of the latter publication.

(D.N.A.S. 465/52/188.)

RESTRICTED.

100.—Books—Handbooks—Common Range Electrical Testing Equipment B.R.1781—Introduction.

(*A.F.O.* 1575/1959.)

B.R.1781, Common Range Electrical Testing Equipment has been introduced to replace D.N.L.D. pamphlet " Preliminary Summaries of Data of Common Range Electrical Testing Equipment ", D.N.L.D. (Bath) G.W.B. 796/12/3C, 1st February, 1957.

2. B.R.1781 contains details of all Common Range Electrical Testing equipment and will be modified from time to time as new test equipment is introduced into the Fleet.

3. B.R.1781 utilizes a special 3 ring binder and selected reports will be called for on its use, at a later date.

(D.N.A.S. 465/252/15.)

UNCLASSIFIED.

101.—Packing and Transport of Typewriters and Other Office Machinery.

Instances continue to occur where office machinery returned to store has suffered damage due to faulty packing or bulk crating.

2. When unserviceable machines are being returned to store, there is a tendency to regard the manner of packing as being of less consequence than is the case with serviceable machines. However, costs of overhaul are considerably increased where sand blasting to remove rust, and extensive dismantling to enable effective cleaning, have become necessary as the result of faulty packing.

3. Difficulties have also been experienced in regard to the following—

(*a*) Failure to return accessories or components of machines (e.g. feed trays of duplicators, operating handles of manual or semi-electric adding machines) causing delay in repairing the machines and increasing the cost of their repair.

(*b*) Failure to replace access plates before returning typewriters (e.g. top cover plate on certain makes of machines which is removed to gain access to ribbon spools, &c.). As this plate gives protection against dust, it should not be removed unless absolutely necessary.

4. In future, when serviceable or unserviceable office machines are returned to store the following method of packing is to be used—

(*a*) The metal cover should be replaced on stencil duplicators (e.g. Ellams, Gestetner, &c.) before packing, and a check carried out to ensure that all accessories are present and that access plates have been replaced on typewriters.

(*b*) Moveable parts should be secured, and the machine should be wrapped in one thickness of grease proof paper and three thicknesses of stout brown paper and tied with cord. A case of suitable size should be lined with sisalkraft, making sure that the lining is completely sealed and made waterproof. The wrapped machine is to be embedded in a minimum six inch protective cover of firmly packed wood-wool. The case should be marked " Fragile ".

5. A.B.R. 4 articles 1007, 2904 and 3010 will be amended in due course.

(D.N.A.S. 462/51/4.)

UNCLASSIFIED.

102.—Revision and Abolition of Forms.

The following forms have been revised. When stocks of the present form are exhausted, supply of the revised forms will be effected on demand—

A.S.33	Pay Envelope.
A.S.79N	Clothing Issued Free to R.A.N.R. Officers on Entry.
A.S.181	Punishment Return.
A.S.258	Effects of Naval Offender.
A.S.264	Divisional Record Sheet.
A.S.264A	Continuation Sheet.
A.S.430N	Trade Certificate—Ordnance Artificer.
A.S.1048	Daily Abstract of Clothing Issued on Repayment.
A.S.1303	Return of Seaman Ratings Recommended to Qualify for a Specialist Qualification.
A.S.2081Z (Large)	Advice Note for Non-accountable Publications.
E.55R	Ledger Page—Returnable Items.
Receiver of Public Moneys—Debit Advice Note.	

2. Forms N.A.3—Salaries and N.A.3A—Wages have been combined and will be known as form N.A.3/N.A.3A, which is available on demand.

3. The following forms have been abolished—

A.S.539Y	Leave History Sheet.
A.S.539Z	Long Leave Book.

4. The following form has been introduced, and is available on demand—

A.D.1138	Log Card for Inflatable Liferaft.

(D.N.A.S. 464/51/3.)

UNCLASSIFIED.

103.—Standardization of Letter Headed Paper and Envelopes.

In the interests of economy, there has been a reduction in the varieties of letter headed paper and " return-to-sender " envelopes previously in use in the R.A.N.

2. Headed paper (other than ministerial and semi-official) will in future be supplied in the following headings in sizes 8¼-in. x 13¼-in., 8¼-in. x 10-in and 6⅝-in. x 8¼-in.

User.	*Heading.*
H.M.A. ships and commissioned establishments	Royal Australian Navy.
All other establishments	Commonwealth of Australia. Commonwealth Crest. Department of the Navy.

Note.—As an example, to illustrate the above, H.M.A.S. LEEUWIN is a commissioned establishment but the Naval Staff Office, Fremantle, is not.

3. Addresses and telephone numbers on headed paper will still be printed for those activities which by volume of correspondence, economically justify this; in other cases the address should be typed or imprinted by rubber stamp.

4. It is also intended that as far as practicable, " return-to-sender " addresses on envelopes should be restricted to one centre in each state e.g.—Naval Staff Office, Brisbane, Hobart, Port Adelaide, although it is realized that some extension may be necessary e.g. in Sydney and Melbourne. In the case of F.O.C.A.F. and ships, " return-to-sender " envelopes will read—

F.O.C.A.F.	Office of Flag Officer Commanding H.M. Australian Fleet.
H.M.A. ships	H.M.A.S.....

5. All re-prints of headed paper and " return-to-sender " envelopes should, in the first instance, be referred to Navy Office for approval. The application should include an estimate of future annual usage of each of the sizes concerned, together with specimens showing the address, &c., desired to be printed and any other information considered relevant to the question.

(D.N.A.S. 3911/51/343.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

FOR OFFICIAL USE ONLY. C.N.O. 104/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
15th February, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

639/60.

UNCLASSIFIED.

104.—Books—Distribution of Non-accountable Publications during December, 1959.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series, contained in the appendix to this order, have been distributed to ships and services during December, 1959. Paragraph 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series Amendments and A.P. Amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	9th October, 1959.
Aeroplane	16th October, 1959.
Aeroplane	23rd October, 1959.
Aeroplane	30th October, 1959.
Aircraft	Volume 39, No. 3. December, 1959.
Fibres and Plastics	Volume 20, No. 9. October, 1959.
Flight	23rd October, 1959.
Joint Services Recognition Journal	Volume 14, No. 8. August, 1959.
Journal of Institute of Navigation	Volume XII., Nos. 2 and 4. July, October, 1959.
Journal of the R.N. Medical Service	Volume XLV., No. 2. Spring, 1959.
Manual of A.B.C. Supply Classification in Australia	Chapter 6.
Manual of the Audit Act and Treasury Regulations	Issue No. 12, dated 10th September, 1959
Manual of the Audit Act and Treasury Regulations	Issue No. 14, dated 11th September, 1959.
Navy List of Retired Officers together with the Emergency List	1959.
Post Office Guide	Supplement No. 49. July, 1959.
Post Office Guide	Supplement No. 50. August, 1959.
Post Office Guide	Supplement No. 51. September, 1959.
Post Office Guide	Supplement No. 52. October, 1959.
Post Office Guide	Supplement No. 53. November, 1959.
Post Office Guide	Mail Schedule for July, 1959.
Appendix to R.N. Navy List	June, 1959.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
B.R. 16	38.
B.R. 125	Supplement No. 4. October, 1959.
B.R. 125	New Entries No. 4. October, 1959.
B.R. 129 (3) (1)	Supplement No. 4. 16th Edition.
B.R. 226B (22)	Australian Amendment No. A.N.I. to A.F.O. P.376/59 (Amendment No. 1).
B.R. 226B (68)	Australian Amendment No. A.N.I. to A.F.O. P.422/59 (Amendment No. 3).
B.R. 268 (56)	1.
B.R. 268 (62)	3.
B.R. 644	30 and 31.
B.R. 677/1958	4.
B.R. 1168 (1)	3.
B.R. 1332 (13)	5.
B.R. 1469 (1) (2)	4.
B.R. 1506	3.
B.R. 1644 (1)	1.
B.R. 1644 (2)B	1.
B.R. 1653	8 and 10.
B.R. 1709 (2)	9 and 11.
B.R. 1754 (1956)	7.
B.R. 1774 (1) (2) (3)	9.
B.R. 1781/1958	1.
B.R. 1787	3.
B.R. 1797	26.
B.R. 1837 (3), Division R, Section R.V.	4.
B.R. 1837 (3), Division R, Section R.W.	4.
B.R. 1837 (3), Division S, Section S.A.	4.
B.R. 1837 (3), Division S, Section S.B.	4.
B.R. 1837 (3), Division S, Section S.C.	4.
B.R. 1837 (3), Division S, Section S.D.	4.
B.R. 1837 (3), Division S, Section S.G.	3.
B.R. 1837 (3), Division S, Section S.H.	4.
B.R. 1837 (3), Division S, Section S.L.	4.
B.R. 1837 (3), Division S, Section S.P.	4.
B.R. 1837 (3), Division S, Section S.R.	2.
B.R. 1837 (3), Division S, Section S.S.	2.
B.R. 1837 (3), Division S, Section S.X.	4.
B.R. 1837 (4), Division U, Section U.H.	3.
B.R. 1837 (4), Division U, Section U.J.	3.
B.R. 1837 (7), Division J, Section J.C.	5.
B.R. 1837 (7), Division J, Section J.D.	12.
B.R. 1837 (7), Division J, Section J.H.	7.
B.R. 1837 (7), Division J, Section J.P.	7.
B.R. 1837 (7), Division J, Section J.R.	3.
B.R. 1837 (7), Division J, Section J.T.	2.
B.R. 1837 (7), Division J, Section J.X.	11.
B.R. 1837 (7), Division L, Section L.X.	18.
B.R. 1837 (8), Division M, Section M.A.	8.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 1837 (8), Division M, Section M.B.	8.
B.R. 1837 (8), Division M, Section M.C.	8.
B.R. 1837 (8), Division M, Section M.D.	7.
B.R. 1837 (8), Division M, Section M.G.	14.
B.R. 1837 (8), Division M, Section M.L.	9.
B.R. 1837 (8), Division M, Section M.M.	12.
B.R. 1837 (8), Division M, Section M.P.	14.
B.R. 1837 (8), Division M, Section M.R.	10.
B.R. 1837 (8), Division M, Section M.V.	12.
B.R. 1837 (8), Division M, Section M.X.	7.
B.R. 1837 (8), Division M, Section M.Y.	9.
B.R. 1839	1.
B.R. 1921 (49)	57.
B.R. 1928	48.
B.R. 1844 (1)	9.
B.R. 1950	42.
B.R. 1982, Volume 1	1.
B.R. 1983	12.
B.R. 1988	21.
B.R. 2047A (10)	2.
B.R. 2047B (6)	2.
B.R. 2050 (641)	Correction to A.F.O. P.468/59 (Amendment 1).
B.R. 2062 (2)	5.
B.R. 2065 (4)	5, 6 and 7.
B.R. 2065 (9)	1 and 2.
B.R. 2101 (2)	6.
B.R. 2101 (3)	6.
B.R. 2105	1.
B.R. 2125 (2)	5.
B.R. 2125 (6)	2.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
B.R. 1035 (3)	S.C. 20/59, Change No. 4.
A.C.P. 118–1, European Supplement	S.C. 21/59, Change No. 10.
A.B.R. 5009	Change No. 1.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 154.
1086, Book 3, Part 2 (2nd Edition)	A.L. 121 and 122.
1086, Book 4, Part 3 (2nd Edition)	A.L. 79.
1086, Book 4, Part 4 (2nd Edition)	A.L. 2, 3 and 5.
1086, Book 5 (2nd Edition)	A.L. 84.
1086, Book 7 (2nd Edition)	A.L. 103.
1086, Book 8, Part 1 (2nd Edition)	A.L. 55.
1086, Book 8, Part 2 (2nd Edition)	A.L. 13.
1086, Book 9 (2nd Edition)	A.L. 125.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1181A, Vol. 1 and Vol. 6, Part 1	A.L. 10.
1181C, Vol. 6, Parts 2, 3 and 4	A.L. 38 and 39.
1182 (Naval), Vol. 2	(A.L. 75)–C.24 (A.L. 76)–E.16.
1182A, Vol. 2, Part 1	C.36.
1182C, Vol. 2	(A.L. 75)–F.14.
1182C, Vol. 4, Parts 2 and 6	A.L. 23.
1182E, Vol. 1	A.L. 77.
1234E, Vol. 5	A.L. 20.
1275A, Vol. 1, Section 16	A.L. 26 and 29.
1275A, Vol. 1, Section 21	A.L. 29.
1275A, Vol. 1, Section 26	A.L. 22.
1275A, Vol. 2	(A.L. 84)–C.16 (A.L. 89)–K.15 (Alt. 1) (A.L. 88)–Z.5.
1275A, Vol. 4, Part 6 (N) (Office and Working Copies)	A.L. 17 and 18.
1275E, Vol. 6	A.L. 26.
1275G, Vol. 2	(A.L. 136)–A.2 (Alt. 1–3 inc.).
1374B, Vol. 1	A.L. 27.
1455	O.10 (April, 1959).
1469F, Vol. 2	D.1.
1538E, Vol. 2, Part 1	No. 130 (A.L. 1 inc.).
1538P, Vol. 6, Parts 2 and 4	A.L. 41.
1641S, Vol. 1, Parts 1 and 3	A.I.L. 1/59.
1661, Vol. 2, Part 3	A.L. 14.
1664E, Vols. 1 and 5	A.L. 14 and 15.
1803, Vol. 2, Part 1	Orange Label for Cover 1 with Binders for Covers 2 and 3 (with Orange Label) D.134 (A.L. 2 inc.) D.136 (A.L. 2 inc.) D.137 (A.L. 2 inc.) D.153 E.113 (A.L. 1) E.120 (A.L. 1) E.124 F.86 F.87 P.6 (A.L. 1 inc.).
1803D, Vol. 1, Book 3	A.L. 114.
1803D, Vol. 2, Part 2	A.L. 219.
1803E, Vol. 1	A.L. 113 and 115.
1803R, Vol. 1	A.L. 72.
1803T, Vol. 6	A.L. 46, 47 and 48.
2173B, Vol. 1 and Vol. 6	A.L. 21.
2173C, Vol. 1 and Vol. 6	A.L. 16.
2337, Vol. 1, Book 1	A.L. 45.
2337, Vol. 1, Book 2	A.L. 40.
2438G, Vol. 1 and Vol. 6	A.L. 13 and 14.
2531J, Vol. 1	A.L. 8, 9 and 10.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2531L, Vol. 1	A.L. 6.
2534N, Vol. 3	A.L. 16.
2534NA, Vol. 1	A.L. 8.
2538HA, Vol. 2	(A.L. 122)–B.77.
2538J, Vol. 1 (2nd Edition)	A.L. 17.
2554D, Vol. 1	A.L. 6.
2554E, Vol. 1	A.L. 3.
2662B	A.L. 22.
2802A, Vol. 1, Parts 1 and 3 (2nd Edition)	A.L. 39 and 40.
2817A, Vol. 1 and Vol. 6, Part 1	A.L. 141.
2817A, Vol. 6, Parts 2 and 3	A.L. 31.
2892F, Vol. 3, Part 1 (2nd Edition)	A.L. 8.
2898D, Vol. 2	(A.L. 24)–B.13 (Alt. 1 inc.).
3042, Vol. 1, Book 2, Sections 2, 3, 4, 5 and 6	A.L. 7.
3158, Vol. 2	(A.L. 451)–A.20
	(A.L. 473)–B.7 (Alt. 13 inc.)
	(A.L. 477)–B.8 (Alt. 6)
	(A.L. 476)–B.14 (Alt. 5)
	(A.L. 468)–B.29 (Alt. 1)
	(A.L. 452)–B.31
	(A.L. 453)–B.32
	(A.L. 454)–B.33
	(A.L. 455)–B.34
	(A.L. 456)–B.35
	(A.L. 457)–B.36
	(A.L. 458)–B.37
	(A.L. 472)–C.2 (Alt. 21)
	(A.L. 471)–C.5 (Alt. 6 inc.)
	(A.L. 475)–C.13 (Alt. 1 inc.)
	(A.L. 459)–C.14
	(A.L. 460)–C.15
	(A.L. 461)–C.16
	(A.L. 462)–C.17
	(A.L. 470)–C.18
	(A.L. 474)–G.2 (Alt. 13)
	(A.L. 463)–H.12
	(A.L. 464)–H.13
	(A.L. 465)–H.14
	(A.L. 466)–H.15
	(A.L. 467)–J.5.
3192B	Correction No. 45B (10/11/59)
	Correction No. 46B (17/11/59).
4099J, Vol. 2	(A.L. 324)–D.18 (Alt. 1 inc.)
	(A.L. 327)–H.25 (Alt. 1–3 inc.)
	(A.L. 329)–K.17.
4121C, Vol. 2, Part 1	(A.L. 97)–G.10.
4269C, Vol. 1	A.L. 63.
4269C, Vol. 2, Part 1	F.14.
4282A, Vol. 2, Part 3	A.L. 57.
4282C, Vol. 1	A.L. 30, 31, 32 and 33.
4288, Vol. 1, Part 1	A.L. 47 and 48.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4288 (N), Vol. 1, Parts 1 and 2	A.L. 35 and 36.
4288, Vol. 2	Binders for Covers 2 and 3 (with Orange Label)
	(A.L. 315)–B.155 (Alt. 2)
	(A.L. 310)–B.205 (Alt. 1)
	(A.L. 308)–B.229
	(A.L. 311)–B.231
	(A.L. 313)–B.233.
4300, Vol. 6, Part 2	A.L. 13.
4300C, Vol. 1	A.L. 41.
4303B, Vol. 1, Book 2	A.L. 15.
4303C, Vol. 2, Part 1	(A.L. 8)–B.5
	(A.L. 10)–B.7.
4303Z, Vol. 1	A.L. 51.
4340, Vol. 1, Book 1	A.L. 20.
4340, Vol. 1, Book 2	A.L. 36.
4340, Vol. 2	(A.L. 24)–B.9 (Alt. 1 inc.)
	(A.L. 25)–B.12.
4340, Vol. 6	A.L. 42.
4343A, Vol. 1	A.L. 80.
4343A, Vol. 2	(A.L. 60)–B.1
	(A.L. 61)–B.2
	(A.L. 62)–B.3
	(A.L. 53)–C.20
	(A.L. 65)–C.23
	(A.L. 66)–C.24
	(A.L. 59)–Z.10.
4343B, Vol. 2	(A.L. 131)–A.5 (Canc.)
	(A.L. 107)–A.9
	(A.L. 126)–Q.6.
4343C, Vol. 1, Book 2	A.L. 26, 27 and 28.
4343C, Vol. 2	(A.L. 36)–C.11
	(A.L. 38)–D.4 (Alt. 1 inc.)
	(A.L. 37)–D.7.
4343D, Vol. 1, Book 3	A.L. 41.
4343D, Vol. 2	(A.L. 46)–A.6
	(A.L. 50)–U.7.
4343E, Vol. 1	A.L. 130.
4343S, Vol. 1	A.L. 75, 77, 78 and 79.
4343X, Vol. 2	(A.L. 45)–C.5
	(A.L. 43)–Z.9.
4360, Vol. 6	A.L. 29.
4360B—P.N. (2nd Edition)	A.L. 4.
4361G, Vol. 1	A.L. 47, 48 and 49.
4361G, Vol. 2	(A.L. 148)–G.1 (Alt. 1)
	(A.L. 150)–G.16 (Alt. 2)
	(A.L. 151)–G.26.
4389A, Vol. 1	A.L. 57.
4389A, Vol. 2	Q.1.
4401, Vol. 2	Mod. Leaflet No. 4227/12 (Oct., 1959).
4487A, Vol. 2	K.16 (A.L. 1 inc.).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4487B, Vol. 2	K.11 (A.L. 1 inc.).
4677A, Vol. 1 and Vol. 6	A.L. 21.
A.P. (N) 68	A.L. 46, 47, 48 and 49.
A.P. (N) 75	A.L. 24.
A.P. (N) 76	A.L. 4.
A.P. (N) 88	A.L. 7, 8 and 9.
A.P. (N) 377	A.L. 122.
A.P. (N) 378	A.L. 122.
A.P. (N) 400 (G.A.)	A.L. 13.
A.P. (N) 400 (V.A.)	A.L. 11.
A.P. (N) 1023 (7)	A.L. 9, 10, 11 and 12.
A.P. (RAN) 101	A.L. 24.
N.A.M.O. Engines	E. (A) 8 (22/9/59)
	E. (A) 9 (9/9/59)
	E. (De H) 26 (31/8/59)
	E. (RR) 53 (27/8/59)
	SI/Leonides Major/3 (7/9/59).
N.A.M.O. Gannet	X.25 (31/8/59)
	SI/13 (9/9/59).
N.A.M.O. General	A.L. 74 and 75
	A.76 (31/8/59)
	G.5, Section 1, Issue 18 (28/8/59)
	I.97, Issue 3 (21/9/59)
	L.109 (26/8/59)
	O.91, Issue 2 (25/9/59)
	O.93 (24/8/59)
	R.79 (2/9/59)
	X.117, Issue 2 (31/8/59)
	X.120 (27/8/59)
	X.121 (31/8/59)
	STI/Ground Equipment/26A (10/9/59)
	STI/Misc./241A (4/9/59)
	STI/RAA/130 (24/8/59)
	STI/RAA/132 (24/8/59)
	STI/RAA/132 Diagrams, Figs. 1 and 2
	STI/Safety Equipment/39B (10/9/59)
	STI/Safety Equipment/39B Diagrams, Figs. 2, 3 and 4
	STI/Safety Equipment/43 (27/8/59)
	STI/Safety Equipment/43 Diagrams
	STI/Safety Equipment/45 (9/9/59)
	STI/Safety Equipment/46 (9/9/59).
N.A.M.O. Miscellaneous	A.L. 37
	Dragonfly/A.5 (24/8/59)
	Dragonfly/A.5 Diagram
	Sea Prince/X.7 (31/8/59)
	STI/Sea Prince/13 (8/9/59)
	STI/Sea Prince/13 Diagrams
	SI/Devon/17A (4/9/59)
	SI/Dragonfly/18C (26/8/59).
N.A.M.O. Sea Vampire	A.L. 20.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
N.A.M.O. Sea Venom	X.69 (Issue 2) (25/9/59)
	X.71 (26/8/59)
	STI/176 (31/8/59).
N.A.M.O. Westland Whirlwind	A.9 (24/8/59)
	A.9 Diagram (Figs. 1 and 2)
	SI/19 (17/8/59)
	SI/19 Diagram (Figs. 1 and 2).
R.A.N.A.M.O. Gannet	Index (November, 1959).
R.A.N.A.M.O. General	Index (November, 1959)
	Index (November, 1959) (I.L. and R.).
R.A.N.A.M.O. Goblin	No. 4 (October, 1959).
R.A.N.A.M.O. Sea Venom	Index (November, 1959)
	STI/RAN/71 (October, 1959).
R.A.N.A.M.O. Sycamore	Index (November, 1959).
R.A.N.A.M.O. Vampire Trainer	Index (November, 1959)
	A.15 (November, 1959).
Air Clues	July, August, September, 1959
	October, 1959.
Air Pictorial	August, 1959
	September, 1959
	October, 1959.
Aviation Studies (International) Limited	Replacement Sheet — Engine Data Sheets (6 Leaves).
D.C.A. Aeronautical Information Publications	A.G.A. (A.L. 18)
	C.O.M. (A.L. 25)
	R.A.C./2 (A.L. 32).
D.C.A. NOTAMS	No. 11/1959 (16/11/59)
	No. 12/1959 (17/11/59)
	No. 13/1959 (17/11/59)
	No. 14/1959 (17/11/59)
	No. 15/1959 (17/11/59)
	No. 16/1959 (1/12/59).
D.C.A. Operations Letters	A.T.C. 291, dated 18/11/59
	A.T.C. 293 C.O.M. 176 (16/11/59)
	A.T.C. 294, dated 1/12/59.
I.C.A.O. Bulletins	No. 7–8, 1959.
Manual of Instructions for the Auster J5G Autocar	R.A.N. Technical Leaflet No. 1.
R.A.F. Flight Information Publication Terminal Approach Procedure Charts Far East Area, High and Low Altitude	A.L. 1 to T.A.P. Check List (31/10/59).
Smiths Aircraft Instruments Ltd. Modification Leaflets	No. 462 (July, 1959)
	No. 468 (August, 1959)
	No. 469 (August, 1959)
	No. 479 (July, 1959)
	No. 472 (A.L. 2)
	No. 481 (August, 1959).
R.A.A.F. Repairs and Maintenance General Instructions	A.L. 295, 298, 300, 303, 305 and 307.
R.A.A.F. Summary of Aircraft Accidents	(July–September, 1959).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Air Diagrams	O.N. 1347/N.B.
	S.R. 1205/N.B.
	S.R. 1206/N.B.
	S.R. 1207/N.B.
	S.R. 1208/N.B.
	S.R. 1209/N.B.
	S.R. 1210/N.B.
	S.R. 1211/N.B.
	S.R. 1212/N.B.
	S.R. 1213/N.B.
	S.R. 1214/N.B.
	S.R. 1215/N.B.
	S.R. 1216/N.B.
	S.R. 1217/N.B., Sheet 1
	S.R. 1217/N.B., Sheet 2
	S.R. 1218/N.B.
	S.R. 1219/N.B.
	S.R. 1220/N.B.
	S.R. 1221/N.B., Sheet 1
	S.R. 1221/N.B., Sheet 2
	S.R. 1222/N.B., Sheet 1
	S.R. 1222/N.B., Sheet 2
	S.R. 1223/N.B.
	S.R. 1224/N.B.
	S.R. 1225/N.B.
	S.R. 1226/N.B., Sheet 1
	S.R. 1226/N.B., Sheet 2
	S.R. 1227/N.B.
	S.R. 1228A/N.B.
	S.R. 1228B/N.B., Sheet 1
	S.R. 1228B/N.B., Sheet 2
	S.R. 1228B/N.B., Sheet 3
	S.R. 1228C/N.B., Sheet 1
	S.R. 1228C/N.B., Sheet 2
	S.R. 1228C/N.B., Sheet 3
	S.R. 1265/N.B., Sheet 1
	S.R. 1265/N.B., Sheet 2
	S.R. 1266/N.B.
	S.R. 1267/N.B.
	S.R. 1268/N.B.
	S.R. 1269/N.B.
	S.R. 1270/N.B.
	S.R. 1271/N.B.
	S.R. 1272/N.B.
	S.R. 1273/N.B.
	S.R. 1274/N.B.
	S.R. 1288/N.B.
	S.R. 1289/N.B.
	S.R. 1291/N.B.
	S.R. 1292/N.B.
	S.R. 1293/N.B.
	S.R. 1294/N.B.
	S.R. 1297/N.B.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

Title.	*Date.*
Lloyds Shipping Index	7th December, 1959.
Lloyds Shipping Index	14th December, 1959.
Lloyds Shipping Index	21st December, 1959.
Lloyds Shipping Index	28th December, 1959.

(D.N.A.S. 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

Registrar.

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C.N.O.'s 105-130/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
17th February, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

640/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.
ADMINISTRATIVE AND GENERAL.

RESTRICTED.

105.—A.C.N.B.—General Messages.

In accordance with Navy Order 336 of 1959, the state of A.C.N.B. general messages as at the 1st January, 1960, is shown in the appendix to this order.

APPENDIX.

The following F messages may be now be withdrawn—

1959—
049 *see* I.P.I.
115 *see* I.P.I.
116 *see* I.P.I.
132 *see* I.P.I.
133 *see* I.P.I.
135 *see* I.P.I.
159 *see* I.P.I.

2. As at 0001Z, 1st January, 1960, the following F messages are still in force—

1959—052	106	130	134	141	142	144	148	156	167
168	172	175	176	182	183	186	199	200	201
202	204	206	208	209	211	212	213	214	

3. The following RF messages may be now withdrawn—

1959—029 *see* S.T.I.	039	050
030	040	051
032	041	052 *see* S.I.
033 *see* S.I.	042	055
034	044	056
035	047	058
036	048	

4. As at 0001Z, 1st January, 1960, the following RF messages are still in force—

1959—024 031 037 038 046 049 053 057 059 060

(H.N.B. 77/5/8.)

(*Navy Order* 336 *of* 1959.)

Cancelled C.N.O 523/62

Section 2.
PERSONNEL.

UNCLASSIFIED.

106.—Contracts for Ratings' Made-to-Measure Uniforms at Sydney and Perth—1959-1960.

The following are the prices operative until 30th June, 1960, at which ratings' made-to-measure uniforms may be obtained from the Sydney and Perth contractors, viz., Evers & Cohen Pty. Ltd., 16 Wentworth-avenue, Sydney, New South Wales and Wende Bros., 80 Barrack-street, Perth, Western Australia.

Item.	*Sydney. Evers & Cohen.* £ *s.* *d.*	*Perth. Wende Bros.* £ *s.* *d.*
Jackets, lightweight serge, double breasted for—		
(*a*) C.P.O. with gilt buttons	9 19 3	9 9 9
(*b*) P.O. with gilt buttons	9 14 5	9 5 8
(*c*) Other ratings, with black horn buttons ..	9 6 10	8 16 8
(*d*) Naval Artificer Apprentices	9 16 9	—
(*e*) Naval Dockyard Police, with white metal buttons	9 8 9	9 18 9
Trousers, lightweight serge, fly..	4 1 0	4 18 3
Jumpers, seamen's serge	4 19 3	6 12 10
Trousers, seamen's serge, fly, class II.	4 2 8	6 0 0
Overcoats—		
C.P.O.'s and P.O.'s, with gilt buttons.. ..	13 1 8	15 12 11
Other ratings, with black horn buttons ..	12 11 1	15 2 4
Extra Charges—		
Sewing on badges, chevrons, &c.	0 10 0 per uniform	0 7 6 each
Taping on bottom of trousers, seamen's serge ..	—	0 7 6 pair.

Terms—

Evers & Cohen Pty. Ltd., less 2½% 14 days; Wende Bros., nett.

2. The conditions of the contracts are—

(*a*) When ordering garments, the rating must present to the contractor a written authority, on form A.S. 87X, signed by the Supply Officer of his ship if one is borne, otherwise by the Commanding Officer or an officer delegated by him. This authority is to state the rating's name, official number, rating, ship or establishment in which serving, and must specify in detail the articles and quantities thereof authorized to be purchased. Unless form A.S. 87X containing the full details required is lodged with the contractor at the time of ordering, the order will not be accepted.

(*b*) The rating must sign the order book of the contractor when placing the order and make an initial payment of at least five shillings. All orders are to be paid in full on delivery.

(*c*) The garments ordered must be made by the contractor to the measurements of the rating and are to be tried on at the contractor's premises at least once in the basted or unfinished condition and again in the finished state.

(*d*) The garments are to be made to the complete satisfaction of the rating but must conform to service requirements and specifications held by the contractor. Certain extras are, however, permissible if desired and these are set forth in paragraph 1 of the specifications.

(*e*) Completion of garments is to be effected within at least fourteen days from date of measurement of the rating, or as otherwise arranged by mutual consent between the rating and the contractor, the delivery period to be subject to the rating attending for a try-on on the date specified by the contractor.

(*f*) Delivery of garments is to be taken at the contractor's premises, otherwise at the rating's expense.

3. Ratings are warned that they themselves are responsible for ensuring that uniforms obtained under the contracts or from private outfitters are made strictly to the approved patterns and that they are liable to disciplinary action if incorrect uniform is worn.

4. In addition to the supply of personal requirements of made-to-measure garments, the contracts provide for the supply of garments against official orders in circumstances where this may be necessary. In these circumstances the following conditions shall apply—

(*a*) Orders shall be placed by Supply Officers on Treasury Form 11, accompanied by a properly completed self-measurement form (if ratings are unable to attend for measurement) and form N.A. 4.

(*b*) Garments shall be completed within fourteen days of receipt by the contractor of the official order and delivered by parcel post to the address shown thereon, postal charges being to the account of the ship or establishment concerned.

(*c*) Unsatisfactory garments supplied against official orders shall be returned to the contractor to be altered to the complete satisfaction of the ordering officer and at the contractor's expense, including forwarding charges each way.

5. Navy Order 724 of 1958 is hereby cancelled.

6. This order will be reprinted for posting on notice boards.

(D.V. 917/80/7.)

(*Navy Order* 724 *of* 1958.)

UNCLASSIFIED.

107.—Examinations for Lieutenant-Commander (Supply and Secretariat Specialization).

Examinations for the rank of Lieutenant-Commander (Supply and Secretariat Specialization) during 1960 will be held as follows—

Part I.—Monday, 12th September Thursday, 15th September	..	Returns due at Navy Office on 15th August.
Part II.—Monday, 14th March Thursday, 17th March	..	Returns due at Navy Office on 15th February.

2. Navy Order 1070 of 1958 is hereby cancelled.

(H.P.B. 4007/3/227.)

(*Navy Order* 1070 *of* 1958.)

RESTRICTED.

108.—Instructional Films and Film Strips—Serial No. A.1060, " Radio and Electronic Fault-Finding "—Distribution.

(*A.F.O.* 2221/1959.)

Copies of the Admiralty instructional film, serial No. A.1060 " Radio and Electronic Fault-finding " are being obtained and initial distribution will be effected, without demand, by the S.N.S.O., Sydney, on the following scale—

H.M.A. Service.	*No. of Copies.*
F.N.D. (for Electrical School)	1
H.M.A.S. NIRIMBA	1
H.M.A.S. LEEUWIN	1
H.M.A.S. HUON	1
H.M.A.S. LONSDALE	1
H.M.A.S. MORETON	1
H.M.A.S. TORRENS	1
R.A.N. Film Library, Sydney	1

2. This film is intended for use as an introduction to elementary principles and good practice in fault finding on radio and electronic equipment. It is suitable for showing to Junior Electrical Branch ratings and is recommended for periodic use in ships and shore establishments in addition to the Electrical Schools.

3. The film has a running time of 26 minutes and is issued on one spool.

4. The classification is Restricted.

(D.N.A.S. 519/56/36.)

RESTRICTED.

109.—Instructional Films and Film Strips—Serial No. A.1203, " Nuclear Explosions (Air Burst) "—Distribution.

(*A.F.O.* 2219/1959.)

Copies of the Admiralty instructional film serial No. A.1203 " Nuclear Explosions (Air Burst) " are being obtained and distribution will be made, without demand, by the S.N.S.O., Sydney, on the following scale—

H.M.A. Naval Establishments.	*No. of Copies.*
F.N.D. (for A.B.C.D. School)	1
H.M.A.S. PENGUIN (for A.B.C.D. School)	1
H.M.A.S. LEEUWIN (for A.B.C.D. Section)	1

2. The film illustrates the sequence of events during an air-burst nuclear explosion, showing the flash, growth of the fireball, blast and cloud formation.

3. The film has a running time of 4 minutes and is issued on one spool.

4. The classification is Restricted.

(D.N.A.S. 519/56/38.)

UNCLASSIFIED.

110.—Programme of Professional Examinations—1960.

The programme of professional examinations to be conducted from Navy Office during 1960 is as follows—

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Sub-Lieutenant (Electrical Specialization)	Tuesday, 2nd February Wednesday, 3rd February Thursday, 4th February	4th January
Leading Steward	Tuesday, 16th February	18th January
Petty Officer Wran Sick Berth Attendant	Tuesday, 16th February	18th January
Leading Wran Sick Berth Attendant	Tuesday, 16th February	18th January
Shipwright Sub-Lieutenant	Tuesday, 1st March Wednesday, 2nd March	1st February
Leading Writer	Tuesday, 1st March Wednesday, 2nd March	1st February
Leading Wran Writer (G.D.)	Tuesday, 1st March Wednesday, 2nd March	1st February
Leading Wran Writer (P) and (S.T.)	Tuesday, 1st March	1st February
Leading Stores Assistant (S) and (V)	Tuesday, 1st March Wednesday, 2nd March	1st February
Leading Wran Stores Assistant (S) and (V)	Tuesday, 1st March	1st February
Leading Writer, R.A.N.R.	Wednesday, 2nd March Wednesday, 9th March Wednesday, 16th March	1st February
Leading Stores Assistant (S) and (V) R.A.N.R.	Wednesday, 2nd March Wednesday, 9th March Wednesday, 16th March	1st February
Sick Berth Chief Petty Officer	Tuesday, 8th March	8th February
Sick Berth Petty Officer	Tuesday, 8th March	8th February
Leading Sick Berth Attendant	Tuesday, 8th March	8th February
Leading Wran Steward (G)	Tuesday, 15th March	15th February
Leading Steward, R.A.N.R.	Wednesday, 16th March Wednesday, 23rd March	15th February
Petty Officer Dental Assistant	Tuesday, 15th March	15th February
Leading Dental Assistant	Tuesday, 15th March	15th February
Wardmaster Sub-Lieutenant	Tuesday, 12th April Wednesday, 13th April	14th March
Petty Officer Writer	Tuesday, 12th April Wednesday, 13th April	14th March
Petty Officer Wran Writer (G.D.) and (P)	Tuesday, 12th April Wednesday, 13th April	14th March
Stores Petty Officer (S) and (V)	Tuesday, 12th April Wednesday, 13th April	14th March

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Petty Officer Wran (S) and (V)	Tuesday, 12th April Wednesday, 13th April	14th March
Petty Officer Steward	Tuesday, 12th April Wednesday, 13th April	14th March
Petty Officer Wran Steward (G)	Tuesday, 12th April	14th March
Petty Officer Writer, R.A.N.R.	Wednesday, 13th April Wednesday, 20th April Wednesday, 27th April Wednesday, 4th May	14th March
Stores Petty Officer (S) and (V) R.A.N.R.	Wednesday, 13th April Wednesday, 20th April Wednesday, 27th April Wednesday, 4th May	14th March
Petty Officer Steward, R.A.N.R.	Wednesday, 13th April Wednesday, 20th April Wednesday, 27th April	14th March
Leading Steward	Tuesday, 10th May	11th April
Engineer Sub-Liuetenant (Mech.) and (M.E.)	Wednesday, 1st June	2nd May
Leading Steward	Tuesday, 2nd August	4th July
Sub-Lieutenant (Engineering Specialization)	Tuesday, 16th August Wednesday, 17th August	18th July
Petty Officer Wran Sick Berth Attendant	Tuesday, 16th August	18th July
Leading Wran Sick Berth Attendant	Tuesday, 16th August	18th July
Leading Writer	Tuesday, 13th September Wednesday, 14th September	15th August
Leading Wran Writer (G.D.)	Tuesday, 13th September Wednesday, 14th September	15th August
Leading Wran Writer (P) and (S.T.)	Tuesday, 13th September	15th August
Leading Stores Assistant (S) and (V)	Tuesday, 13th September Wednesday, 14th September	15th August
Leading Wran Stores Assistant (S) and (V)	Tuesday, 13th September	15th August
Leading Writer, R.A.N.R.	Wesnesday, 14th September Wednesday, 21st September Wednesday, 28th September	15th August
Leading Stores Assistant (S) and (V), R.A.N.R.	Wednesday, 14th September Wednesday, 21st September Wednesday, 28th September	15th August
Leading Wran Steward (G)	Tuesday, 13th September	15th August
Leading Steward, R.A.N.R.	Wednesday, 14th September	15th August
Sick Berth Chief Petty Officer	Tuesday, 13th September	15th August
Sick Berth Petty Officer	Tuesday, 13th September	15th August
Leading Sick Berth Attendant	Tuesday, 13th September	15th August

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Petty Officer Dental Assistant	Tuesday, 13th September	15th August
Leading Dental Assistant	Tuesday, 13th September	15th August
Petty Officer Writer ..	Tuesday, 11th October .. Wednesday, 12th October	12th September
Petty Officer Wran Writer (G.D.) and (P)	Tuesday, 11th October .. Wednesday, 12th October	12th September
Stores Petty Officer (S) and (V)	Tuesday, 11th October .. Wednesday, 12th October	12th September
Petty Officer Wran Stores (S) and (V)	Tuesday, 11th October .. Wednesday, 12th October	12th September
Petty Officer Steward ..	Tuesday, 11th October .. Wednesday, 12th October	12th September
Petty Officer Wran Steward (G)	Tuesday, 11th October ..	12th September
Petty Officer Writer, R.A.N.R.	Wednesday, 12th October Wednesday, 19th October Wednesday, 26th October Wednesday, 2nd November	12th September
Stores Petty Officer, R.A.N.R. (S) and (V)	Wednesday, 12th October Wednesday, 19th October Wednesday, 26th October Wednesday, 2nd November	12th September
Petty Officer Steward, R.A.N.R.	Wednesday, 12th October Wednesday, 19th October Wednesday, 26th October	12th September
Wardmaster Sub-Lieutenant	Tuesday, 18th October .. Wednesday, 19th October	19th September
Electrical Sub-Lieutenant (L), (R), (A.L.), (A.R.)	Tuesday, 1st November .. Wednesday, 2nd November	3rd September
Leading Steward ..	Tuesday, 8th November..	10th October
Supply Sub-Lieutenant (S) and (W)	Tuesday, 22nd November Wednesday, 23rd November	24th October
Engineer Sub-Lieutenant (A/E)	Monday, 5th December .. Tuesday, 6th December	7th November
Engineer Sub-Lieutenant (A/O)	Tuesday, 6th December ..	7th November
Engineer Sub-Lieutenant (O/E)	Monday, 5th December .. Tuesday, 6th December	7th November

2. It should be ensured that candidates are qualified in all respects before submitting returns to Navy Office.

3. No application received after the closing date will be considered unless it is evident that it has been delayed through no fault of the candidate. The circumstances should be reported to the Naval Board for consideration.

4. Navy Order 1071 of 1958 is hereby cancelled.

5. This order will be reprinted for posting on notice boards.

(H.P.B. 4007/3/227.)

(*Navy Order* 1071 *of* 1958.)

UNCLASSIFIED.

111.—Resettlement in Civil Life—Employment in the Department of the Navy.

Members of the R.A.N. who desire to be considered for employment in a civilian capacity in the Department of the Navy or in the Commonwealth Public Service on termination of their services in the R.A.N. may forward applications through their Captains to the relevant address set out below—

Type of Employment.	*Address.*
(*a*) Tradesman, Semi-skilled or unskilled work in a dockyard	General Manager, H.M.A. Naval Dockyard, Garden Island, Sydney, New South Wales; or General Manager, H.M.A. Naval Dockyard, Box 41, P.O., Williamstown, Victoria.
(*b*) In categories other than those shown above within the Department of the Navy	Director of Civil Personnel, Department of the Navy, Victoria Barracks, Melbourne, S.C.1.
(*c*) In other Commonwealth departments	Commonwealth Public Service Inspector in the appropriate capital city.

2. C.O.R. article 174 is suspended. This order will be incorporated in Regulations and Instructions for the R.A.N.

(H.P.B. 347/1/5.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

112.—Fire Control—F.P.S. 3, and M.R.S. 3 Firing Control Unit—Resistance of Gun Firing Relays—(Westinghouse Marconi Type 632).

It has been found that consistent resistance readings for the firing circuit common lead cannot be obtained for the above installations by the Bridge method because the gun firing relays (Westinghouse Marconi type 632) do not exhibit a consistently low-contact resistance unless current is passing.

2. The firing relay contacts are therefore to be short circuited by means of a temporary jumper when checking that resistance of the common lead, does not exceed 0.3 ohms.

3. The operation of the relay is tested adequately during rough continuity, non-contact, and functional tests.

4. Admiralty has advised that B.R. 157 will be amended in due course and that B.R. 268 (4) is being rewritten and will include full details of tests on firing circuits.

5. Navy Order 147 of 1958 is hereby cancelled.

(D.O.U.W. 737/51/9.)

(*Navy Order* 147 *of* 1958.)

RESTRICTED.

113.—Guns—Misfires in Action—Procedure.

The misfire interval in Naval Guns is laid down as 30 minutes before the breech of the gun may be opened. This long margin is designed to cover the remotest possibility of a hangfire, the risk of which is not acceptable in peace time.

2. In battle, it is essential to keep as many guns as possible in action and the effect on material and morale of a hangfire igniting on opening the breech must be weighed against the need to maintain the maximum output.

3. A review has been made of the various guns and mountings now in service, and the probable effect of opening the breech of a misfired gun has been assessed as follows—

Gun and Mounting.	*Means of Ignition.*	*Probability of Charge igniting on Opening Breech.*	*Effect of Mounting.*
4.5-in. turret	Electric primer	Quite possible	Possible dockyard repairs, certainly out of action for some hours.
4.7-in. open mountings; 4-in. open mountings	Electric and percussion primer	Quite possible	Damage not serious.

4. In general, enclosed mountings are likely to suffer serious damage and men in the gunhouse are certain to become casualties if the charge ignites on the breech being opened, while at open mountings, little or no damage and few, if any, casualties are likely to result. Enclosed mountings therefore require a Command decision based on the tactical situation, while at open mountings it is appropriate for the decision to be made by the O.O.Q. according to the situation at the mounting.

5. The following drills are hereby introduced for use at guns which misfire in action.

Misfires in Action—Turret Mountings.

6. The O.O.Q. is to carry out the misfire drill laid down in the appropriate drill book. When tests have failed to locate the cause of the misfire and all auxiliary methods have failed to fire the gun, he is to report to the Command, where the decision will be taken whether to open the breech during the first lull in the action or to wait the full 30 minutes.

If it is decided to open the breech, the O.O.Q. is to—

(*a*) Stop all turret machinery, unload the top position of the propellant hoists.

(*b*) Close all flash doors, where fitted.

(*c*) Return R.U. propellant to lockers, close and clip the doors.

(*d*) Stop gunhouse fans and open all turret doors and hatches.

(*e*) Arrange the shortest and clearest route to throw the charge over the side, employing the minimum number of men.

(*f*) Evacuate gunhouse and working chamber or gunbay, and remove the crews to a safe distance.

(*g*) Rig a hose to the breech of the gun and keep the valve manned.

(*h*) Warn magazine and shell room; then open the breech, drown the charge in the chamber, and remove, employing as few hands as possible, to pass it over the side.

(*i*) Ensure adjacent turrets, where applicable, are warned and that they are trained in such a way as to minimize the risk of damage should anything go wrong.

Misfires in Action—Open Mountings.

7. The O.O.Q. is to carry out the misfire drill laid down in the appropriate drill book. Fire is not to be checked to clear the misfire of one gun of a twin mounting, which must await a lull in the action. When all auxiliary methods have failed to fire the gun and examination has failed immediately to locate the cause of the misfire he is, as soon as possible to—

(*a*) Re-stow R.U. ammunition and clip locker doors.

(*b*) Close adjacent hoists or hand ups.

(*c*) Arrange the shortest and clearest route to throw the charge over the side, employing the minimum number of hands; train breech outboard where possible.

(*d*) Rig a hose and keep the valve manned.

(*e*) Remove unwanted hands to a safe distance from the mounting.

(*f*) Open the breech and remove the charge. Two hands only are required for this.

(D.O.U.W. 1624/13/15.)

UNCLASSIFIED.

114.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 115. *Classification* " *A* ".

Item: " To fit in S2 Metadyne Room at 2F starboard—

(i) Automatic telephone wired from J.B.5 2F starboard—

Approximate length of run	50 feet.
Pattern No. of cable	6108 (AB).
Pattern No. of phone	12687.

(ii) Wooden bench."

References:

H.M.A.S. MELBOURNE's proposed alteration and addition Item T.D.L. " B.S.".

Navy Office letter 70315 dated 18th August, 1959.

Flag Officer-in-Charge, East Australia Area memorandum N/20/14/66. dated 22nd October, 1959.

(D.C.C. 1213/52/7.)

UNCLASSIFIED.

115.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 119. *Classification* " *A* ".

Item: " To provide a permanent 28V 200 amp D.C. supply to Air Electrical Repair section."

References:

H.M.A.S. MELBOURNE's proposed alteration and addition item, T.D.L. " B.I.".

Navy Office letter No. 68342 of 20th July, 1959.

F.O.I.C.E.A. memorandum N20/14/73 dated 28th October, 1959.

Garden Island Drawing No. 545/564.

(D.C.C. 1213/52/29.)

UNCLASSIFIED.

116.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 120. *Classification* " *A* ".

Item: " To fit a moveable (wheeled) bain-marie in the Wardroom."

References:

H.M.A.S. MELBOURNE's proposed alteration and addition item, T.D.L. " BW ".

Navy Office letter No. 70099 dated 14th August, 1959.

F.O.I.C.E.A. memorandum N20/14/58 dated 27th October, 1959.

Garden Island Drawing No. 561/595.

(D.C.C. 1213/52/67.)

UNCLASSIFIED.

117.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 121. *Classification* " *A* ".

Item:

" To resite aircraft starting battery charging Flight Deck connection situated at 1J port station 105 to 18 feet forward, 1J port, station 98.

Type of cable: A.P.6192.

Supplied from Aircraft Battery Charging Room situated at 2Q2 port, station 168."

References:

H.M.A.S. MELBOURNE's proposed alteration and addition item T.D.L. " B.Z.".

Navy Office letter 18658 dated 8th September, 1959.

F.O.I.C.E.A. memorandum N20/14/87 dated 12th November, 1959.

(D.C.C. 1213/52/10.)

UNCLASSIFIED.

118.—Naval Stores (Air)—Safety Equipment—Dinghies—Outfits Repair Consumable Ref. 27C/2391 and Non-consumable Ref. 27C/2392.

(*A.F.O.* 104/1959.)

The following items are hereby introduced to replace Reference 27C/2312 outfit, tropical repair (KB156) when stocks of the latter are exhausted—

Reference No.	*Part No.*	*Description.*
27C/2392	Spec. KB156	Outfit, repair, consumable, consisting of— Accelerator, A2 rubber solution Sulphur solution Coal Tar Naphtha.
27C/2391	Spec. KB156 and KB157	Outfit, repair non-consumable, consisting of— Dry measure for A1 and A2. Mixing vessel for mixing A1 and A2 with Coal Tar Naphtha, glass stirring rod for mixing A1 and A2 with Coal Tar Naphtha, spatula for mixing all ingredients in tin " B " Instructions (KB157).

2. Instructions regarding the use of this equipment, together with details of storage life, are shown in AP1182C (Naval) Vol. 6, Section 2.

3. Admiralty has advised that relevant publications will be amended.

(D.N.A.S. 4404/3/207.)

UNCLASSIFIED.

119.—Naval Stores (Air)—Vocabulary Section 36FF Ghost Engine Spares—Change of Vocabulary Section and Reference Number.

The reference number of the item described below has been amended as shown, and stocks and Naval Store accounts should be adjusted accordingly.

Old Reference Number.	*Part Number.*	*Nomenclature.*	*New Reference Number.*
36FF/29568	N1085	Washer for banjo	36TT/2270

2. Admiralty has advised that the relevant Schedule of spare parts will be amended.

3. Navy Order 775 of 1959 is hereby cancelled.

(D.N.A.S. 611/54/20.)

(*Navy Order* 775 *of* 1959.)

UNCLASSIFIED.

120.—Naval Stores—Furniture—H.M.A. Ships—Accounting.

It has been decided that the modified method of accounting for furniture and furnishings in H.M.A. ships, *vide* Naval Storekeeping Manual, A.B.R. 4, article 1831 should also be applied to Covers, table, woollen.

2. A.B.R. 4 will be amended.

(D.N.A.S. 4512/40/618.)

UNCLASSIFIED.

121.—Naval Stores (General)—Introduction of "Shopping List"—Demand Form A.S.134S.

(*A.F.O.* 148/1959.)

A new type of multi-line demand for use by H.M.A. ships and establishments in connection with the replenishment of Naval Stores (including Air Stores) will shortly be introduced in the R.A.N.

2. The new type of demand, form A.S.134S (shown in appendix "A"), known as a "shopping list" demand, is to be prepared in duplicate, by means of a special double sided carbon, to provide a Master for the machine production of single-line transcript demands, and a Ship's Copy. The features of the new type demand, as far as H.M.A. ships and establishments are concerned, are as follows—

(*a*) From 6 to 22 items can be included in each form A.S.134S—it is not economical to use forms A.S.134S when demanding less than six items and existing forms A.S.134 should be used for this purpose.

(*b*) Separate demands are not required to be prepared for each class and group or section or for "Permanent" and "Consumable" stores one form A.S.134S can contain a mixture of "Permanent" and "Consumable" stores under any number of classes and groups or sections.

(*c*) The clerical effort involved in preparing replenishment demands is reduced appreciably.

(*d*) The number of "Ship's Copy" demands to be retained on board is considerably reduced.

(*e*) The use of a code to indicate "reason for demand" simplifies preparation of demands.

3. It has been approved to bring the new type of demand into use early in 1960 and H.M.A. ships and establishments will be supplied in due course with initial outfits of the necessary stationery by S.N.S.O. Sydney. The new forms are to be brought into use on receipt. "Masters", "Ship's Copy", special carbon and backing sheets are to be demanded as individual items when replenishing stocks.

4. A "Banda" duplicator, for the reproduction of single-line transcript demands from the "Master", has been installed in Sydney. As a duplicator is not being provided at Port Melbourne or Fremantle, services demanding stores there should continue to use existing forms A.S.134.

5. "Banda" duplicators have been installed at all R.N. Naval Store Depots (other than Hong Kong), and on R.F.A.'s "Reliant", "Fort Charlotte" and "Fort Duquesne", "shopping list" demands may therefore be used by H.M.A. ships when demanding Naval Stores (including Air Stores) from any of these authorities. As a duplicator is not being provided at Hong Kong, ships demanding stores there should continue to use existing forms A.S.134.

6. As the "Master" copy of form A.S.134S received by the (Superintending) Naval Store Officer is used for the direct machine reproduction of single-line transcript demands, it is essential that care should be exercised during preparation. Detailed instructions regarding the procedure to be adopted for raising forms A.S.134S are set out in appendix "B".

7. If any difficulties are experienced in connection with the use of this new type demand, the advice of the Director of Naval and Air Stores or the Superintending Naval and Air Store Officer, Sydney should be sought.

APPENDIX A.

AS 134S

STORES DEMAND

* ITEM NUMBER IN COLUMN 1 MUST ALSO BE QUOTED

TO: S N S O SYDNEY

FROM: HMAS MELBOURNE

REASONS FOR DEMAND NOT CODED BELOW ARE—: 11 In Lieu AS 148. 71/58; 22 Vide CNO 325/59

SPECIAL INSTRUCTIONS

DATE REQUIRED OR PRIORITY: 4. 11. 59

SHIPS SERIAL No *: 123

REGISTER No *

PACKAGING INSTRUCTIONS

TRANSCRIPT No

INSPECTION STAMP | EXP. CLASSIN | ISSUE AUTHORISED

SHIPS COPY

AS 134S

STORES DEMAND—MASTER

* WHEN SETTING OFF SINGLE LINE VOUCHERS ALSO CHECK ITEM NUMBERS SHOWN IN COLUMN 1

DOCKYARD USE ONLY

TO: S. N. S. O. SYDNEY

FROM: H.M.A.S MELBOURNE

REASONS FOR DEMAND NOT CODED BELOW ARE—: 11 In Lieu AS 148. 71/58; 22 Vide CNO 325/59; 19 Vide B.R. 359(1) 360, 380/372 etc

SPECIAL INSTRUCTIONS

DATE REQUIRED OR PRIORITY: 4. 11. 59

SHIPS SERIAL No *: 123

REGISTER No * 1

PACKAGING INSTRUCTIONS 1

TRANSCRIPT No 1

INSPECTION STAMP 1 | EXP. CLASSIN 1 | ISSUE AUTHORISED 1 SIG. DATE

REASONS FOR DEMAND ARE CODED BELOW SIG. J TARR 20. 10. 59 DATE

ITEM No.	CLASS & GROUP AND PART OF SECTION	PATTERN OR REFERENCE No.	DESCRIPTION	P/C	DEMON	QUANTITY: REMAINING	QUANTITY: REQUIRED	QUANTITY: SUPPLIED	REASON FOR DEMAND
1	O M		Typewriter Olivette Brief	P	No	2	1	1	0/Port
2	D8A/908		Pipe Fitting	C	No	12	Nil	8	A
3	E5/6926		Filters For Paint Spray Respirator	C	No	84	Nil	60	A
4	46B/3121		Cable Release	C	No	7	Nil	4	A
5	28D/13917		Bolts	C	No	1	Nil	1	A
6	A/		Timber, Ash 12"x1"	C	S/Ft	50	18	24	A
7	E2C/8554		Sheeting, Rubber Insertion 1/4"	C	Lbs	102	Nil	75	A
8	F2A/YA-YC01870		Batteries Dry	C	No	30	Nil	20	A
9	F5/14B/623		Dividers For Frames Developing	P	No	4	1	3	B26
10	O.M		Punch Paper	P	No	–	–	1	B2
11	89B/78Q		Hooks Boat G.M	P	No	12	11	1	F
12	5CX/1515		Lamp Landing Type J	P	No	–	–	1	B628
13	F2A/15028		Sheets Synthetic Resin 3/16"	C	S/Ft	41	4	25	A
14	B11E/		Spanner Wheel 6"	C	No	2	1	1	A
15	F2A/16066		Lantern Mast Head	P	No	–	–	1	C
16	F4C/101241		Capacitor	C	No	1	Nil	1	A
17	F4A/CV 2218		Valve	C	No	4	Nil	3	A
18	26BV/270		Nut Shear	C	No	5	Nil	5	A
19	B10G/6423		Balance Spring 0-5 lbs	P	No	3	2	1	E
20	26BV/20115		Strut Jury Port	P	No	–	–	2	B316
21	D3/839012		Aust. National Flag 12 Bottle	C	No	14	Nil	8	A
22	B11D/H1842		Pliers Round Nose Box Joint 6"	C	No	–	–	86	F

CODE FOR REASONS FOR DEMAND (IF OTHER THAN SHOWN BELOW SHOW WITH CODE IN PANEL ABOVE)

A. TO REPLENISH
B. IN LIEU OF A S (AS 331 No ALSO TO BE QUOTED)
C. IN LIEU OF AS 136
D. FIRST OUTFIT
E. TO COMPLETE TO ESTABLISHMENT. QUOTE ITEM NUMBER AND REASON IN BOX ABOVE

S & S Ltd 51-2574

Appendix B.

PROCEDURE FOR PREPARATION OF "SHOPPING LIST" DEMAND, FORM A.S.134S.

Steps.

1. Prepare stationery for demand as follows—

   (*a*) *Handwritten*—

   (i) Place "Ship's Copy" on a metal or plastic writing sheet
   (ii) Place on "Ship's Copy" double-sided special carbon
   (iii) Place "Master" on top of special carbon
   (iv) Secure forms and carbon to writing sheet to prevent movement during preparation

   New carbon for each demand. Carbon paper *must* be blue side up.

   (*b*) *Typewritten*—

   (i) Place "Ship's Copy" on "backing" sheet (supplied with carbon papers)
   (ii) Place on "Ship's Copy" double-sided special carbon
   (iii) Place "Master" on top of special carbon
   (iv) Insert carefully in typewriter

   New carbon for each demand. Carbon paper *must* be blue side up.

2. Complete following windows at top of Form A.S.134S—

   (*a*) To:
   (*b*) From:
   (*c*) Special Instructions (if any)
   (*d*) Date required or priority (if applicable)
   (*e*) Ship's Serial No.

3. For first item to be demanded insert—

   Each item to be numbered consecutively from 1–22.

Column 1	Item No.	
2	Class/Group or Section	
3	Pattern or Reference Number	
4	Description	Description *must* occupy only one line
5	"P" or "C" (i.e. Permanent or Consumable)	
6	Denomination	
7	Allowed (P/R) or 12 months Expenditure (C)	If error is made, delete line concerned by ruling out.
8	Remaining	
9	Required	
10	Reason for demand	If codes shown at foot of form are not applicable, allocate further letter as code and insert details of additional code in box at head of form "Reasons for demand coded below".
11	For Air Stores only—Aircraft or Engine number when necessary	

APPENDIX B—*continued.*

Steps.	
4. For additional items to be demanded proceed as at Step 3	All columns must be completed on every line (" ditto " is not acceptable).
5. After insertion of last item on demand close voucher	Draw line immediately below last item with diagonal line from right hand end of horizontal line to bottom left hand corner of voucher.
6. Officer authorizing demand to sign in window " Reason(s) for demand are coded below ". (*See* article 0601 A.B.R. 4)	Special carbon must be in position when voucher is signed.
7. Remove carbon from between " Master " and " Ship's Copy "	Destroy carbon.
8. Despatch " Master " to " Store Depot " concerned	" Masters " must not be folded for despatch by post but sent flat between cardboard covers to prevent tearing and fraying of the edges. Each " Master " should be backed with a sheet of flimsy paper to protect the hecto carbon impressions.
9. File " Ship's Copy."	

(D.N.A.S. 462/53/9.)

UNCLASSIFIED.

122.—Naval Stores (General) (Class B, Group 4)—Chain Cable—Supply of 15-Fathom and 7½-Fathom Lengths.

It has been decided that it is not at present necessary to standardize on 15-fathom and 7½-fathom lengths for chain cables in ships.

2. As far as practicable chain cables of 15-fathom and 7½-fathom lengths will be supplied when renewals are necessary but until stocks of 12½-fathom and 6¼-fathom lengths are exhausted, it will be necessary to supply cables in these lengths.

(D.N.A.S. 4505/40/337.)

UNCLASSIFIED.

123.—Naval Stores (General) (Class B, Group 9G) Aluminium Alloy Rivets—Change in Material Specification and Introduction of new Range of Patterns.

Navy Order 1069 of 1959 is to be amended as follows—

(*a*) *Paragraph* 1, line 2—*delete* " on " and *insert* " or ".

(*b*) *Paragraph* 4, *add* at end " for the less important structure which is under cover ".

(D.N.A.S. 506/51/23.)

(*Navy Order* 1069 *of* 1959.)

UNCLASSIFIED.

124.—Naval Stores (General) (Class E, Group 3)—Inflatable Liferafts—Failure of Union Nuts.

(*A.F.O.* 2918/1959.)

A report has been received of the fracture of the union nuts on the inflation valves of two 20-man two-cylinder inflatable liferafts.

2. Failure may have been caused by the use of excessive force in tightening the nuts. The union nuts on the two-cylinder 20-man liferafts are to be tightened with spanner, adjustable, pattern B11G/910–5955; the manifold nuts on the single cylinder 20-man liferaft are to be tightened using spanner, pattern B11G/3219. Direct use by hand alone is required; the use of extra leverage, tapping with a mallet or hammer, &c., is not to be attempted.

3. Admiralty has advised that B.R. 1977 (1) will be amended.

(D.N.A.S. 1275/57/27.)

UNCLASSIFIED.

125.—Naval Stores (General) (Class F, Group 1C, Part 5) Electric Floor Polishing Machines for H.M.A. Ships and Establishments—Supply of Spare Parts for Maintenance of Machines.

Pending the result of trials at present in course, the following type of electric floor polishing machine will continue to be supplied to H.M.A. ships and establishments. The machines should be accounted for as a Permanent Naval Store item under class F, group 1C, part 5.

H.M.A. Ships.

2. Machine floor polishing, electric, 16-in., with polishing brush, with ½ H.P. 220 volt D.C. or 115 volt 60 cycle A.C. motor as appropriate (G.I. Spec. A217).

3. Allowances of the machine are as follows—

H.M.A. Ships.	*Large Type.*	*Domestic Type.*
Light Fleet Carriers	8 No.	—
Destroyers (Daring)	3 No.	—
Destroyers (Battle)	2 No.	1 No.
Destroyers (Tribal)	1 No.	1 No.
Frigates (Type 15)	2 No.	1 No.
Frigates (River Class)	1 No.	1 No.

H.M.A. Establishments.

4. Machine, floor polishing, electric, 16-in., polishing brush, with ½ H.P. 240 volt, A.C. motor (G.I. Spec. A217).

5. Generally 1 No. machine for every 1,000 square yards of floor area to be maintained, except in the case of larger establishments where the concentration of buildings should enable requirements to be met by a more restricted scale. Current allowances to the various establishments are shown in the relevant Establishment of Naval Stores.

6. Occasionally, to meet a particular requirement in an establishment where provision of the standard type machine would be either uneconomical or unsuitable, a small or domestic type machine will be provided.

7. Other types of machines, e.g., " High Shine ", " Silovac " at present held by H.M.A. ships and establishments will not be replaced until they become beyond economical repair.

8. Dormant demands for ships under construction, conversion or modernization will be prepared by the appropriate (Superintending) Naval Store Officer.

9. Repair and maintenance of the machines should be carried out as far as practicable by service personnel in the ships or establishments to which the machines are supplied. Machines requiring, major repairs are to be returned to store for repair by the contractor.

10. The following spares only are to be carried by H.M.A. ships and services for " Portovac " machines:—

Description.	*Quantity.*	*Remarks.*
Bumper bands	1 No.	1 set for each 2 or part thereof machines carried.
Handle grips	1 set	
Motor brushes and caps	2 No.	
Switches, 10-amp.	1 No.	
Motor bearings	1 set	
Oil seals	1 No.	

11. Ships and services holding boxes and those spares not now required, are to return them to the appropriate (S)N.S.O. These items are to be brought to separate charge and, together with other spares held, issued " in aid ", as necessary to the repair contractor.

12. The scale of spare parts and accessories for other types of floor polishing machines still in service will remain as follows—

(*a*) " *Silovac* " *Domestic Two Brush Polishers*—

Scrubbing brushes	2 No.	For each 3 machines in service.
Polishing brushes	2 No.	
Rubber/driving bands	2 No.	
Friction plate bearing	1 No.	
Carbon brushes	2 No.	For each machine in service.
Brush holders	2 No.	

(*b*) " *Hi-Shine* " *Single Brush* 13-*in. Commercial Polishers*—

Scrubbing brushes	1 No.	For each 3 machines in service.
Polishing brushes	1 No.	
Ball bearings, roll top for motors	2 No.	
Carbon brushes	2 No.	For each D.C. machine in service.
Brush holders	2 No.	

Note.—Establishments holding machines of type other than those listed, should demand spare parts and accessories as and when required, to effect repairs.

(D.N.A.S. 518/57/14.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES. UNCLASSIFIED.

126.—Clothing—Sale of Imperfect and Part-worn Items at Reduced Prices.

Quantities of unused but soiled and imperfect articles of repayment clothing, and also of cleaned and renovated part-worn clothing, have accumulated at H.M.A. Victualling Yards during recent years and have been held on a separate account known as the " Emergency Serviceable Account ".

2. It is not practicable, under present conditions, to offer this clothing for sale outside the Service and, in order to avoid deterioration due to prolonged storage, it has been decided that stocks should be made available for issue to H.M.A. establishments at half the current fixed issuing prices under the arrangements set out hereunder—

(*a*) Demands for requirements should be forwarded to the Superintending Victualling Store Officer, Royal Edward Victualling Yard, Sydney, or the Victualling Store Officers, H.M.A. Victualling Yard, Port Melbourne or Fremantle, as appropriate. The demands should be clearly headed " Emergency Serviceable Account ".

(*b*) Each article will be marked inconspiciously with the letters " ES ". In addition, second-hand articles marked with the previous owner's name will be stamped with the " Declared Clothing " marking.

(*c*) Emergency Serviceable Clothing will be packed and issued separately from other clothing and is to be shown separately in the accounts of H.M.A. establishments.

3. The range of items at present stocked under these arrangements is shown in the appendix to this order but no guarantee can be given that all sizes will be available. Furthermore, in some cases only minor quantities of certain items are stocked and the range of items available will be decreased as stocks of these items are exhausted. On the other hand, additional items or quantities will become available from time to time.

4. The scheme will be subject to review after twelve months.

5. This order will be reprinted for posting on notice boards.

APPENDIX.

Item.	*Location of Stocks.**		
	Sydney.	*Melbourne.*	*Fremantle.*
Officers—			
Shirts, tropical, white, long sleeves	*	—	—
Shirts, tropical, white, short sleeves	*	—	—
Shirts, white, dress	*	—	—
Shirts, white tunic	*	—	—
Shirts, white, double cuffs	*	—	*
Repayment Clothing—			
Bags, kit, small, blue drill	—	—	*
Bags, soap	—	—	*
Brushes, blacking	—	—	*
Brushes, clothes	—	—	*
Brushes, hair	—	—	*

APPENDIX—*continued.*

Item.	*Location of Stocks.**		
	Sydney.	*Melbourne.*	*Fremantle.*
Repayment Clothing—continued.			
Brushes, polishing	—	—	*
Caps, peaked, lightweight	—	—	*
Caps, white, class II	—	*	*
Collars, blue jean	*	*	—
Collars, semi-stiff	—	—	*
Collars, stiff, double	—	—	*
Covers, cap, marcelline	—	—	*
Covers, cap, pique	—	—	*
Flannels, cotton	*	*	*
Jerseys, blue	—	*	*
Pullovers, sleeveless, blue	—	—	*
Raincoats, ratings	—	*	*
Scarves, black	—	*	—
Shirts, action, working	—	—	*
Shirts, white, double cuff	*	—	*
Shirts, white, single cuff	*	—	*
Shirts, white, tropical	*	—	*
Shirts, white, with collar	*	—	—
Shorts, blue	*	*	*
Shorts, tropical, white	*	*	*
Stockings, white	*	—	—
Suits, pyjama, heavyweight	—	—	*
Ties, black rayon, day wear	—	—	*
Ties, black, woollen, day wear	—	—	*
Towels, bath, medium	—	—	*
Towels, white	—	—	*
Trousers, action working	—	—	*
Waistbelts, blue with pouch	—	—	*
Vests, net, cotton	*	—	—
Classes I and III—			
Jackets, diagonal, serge, double breasted, G.B., C.P.O.	*	—	—
Jackets, diagonal, serge, double breasted, G.B., P.O.	*	—	*
Jackets, diagonal, serge, double breasted, H.B.	*	—	*
Trousers, diagonal serge, fly	*	—	*
Trousers, white drill, fly	*	—	—
Trousers, white drill, fall	*	—	—
Tunics, drill, with blue facings	*	*	*
Tunics, drill, without buttons	*	*	*
Class II—			
Jumpers, seamen's, serge	*	*	*
Jumpers, white, drill	*	*	*
Trousers' seamen's serge, fall	*	*	*
Trousers, white, drill, fall	*	*	—

(D.V. 917/51/4.)

UNCLASSIFIED.

127.—Fixed Issuing Prices for Provisions and Victualling Allowances Operative from 1st January, 1960.

The fixed issuing price list for provisions which has operated since 1st January, 1959, and the supplementary list of issuing prices for fresh fruit and vegetables which has operated since 1st October, 1959, have been amended. Revised price lists have been distributed to all H.M.A. ships and establishments.

2. Consequent upon the revision of prices, the following rates of victualling allowances per head per diem, will apply from 1st January, 1960—

	s.	*d.*
Messes of more than 300	6	5
Messes of 300 or less	6	7
Additional for ships attached to the strategic reserve	0	4
H.M.A.S. MELVILLE	6	11
H.M.A.S. TARANGAU	7	0
R.A.N.C.	7	7
R.A.N.A.T.E.	7	6

3. Navy Order 965 of 1959 is hereby cancelled.

(D.V. 903/51/1.)

(*Navy Order* 965 *of* 1959.)

UNCLASSIFIED.

128.—Protective Clothing.

(*A.F.O.* 2582/1959.)

A set of anti-flash gear is to be issued on loan in future to each officer and rating serving in H.M.A. ships in order that personnel may gain experience of wearing this gear whilst carrying out their normal action duties during peacetime practices.

2. The scale allowance for all ships, with the exception of harbour craft, will be the total of—

(*a*) Hoods, Anti-Flash .. 1 No. to each officer and rating in the War complement.
Gloves, Anti-Flash .. 1 Pair to each officer and rating in the War complement.

(*b*) 10 per cent. of (*a*) as spares.

(*c*) A further 10 per cent. of (*a*) for cleansing station requirements.

(*d*) Requirements for fire parties (Navy Order 1010 of 1958).

3. The allowance for harbour craft is to be based on the requirements for guns' crews only, plus 10 per cent. as spares.

4. Commanding Officers should arrange forthwith for anti-flash gear to be issued on personal loan, from the stocks already carried on board, to each officer and rating borne at present or joining subsequently. The gear should be withdrawn when personnel finally leave the ship. Issues in bulk to departments are not to be made owing to the risk of infection should the gear be re-issued without cleaning.

5. Anti-flash gear withdrawn from personnel is to be returned as convenient to a Victualling Yard for cleaning and reproofing.

6. The attention of all personnel should be drawn to the need to take care of these items, as their own protection and safety may be seriously prejudiced in an emergency if the gear is not properly maintained.

7. Captains of H.M.A. ships are to arrange regular inspections of all anti-flash gear (including articles in store) and to arrange for reproofing if the articles have been immersed in sea water, exposed to heavy rain or washed. Reproofing instructions are given in the appendix to this order.

8. Demands are to be lodged with Victualling Yards for quantities necessary to complete requirements, quoting this order as the authority.

9. Stocks of other items of protective clothing are to be restricted to the quantities necessary for weather protection and training purposes and dormant demands for quantities to complete to full establishment lodged with the Superintending Victualling Store Officer, Royal Edward Victualling Yard, Sydney.

10. Navy Order 110 of 1958 is hereby cancelled.

APPENDIX.

Thoroughly soak the articles in a warm solution (not exceeding 98° F.) of BORAX/BORIC ACID made up strictly to the following formula—

Borax (Crystalline)	12 ounces.
Boric Acid	6 ounces.
Water	1 gallon.

2. Lightly wring out the articles and hang them up to dry thoroughly, taking especial care to ensure that no article comes in contact with hot radiators or steam pipes as this would result in some loss of proofing by sublimation.

(D.V. 917/90/23.)

(*Navy Orders* 110 *and* 1010 *of* 1958.)

UNCLASSIFIED.

129.—Provisions—Bread, Sliced and Wrapped.

Bread, sliced and wrapped, has been included in the Fixed Issuing Price List of Provisions dated 1st January, 1960, as an alternative to loaf bread.

2. This type of bread stays slightly fresher and more palatable than the ordinary loaf and may prove particularly advantageous in localities where bread is not baked commercially at weekends. It is also considered suitable for sea stocks for ships not fitted with a bakery.

(D.V. 912/64/9.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

130.—Courts-Martial Forms—Disposal.

All existing stocks of forms " S ", " A.S. " and " A.C.M. " in respect of courts-martial are to be disposed of in accordance with current procedure.

2. These forms will not be revised and reprinted but are to be typed as required Specimen courts-martial forms are to be found in B.R. 11/58, Chapter II.

(C.N.J.A. 464/70/42.)

With reference to Navy Order 1094 of 1959, Navy Orders 1 to 36 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
3rd February, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

131.—Organization under the Third Naval Member and Chief of Naval Technical Services.

The organization under the Third Naval Member has been revised to meet modern trends in material developments. The new organization is shown diagrammatically as Appendix A.

2. Under the new organization the Chief of Construction and some Technical Directors have been re-titled as follows—

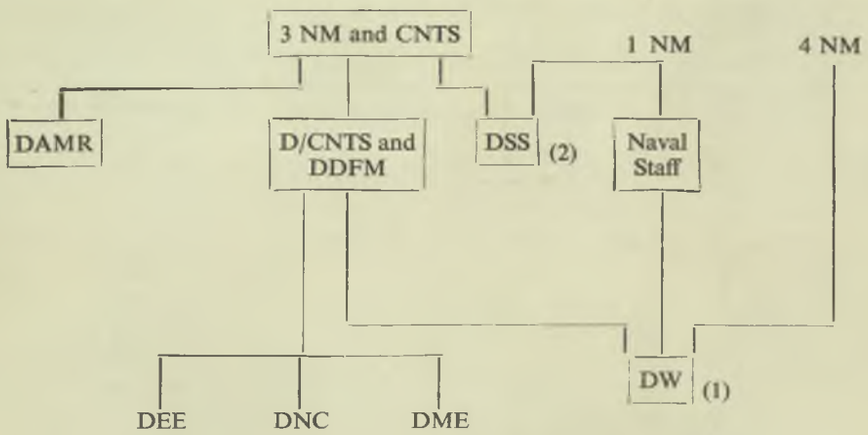
Present Title.	*New Title.*
Third Naval Member and Chief of Construction.	Third Naval Member and Chief of Naval Technical Services.
Deputy Chief of Construction and Director of Technical Planning.	Deputy Chief of Naval Technical Services and Director of Dockyards and Fleet Maintenance. (Short title: DCNTS and DDFM.)
Director Naval Ordnance and Underwater Weapons.	Director Weapons. (Short title: DW.)

3. The scope of DCNTS has been widened to include overall responsibility to Chief of Naval Technical Services for the work of the Directors of Naval Construction, Electrical Engineering and Marine Engineering, together with the new responsibility of Director of Dockyards and Fleet Maintenance, and a specified role with appropriate authority to deal with Director Weapons on the weapon element in Ship Construction and Dockyard and Fleet Maintenance.

4. In addition to his responsibilities in other fields and to other Board Members, Director Weapons is responsible to DCNTS for the weapon element in the overall design, construction and maintenance of ships.

5. Responsibilities and functions of Directors under the Third Naval Member and Chief of Naval Technical Services are set out in Appendix B.

APPENDIX A.



Note 1.—Director of Weapons is also responsible to 4th Naval Member for logistics and to the Naval Staff as Technical Adviser on Weapon matters.

2.—Director of Scientific Services is also responsible to the Chief of Naval Staff for matters concerned with operational research.

APPENDIX B.

DIRECTIVES.

DEPUTY CHIEF OF NAVAL TECHNICAL SERVICES AND DIRECTOR OF DOCKYARDS AND FLEET MAINTENANCE.

(*Short title: DCNTS and DDFM.*)

The Deputy Chief of Naval Technical Services acts for the Chief of Naval Technical Services and is responsible to the Chief of the Naval Technical Services for the overall work of the Naval Technical Services Branch, which comprises the Naval Construction, Naval Electrical Engineering, Marine Engineering Divisions and the Administrative, and the Materials and Standards Sections.

2. The general functions of the Naval Technical Services Branch are—

(*a*) Construction of H.M.A. Ships, Support Ships and Craft.
(*b*) Modernization and Conversion of H.M.A. Ships, Support Ships and Craft.
(*c*) Repair and Refit of H.M.A. Ships, Support Ships and Craft.
(*d*) Administration of Naval Dockyards.
(*e*) Materials and standards and technical advice in relation thereto.

3. In particular the Deputy Chief of Naval Technical Services is responsible for—

(*a*) Construction of H.M.A. Ships and Support Ships and Craft.
(*b*) Modernization and Conversion of H.M.A. Ships, Support Ships and Craft.
(*c*) Repair and Refit of H.M.A. Ships, Support Ships and Craft.
(*d*) " Alterations and Additions " to H.M.A. Ships and commissioned Shore Establishments.
(*e*) Preparation and review of annual estimates for ships and craft being built and for the repair and refit of H.M.A. Ships, Support Ships and Craft.
(*f*) Half-yearly reviews of estimates of costs of ship construction projects for submission to the Naval Board, the Defence Business Board and Cabinet.
(*g*) Overall administration and capacity of Naval Dockyards.
(*h*) Materials and Standards.
(*i*) Overall administration of professional, technical and clerical civil staffs of the branch.
(*j*) Administration of services common to the organization e.g. accommodation, &c.
(*k*) Planned maintenance of H.M.A. Ships.
(*l*) Advice on works matters related to the Naval Technical Services Branch.

DIRECTOR OF ELECTRICAL ENGINEERING.

(*Short title: DEE.*)

The Director of Electrical Engineering is responsible to the Deputy Chief of Naval Technical Services for the management of the Electrical Engineering Division, for the conduct of electrical engineering in the Royal Australian Navy and for the overall administration of personnel engaged on this duty.

2. *The functions of the Division are*—To advise on all matters relating to electrical engineering, and technical aspects of associated stores and equipment for ships and craft under construction, in service and in reserve, and for shore establishments.

3. *Specific responsibilities cover*—

(*a*) Planning for present and future requirements of Naval electric equipment;
(*b*) Preparation of electrical engineering drawings and specifications; and provision of technical handbooks and publications;

APPENDIX B—*continued.*

(*c*) Advice on the technical suitability of electrical and electronic equipment for Service use;

(*d*) Arrangements for the fitting or installation of electrical and electronic equipment in ships and establishments;

(*e*) Advice on allocation of electrical and electronic equipment;

(*f*) Advice and allocation of stores and spares associated with electrical and electronic equipment;

(*g*) Inspections and trials of electrical and electronic equipment and installations;

(*h*) The maintenance of all electrical and electronic equipment other than that for which the Department of Works is responsible;

(*i*) Certification that all electrical and electronic equipment in H.M.A. ships built, modernized or converted is complete and properly fitted to carry out the ships' function as specified in the Staff requirements.

(*j*) *Personnel*—DEE is responsible—

(i) for stating the requirements and advising DOA and DMT on syllabi and training aids in respect of the technical training of electrical officers and ratings;

(ii) that the knowledge imparted by the schools does in fact enable the ratings properly to perform their technical duties;

(iii) for advising DOA and DMT on Electrical Engineering Branch complements;

(iv) for recommendations and advice regarding the entry, training advancement and employment of civil professional and technical officers of Naval Electrical Engineering Organization.

4. *Correspondence*—DEE is authorized to correspond on routine and technical matters, within his sphere of responsibility directly with the following—

(*a*) Commodore Superintendent of Training.

(*b*) Captains of H.M.A. Ships and Establishments.

(*c*) Naval Officers-in-Charge.

(*d*) General Managers, H.M.A. Naval Dockyards.

(*e*) General Overseers.

DIRECTOR OF NAVAL CONSTRUCTION.

(*Short title: DNC.*)

The Director of Naval Construction is responsble to the Deputy Chief of Naval Technical Services for the management of the Construction Division, for the conduct of Naval Architecture in the Royal Australian Navy, and for the overall administration of personnel engaged on this duty.

2. *The functions of the Division are*—To advise on all matters relating to Naval architecture, including hull constructions, maintenance and repair and technical aspects of associated stores and equipment for ships and craft being built, modernized and converted and undergoing repair and refit and for shore establishments.

3. *Specific responsibilities cover*—

(*a*) Planning for present and future requirements including provision of facilities for local production, maintenance and repair of hull structures and fittings.

(*b*) Preparation of drawings and specifications for ships and craft being built, modernized and converted and for ships and craft under repair and refit and for alterations and additions to ships and craft.

APPENDIX B—*continued.*

(*c*) Advice on the technical suitability of hull, &c., equipment. Arbitration on variations to approved hull design proposed by Shipbuilders, Dockyards, &c.

(*d*) Certification that hull and associated equipment in H.M.A. ships built, modernized or converted are complete and properly fitted to carry out the ship's functions as specified in the staff requirements.

(*e*) Maintenance of facilities (other than those specified the responsibilities of the Department of Works) for full construction, maintenance and repair.

(*f*) Advice on the provision of power boats.

(*g*) In respect of H.M.A. Ships and Small Craft—

(i) maintenance of hull structures and fittings with particular reference to maintenance of required standards of strength and stability;

(ii) provision of arrangements and facilities required for safety from accident and fire;

(iii) for preparedness for action damage;

(iv) maintenance of required standards of habitability;

(v) investigation into proposals for alterations and additions.

(*h*) *Personnel*—DNC is responsible—

(i) for stating the requirement and advising DOA and DMT on syllabi and training aids in respect of the technical training of Naval Shipwright officers and ratings;

(ii) that the knowledge imparted by the schools does in fact enable the ratings properly to perform their technical duties;

(iii) for advising DOA and DMT on Naval Shipwright Branches complements;

(iv) for recommendations and advice regarding the entry, training, advancement and employment of Civil Professional and Technical officers of the Naval Construction Organization.

4. *Correspondence*—DNC is authorized to correspond on routine and technical matters, within his sphere of responsibility, directly with—

(*a*) Commodore Superintendent of Training.

(*b*) Captains of H.M.A. Ships and Establishments.

(*c*) Naval Officers-in-Charge.

(*d*) General Managers, H.M.A. Naval Dockyards.

(*e*) General Overseers.

DIRECTOR OF MARINE ENGINEERING.

(*Short title: DME.*)

The Director of Marine Engineering is responsible to the Deputy Chief of Naval Technical Services for the management of the Marine Engineering Division and for Marine Engineering in the Royal Australian Navy, and for the overall administration of personnel engaged on this duty.

2. *The functions of the Division are*—To advise on all matters relating to marine and mechanical engineering and technical aspects of associated stores and equipments for ships and craft under construction, in service and in reserve and for shore establishments.

APPENDIX B—*continued.*

3. *Specific responsibilities cover*—

(*a*) Planning for present and future requirements, including provision of facilities for local production, maintenance and repair of propelling and auxiliary machinery, boilers, &c.

(*b*) Preparation of mechanical and marine engineering specifications.

(*c*) Advice on the technical suitability of mechanical equipment for Service use.

(*d*) Certification that machinery and marine engineering in H.M.A. ships built, modernized or converted are complete and properly fitted to carry out the ship's functions as specified in staff requirements.

(*e*) Allocation of mechanical and marine engineering equipment and advice on spare gear and stores requirements.

(*f*) Maintenance of marine and mechanical engineering installations and equipment in H.M.A. Ships, Dockyards and Naval Establishments (other than those for which the Department of Works is responsible).

(*g*) *Personnel*—DME is responsible—

(i) for stating the requirements and advising DOA and DMT on syllabi and training aids in respect of the technical training of Naval Engineering Officers and ratings;

(ii) that the knowledge imparted by the schools does in fact enable the ratings properly to perform their technical duties;

(iii) for advising DOA and DMT on Naval Engineering Branch Complements;

(iv) for recommendations and advice regarding entry, training, advancement and employment of civil, professional and technical officers of the Mechanical Engineering Organization.

4. *Correspondence.*—DME is authorized to correspond on routine and technical matters, within his sphere of responsibility, directly with the following—

(*a*) Commodore Superintendent of Training.

(*b*) Captains of H.M.A. Ships and Establishments.

(*c*) Naval Officers-in-Charge.

(*d*) General Managers, H.M.A. Naval Dockyards.

(*e*) General Overseers.

DIRECTOR OF AIRCRAFT MAINTENANCE AND REPAIR.

(*Short title: DAMR.*)

The Director of Aircraft Maintenance and Repair is responsible to the Chief of Naval Technical Services for the exercise of the Naval Board materiel responsibilities for aircraft and aero-engines, and their maintenance and repair. He is also responsible for advising appropriate supply Directors on technical matters concerning the provision of air stores and equipment, also their maintenance and repair.

2. The general functions of the Aircraft Maintenance and Repair Branch are—

(*a*) Procurement and allotment of R.A.N. aircraft and engine change units to meet the requirements of the Naval Staff.

(*b*) Planning and implementing programmes for the repair, overhaul, modification, modernization and ultimate disposal of R.A.N. aircraft and engine change units.

(*c*) Financial and materiel accounting in relation to R.A.N. aircraft, engine change units and ground transportation equipment.

APPENDIX B—*continued.*

(*d*) Determining technical standards and providing technical advice in respect of air equipment.

(*e*) Advising appropriate authorities on matters concerning technical personnel in the Fleet Air Arm.

3. In particular the Director of Aircraft Maintenance and Repair is responsible for—

(*a*) Evaluation of the technical and maintenance aspects of new aircraft and engines.

(*b*) Procurement of new aircraft and engines.

(*c*) Preparation of new aircraft for service.

(*d*) Procurement of jigs and special tooling to establish repair facilities at civil contractors.

(*e*) Planning programmes for the repair, overhaul, &c., of aircraft and engines.

(*f*) Allotment of aircraft and engines to meet the requirements of the Naval Staff.

(*g*) Determining standards, and issuing instructions for inspection.

(*h*) Arranging overseeing and inspection at civil contractors.

(*i*) Investigation of defects and determination of remedial action.

(*j*) Design and development of modifications.

(*k*) Preparation and review of annual estimates of authorization and expenditure on the repair, &c., of aircraft and engines.

(*l*) Issue of accounting instructions for aircraft, engines and ground transportation equipment.

(*m*) Compilation and issue of orders and instructions for the maintenance of aircraft, engines and ancillary equipment.

(*n*) Advice on the technical aspects of aircraft accidents.

(*o*) Initiation and control of trial installations and technical investigations.

(*p*) Technical control of all aircraft stores and materials.

(*q*) Instructions for the maintenance and use of special equipment such as Towed Targets, Safety Equipment, Photographic Equipment, &c.

(*r*) Co-ordination of requirements for Air Radio and Electronics with those of other Branches.

(*s*) Technical requirements and instructions for test flying.

4. In matters relating to personnel DAMR is responsible—

(*a*) for stating the requirements and advising DOA and DMT on syllabi and training aids in respect of the technical training of F.A.A. Engineer Officers and Ratings, and for controlling aircraft maintenance standards through R.A.N.A.M.E.B.

(*b*) That the knowledge imparted by schools does in fact enable ratings properly to perform their technical duties.

(*c*) For advising DOA and DMT of F.A.A. Engineering Branch complements.

DIRECTOR OF SCIENTIFIC SERVICES.

(*Short title: DSS.*)

The Director of Scientific Services is responsible for advising the Naval Board on all scientific matters as they affect the Naval service, and for the direction, co-ordination and control of all scientific activities undertaken by the Department of the Navy. His responsibility for the effective conduct of the work is to the Third Naval Member with the exception of operational research for which he is responsible to the Chief of Naval Staff.

APPENDIX B—*continued.*

2. In order to ensure that these responsibilities can be effectively implemented the Director of Scientific Services has the following functions—

(*a*) To direct all practical scientific work undertaken by the Department of the Navy.
(*b*) To advise in regard to the equipment required for the scientific work.
(*c*) To advise on the placing of contracts for development work.
(*d*) To prepare financial estimates and expenditure relating to the work.
(*e*) To direct all operational research required by the Naval Board.
(*f*) To advise on the recruitment, promotion and transfer of all scientific personnel.
(*g*) To advise on all matters relating to the scientific aspects of development of new or improved equipments, weapons, methods and techniques.

3. The Director of Scientific Services is a member of the Scientific Policy Committee which meets regularly to consider the broad policy of the items enumerated above.

4. Scientific work having a direct naval application is carried out by the RAN Experimental Laboratory, Sydney. The Commander Superintendent RANEL is responsible to the Naval Board for the administration of the laboratory and the effective implementation of the approved scientific programme. He is assisted by the Principal Scientist RANEL who directs the work of the scientific personnel and advises the Commander Superintendent in regard to the laboratory; requirements for equipment, &c.

5. On scientific matters the Principal Scientist RANEL and the Director of Scientific Services may at any time communicate directly.

DIRECTOR WEAPONS.

(*Short title: DW.*)

The Director Weapons is responsible to the Deputy Chief of Naval Technical Services for the management of the Weapon element in the overall design construction and maintenance of ships. The Weapon element comprises Gunnery, Underwater and Guided Weapon Systems, except in the case of Aircraft systems but including aerial torpedoes.

2. The function of the Weapons division in relation to the C.N.T.S. is to advise in regard to all points in which Weapon systems affect design, construction and maintenance of ships.

3. Specific responsibilities are—

(*a*) Advice on the technical suitability of weapon systems for Service use, including systems undergoing Research and Development.
(*b*) Planning for present and future requirements for weapon systems.
(*c*) The supply of data for local manufacture, installation, testing and tuning, trials and modification of weapon systems.
(*d*) Design changes in the schedules for local manufacture of weapon systems to meet local requirements and standards.
(*e*) Arrangements for the fitting of weapon systems in ships and establishments.
(*f*) Allocation and efficiency of spares for weapon systems.

APPENDIX B—*continued.*

4. *Personnel*—DW is responsible—

(*a*) For stating the requirement and advising DOA and DMT on syllabi and training aids in respect of the technical training of Ordnance Engineer Officers and ratings.
(*b*) That the knowledge imparted by the schools does in fact enable maintenance personnel to perform their technical duties.
(*c*) For advising DOA and DMT on complement matters affecting the efficiency and maintenance of weapon systems.

5. In discharging the above function and responsibilities, DW will collaborate closely with DEE, DNC and other directorates concerned.

6. In addition to his responsibilities under the 3rd Naval Member and CNTS, DW is responsible to the 4th Naval Member and Naval Staff for other aspects of the Weapon element.

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

409/60.—2

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
18th February, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

811/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

132.—Antihistamine Drugs—Warning.

Antihistamine Drugs under various trade names, some of which are, Benadryl, Antistin, Anthisan, Histanin, Phenergan, Dramamine, &c., used for the treatment of hay fever and other allergies, can have dangerous side reactions which have been regarded as a cause of motor and vehicle accidents.

2. The side effects vary according to the individual and the type of drug used, the most common being drowsiness, dizziness, weakness, mental inco-ordination and sickness which may last for 48 hours after the last treatment.

3. All personnel are to be warned of the possible dangerous effects of these drugs and aircrew who have taken them are not to fly until passed fit by the Medical Officer.

4. Motor transport drivers are not to drive whilst taking these drugs.

(M.D.G. 1003/51/18.)

RESTRICTED.

133.—Quarantine Regulations—New Zealand.

The following has been promulgated in New Zealand Navy Orders—

"In pursuance of the powers vested in him by Section 21 of the Quarantine (Ship) Regulations 57, the Director-General of Health has notified that he exempts from the provisions of Sections 94, 95 (1) (*a*) and (*b*), 99, 101, 102, 105 and 107 of the *Health Act* 1956 all ships belonging to—

(*a*) The Royal New Zealand Navy
(*b*) The Royal Navy
(*c*) The Royal Australian Navy
(*d*) The United States Navy."

2. This, in practice, means that free pratique is granted to all such ships.

3. Ships with suspected infectious disease on board should continue to notify by signal—

(*a*) The Medical Officer-in-Charge, Royal New Zealand Naval Hospital if arriving in Auckland.
(*b*) The Local Port Health Officer if arriving at other New Zealand Ports.

4. Such signal is to be made not later than 12 hours and not earlier than 24 hours before the expected time of arrival in port.

5. Navy Order 77 of 1958 is hereby cancelled.

(M.D.G. 156/251/1.)

(*Navy Order* 77 *of* 1958.)

UNCLASSIFIED.

134.—Special Order of the Day by His Excellency Field-Marshal Sir William Slim, K.G., G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.St.J., Governor-General and Commander-in-Chief in and over the Commonwealth of Australia.

The following Special Order of the Day has been issued by His Excellency Field-Marshal Sir William Slim.

"It has been a source of great pride to me that for six and a half years I have been Commander-in-Chief of the Armed Services of Australia. Throughout my period of Office I have been with you enough to be assured that the unsurpassed reputation for courage, initiative, hardihood and true discipline, that I have seen you hold in war, has been and will be maintained.

It was her fighting men, not Acts of Parliament, that first truly made Australia one nation, and it is in her Armed Services that the nation's vital spirit will be especially and historically kept alive. Remember that we who wear The Queen's uniform and serve her and our country must ever show to all an example of courage, self-sacrifice and duty. Your record in the past makes me confident that in the future, as always, you will continue nobly to serve Australia.

In war and in peace, God speed you well."

W. J. SLIM
Field-Marshal.

(H.N.B. 75/1/9.)

Section 2.

PERSONNEL.

UNCLASSIFIED— Cancelled CNO 52/62 + 4/63

135.—Fees Payable to Civilian Orthoptists and Physiotherapists.

When orthoptic or physiotherapy treatment is considered by a medical officer to be essential and such treatment cannot reasonably be obtained from Repatriation or other Government sources, the fees payable should not exceed the amount currently ruling within a State for the particular service involved.

2. Claims submitted by practitioners in respect of such treatment may be met subject to the certification by the medical officer as to the reasonableness of the charges made.

3. Navy Order 80 of 1958 is hereby cancelled.

(M.D.G. 327/61/9.)

(*Navy Order* 80 *of* 1958.)

RESTRICTED.

136.—Merchant Navy—Attachment of R.A.N. Officers to Certain Shipping Companies.

Arrangements have been made for the attachment of R.A.N. Seaman Specialist Officers of the rank of Lieutenant-Commander and Lieutenant to Shipping Companies for a short period in merchant ships.

2. The aim of the scheme is to provide officers an opportunity of gaining experience of the day-to-day work of the Merchant Navy, and thus foster in peace-time, a close liaison between the Royal Australian Navy and the Merchant Navy.

3. At present the scheme will entail Seaman Specialist Officers, who can be spared, being loaned to Australian ships for periods of up to one month. It is hoped eventually to extend the scheme to include officers of other branches.

4. An officer selected by the Naval Board, will be signed on Articles of the ship concerned in a supernumerary capacity, at a nominal rate of pay. The Master of the merchant ship will be instructed to ensure that the officer is given the fullest opportunity of seeing and understanding the working of the ship, and participating as a supernumerary in all duties including watchkeeping, loading and discharging of cargo, engine-room routine, radio duties, &c. He will be authorized to study any books of standing instructions, Fleet books, or other handbooks provided for a Master.

5. Whilst on board, the officer is to consider himself under the command of the Master of the ship, and is to comply with any instructions given him by the shipping company or Master. During any period of attachment when not on board, he is to comply with any instructions given him by the company.

6. He will be victualled and accommodated in the ship and will not, therefore, be entitled to provision or living-out allowances during such period. He will, however, be allowed the privilege of purchasing drinks and tobacco at the prices paid by Ship's officers.

7. He is normally to wear naval uniform while on board. When in harbour and employed on dirty work in the holds, &c., he may wear clothes suitable to the occasion; in this matter, however, he is to be guided by the custom of the ship's officers.

8. A Naval identity card is to be carried and, depending on the voyage schedule, a taxation clearance and International Certificate of Vaccination and Immunization will be required.

9. Navy Orders 390 of 1958 and 837 of 1959 refer to Certificate of Vaccination and Immunization and Taxation Clearance, respectively.

10. Names of officers wishing to take advantage of the scheme are to be forwarded to the Naval Board through the usual channels.

(S.O.T. 333/201/17.)

(*Navy Orders* 390 *of* 1958 *and* 837 *of* 1959.)

RESTRICTED.

137.—Pilots—Conversion and Familiarization in Aircraft.

Section I of this order lays down the procedure to be followed in converting a pilot to an aircraft group in which he is not already qualified. Section II lays down the procedure for familiarizing a pilot in an aircraft contained in a group in which he has previously qualified under Section I.

Section I.

2. Naval aircraft have been divided into groups as follows—

Piston-Engined Groups.	*Description.*	*Examples.*	*Normal Method of Conversion.*
A ..	Single-engined light aircraft	Auster .. Tiger Moth	Local conversion
B ..	Single-engined operational aircraft and associated trainers	Firefly ..	N.A.S. Nowra 723 Squadron
C ..	Twin-engined aircraft ..	Dakota ..	Courses at R.A.A.F., E. Sale as arranged by A.C.N.B.
D ..	Helicopters	Sycamore	N.A.S. Nowra 723 Squadron
Jet-engined Groups.			
E ..	Single jet operational aircraft and associated trainers	Sea Venom Vampire Trainer	N.A.S. Nowra 724 Squadron
F ..	All prop-jets and associated trainers	Gannet .. Gannet Trainers	N.A.S. Nowra 725 Squadron

3. In every case the established training course should be regarded as the normal method of converting a pilot to a new group.

Local Conversions.

4. Briefing officers for local conversions should be selected for their experience on type and should conduct their briefings in accordance with Section II of this order. The applicable approved syllabus should always be used as a guide to briefing officers with particular emphasis on ground lectures.

Section II.

5. This section lays down the procedure for familiarizing a pilot in aircraft within a group in which he is already qualified. It is not necessary to familiarize pilots on aircraft which have the same set of pilots' notes as those of an aircraft on which they are already familiarized.

6. The Commanding Officer is to ensure that the procedure set out hereunder is strictly followed—

(*a*) The pilot is to make a detailed study of the pilot's notes, engine handling pamphlets and all relevant S.F.I.'s and S.T.I.'s;

(*b*) A briefing officer, experienced on type, should give the pilot a thorough cockpit familiarization on the ground, including a blindfold cockpit check;

(*c*) Dual instruction is to be given in all possible cases. If no Qualified Flying Instructor is available, who is qualified on type, this instruction may be given by a pilot experienced in the aircraft concerned, at the Commanding Officer's discretion;

(*d*) Favourable weather conditions, with particular reference to crosswind, are to be selected for the initial flights;

(*e*) The briefing officer is to give the pilot a complete pre-flight briefing for each flight. Three local flights of 50 minutes each are to be made, with an additional flight of 50 minutes for jet aircraft. All flights in jet aircraft are, however, to be timed to allow at least 30 per cent. fuel remaining for the final landing.

(*f*) Before making any flights, the pilot is also to be examined orally by the briefing officer as to—

(i) radio aids and equipment installed.
(ii) I.F.F.
(iii) all emergency drills including ejector seat drill.
(iv) ditching and dinghy stowage.
(v) oxygen and instrument drills.

On completion of this he is to sign the left hand column of the " Certificate of Qualification as Pilot ", which is to be inserted in the front of his current log book. The certificate is to be made up as follows—

CERTIFICATE OF QUALIFICATION AS PILOT.

Name..... Rank.....

Certified that I have read the pilot's notes and carried out cockpit drills, in accordance with Navy Order 137 of 1960, on the following aircraft—			Certified that this pilot has completed familiarization (under Section II of Navy Order 137 of 1960) and is qualified.		
Date.	*Aircraft.*	*Signature.*	*Date.*	*Briefing Officer.*	*Commander (Air).*

(*g*) Objects of the familiarization flights are—

First Flight—

Starting, warming and running up.
Taxying and use of brakes.
Take-off and climb to safe height V.F.R.
Engine handling and changing tanks.
Stalling (clean and all down).
Slow flying.
Slow safe cruising.
Use of speed brakes.
Note use of emergency systems.
Rejoin circuit, one overshoot and one landing.

Second Flight (Jet aircraft only)—
Take-off and climb to 20,000 feet.
Q.G.H., weather to be suitable and V.F.R. at base.
Rejoin circuit.
Circuits and roller landings.

Second Flight (Propeller aircraft)—
Take-off and climb to local safe approach height.
Q.G.H., weather to be suitable and V.F.R. at base.
Rejoin circuit.
Circuits and roller landings.

Third Flight (Single-engine jet aircraft)—
Climb to 20,000 feet.
Use of pressurization.
Steep turns.
Basic aerobatics as permitted by pilot's notes.
Gliding.
Forced landing approaches on airfield.

Third Flight (Single-engined propeller aircraft)—
Climb to a safe height.
High speed stall.
Steep turns.
Basic aerobatics as permitted by pilot's notes.
Gliding.
Forced landing approaches.
Flapless roller landings.
One final flapped landing.

Third Flight (Twin-engine propeller aircraft)—
Asymmetric flying at a safe altitude V.F.R.
Feathering and unfeathering.
Critical speeds with varying power and under varying conditions as briefed.
Steep turns.
Basic aerobatics as permitted by pilot's notes.
Final twin-engine landing.

Fourth Flight (Jet aircraft only)—
Maximum permissible rate climb to 35,000 feet.
High speed stall and steep turn at speed.
High speed run to critical Mach No.
Speed brake descent to 20,000 feet.
Aerobatics.
High level Q.G.H.
Flapless roller landings.
One final flapped landing.

(*h*) Single-engined overshoot procedure and single-engined landings are to be practised at the discretion of the Squadron Commander as soon as he considers runway and weather conditions suitable and the pilot competent. In all cases, single-engined landings are to be carried out prior to gaining eight hours' experience on type. When a dual aircraft of a similar group is available, at least one single-engined landing should be carried out dual by the pilot being converted, before commencing solo. In no circumstances is a pilot to be considered " Qualified on Type or Mark " until he has carried out a single-engined landing and overshoot procedure satisfactorily.

(*i*) Except when comparing the drag of a windmilling propeller with that of a feathered one, all single-engined flying should be carried out with the propeller of the failed engine feathered.

7. The above familiarization flights are to be entered in red ink in the Flight Authorization Book.

8. On successful completion of the familiarization exercises required, a notation is to be made in the right hand columns of the " Certificate of Qualification as Pilot ", to the effect that the pilot has been checked out in accordance with Section II of this order. This should be dated and signed by the briefing officer and Commander (Air).

9. The above are the minimum requirements for familiarization applicable to an experienced pilot in flying practice. Each familiarization flight, however, depending on the experience and ability of the pilot, is to be repeated until the Squadron Commander or briefing officer is reasonably confident that the pupil is proficient to proceed to the next familiarization phase.

10. Commanding Officers of squadrons or units must be satisfied that a pilot is competent to handle a new type with a full war load before he is ordered to fly it on general service duties.

Returns.

11. All conversions under Sections I and II should be reported on completion to A.C.N.B., copy to F.O.I.C.E.A.

12. Navy Order 94 of 1958 is hereby cancelled.

(D.A.W.O.T. 311/4/31.)

(*Navy Order* 94 *of* 1958.)

UNCLASSIFIED.

138.—R.A.N. College—Proposed Time-table 1960-61.

The following timetable for the Royal Australian Naval College during 1960–61 has been approved by the Naval Board—

Term I.—

Tuesday, 26th January	New Cadets join.
Friday, 29th January	Senior and Second Year Cadets rejoin. Term begins.
Friday, 11th March	Mid-term break.
Monday, 14th March	
Friday, 29th April	Term ends.

Three Weeks Leave.

Term II.—

Friday, 20th May	Term begins.
Friday, 1st July	Mid-term break.
Monday, 4th July	
Friday, 19th August	Term ends.

Three Weeks Leave.

Cancelled 1962

Term III.—

Friday, 9th September	..	Term begins.
Friday, 28th October	..	Mid-term break.
Monday, 31st October	..	
Thursday, 15th December	..	Graduation Day.
Saturday, 17th December	..	Term ends.

Seven Weeks Leave.

1961—

Tuesday, 31st January	..	New Cadets join.
Friday, 3rd February	..	Term begins.

2. Navy Order 99 of 1959 is hereby cancelled.

(H.P.B. 310/1/7.)

(*Navy Order* 99 *of* 1959.)

UNCLASSIFIED.

139.—Uniform—Ceremonial Day Dress for Officers of Flag Rank.

A ceremonial day coat is authorized for wear by R.A.N. officers of flag rank with No. 3, Blue Ceremonial Dress, and No. 4, Blue Dress, in place of the undress coat, while Full Dress remains in abeyance. The description of the coat is given in the appendix to this order.

2. Officers of Flag rank are to wear their shoulder straps of rank with this coat. These may be detachable so that they can be worn on other garments.

3. The ceremonial day coat may be worn from 1st January, 1960, onwards and will be obligatory with the above dresses as from 1st July, 1960. The officers concerned are expected to provide themselves with the coat in the course of uniform replacement and a grant (£6 10s. at current price levels) will be paid to cover the difference in cost between a ceremonial day coat and the undress coat which they would otherwise have been expected to purchase. The grant does not include any element for provision of shoulder straps. Officers with less than a year to serve from 1st July, 1959, will not be eligible for the grant and will not be required to provide the ceremonial day coat.

4. The gratuity payable to officers promoted to flag rank after 1st July, 1960, will be increased accordingly.

5. Gold-laced trousers (re-introduced by Navy Order 9 of 1959) if held, should usually be worn with this coat.

APPENDIX.

Ceremonial Day Coat—Description.

A blue cloth, double-breasted, skirted coat similar to the Full Dress Coat, six buttons in each row down the front, 6 inches apart across the breast, to button six.

The skirt to begin at one-fifth the circumference from the front edge, to be lined with black, and to have one button at the bottom of each plait and two buttons in the waist seam behind. Skirt to have a pointed blue flap at each side with three black silk cords on it and three buttons underneath. Distinction lace of rank on cuffs. Collar of white superfine cloth, the corners slightly rounded and fitted with a black tongue to cover the space between them, fastened at the bottom with one hook and eye. The collar to be laced at top, front and bottom edges with plain $\frac{9}{16}$-in. gold wire lace. Collar to be 2 inches high.

(D. of V. 917/87/4.)

(*Navy Order* 9 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

140.—A/S Mortar, Mark 10—Projectiles—Fitting of Nose Covers.

(*A.F.O.* 3030/1959.)

Reports have been received in the R.N. that projectiles A/S mark 6 fuses have been landed by H.M. Ships without TD678 covers, nose.

2. It is essential in order to prevent damage to A/S fuses, that nose covers are fitted to all projectiles before return to Armament Depots.

(D.O.U.W. 714/51/50.)

RESTRICTED.

141.—Diving—Underwater Floodlights—Introduction, Operation and Allowances.

Navy Order 738 of 1959 is to be amended as follows—

Paragraph 5—" Allowances "—*Insert* " (H.M.A.S. SWAN—not allowed) " after A/S Frigates (Sloop).

(D.O.U.W. 517/251/22.)

(*Navy Order* 738 *of* 1959.)

UNCLASSIFIED.

142.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE.

Class List Item No. 113. *Classification* " *A* ".

Item: In the Upper Operations Room—

To resite the design 7 control box, pattern AP.65247 and its associated speaker from above the L.O.P. to a position above the G.O.P.

To remove one box junction, W7546 and its associated jackbox, phone, AP142 and attenuator unit, AP.65248, from above the G.O.P. and resite them above the L.O.P.

References: H.M.A.S. MELBOURNE'S proposed alteration and addition item T.D.L. " BX ".

Navy Office letter 68406 dated 20th July, 1959.

F.O.I.C.E.A. memorandum N20/14/61 dated 12th October, 1959.

(D.C.C. 1213/52/27.)

UNCLASSIFIED.

143.—Naval Stores (Technical) (Class F, Group 1A/1)—Radar—Obsolete Stores—Disposal.

(*A.F.O.* 2312/1959.)

The stores detailed in the appendix to this order are now obsolete. Any stocks on board H.M.A. ships and in establishments are to be returned to the nearest (Superintending) Naval Store Officer who is to dispose of them and any stocks already held, as surplus to requirements.

2. None of the items requires mutilation before disposal.

3. No further returns of the items in the appendix are to be taken on main or repairable ledger charge.

4. Strict adherence to the pattern numbers quoted is essential, i.e., no " A " pattern is to be considered surplus where a " plain " pattern only is shown.

5. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Pattern.	*Description.*	*Pattern.*	*Description.*
W.655	Mounting, resilient.	W.9449	Box of parts.
W.837	Moulding.	W.9823	Rectifier unit.
W.849	Moulding.	W.9844/A	Resistance.
W.850	Condenser unit.	W.9907	Connection.
W.1400	Choke.	W.9910	Connection.
W.2442	Transformer.	50640	Switch.
W.2445	Test set, cable.	52324	Switch.
W.2830	Fuse holder.	52354	Switch.
W.2889	Voltmeter.	52462	Switch.
W.3627	Connection.	54152	Dome for house.
W.3666	Transformer.	54169	Rectifier.
W.3736	Junction box.	54508	Ring Seal.
W.3910	Cover for plug.	54705	Signal generator.
W.3985	Cap, anode.	54706	Valve tester.
W.4758	Junction box.	54707	Test oscillator.
W.4760	Lock, spindle.	54708	Wattmeter.
W.5000	Bridge, capacity.	54709	Analyser.
W.5242	Mount.	54715	Connection.
W.5295	Plug.	54926	Nuts, clamping.
W.5393/A	Junction box.	54927	Ferrule.
W.5394/A	Junction box.	55125	Reactor.
W.5532	Plug.	56064	Connection.
W.6311	Terminal board.	56243	Bolometer unit.
W.7386	Diode head " B ".	57392	Oil seal.
W.7788	Washer.	57393	Oil seal.
W.7934	Washer.	57397	Socket.
W.7940	Washer.	57439	Plug.
W.7969	Junction box.	57518	Attenuator.
W.8053	Output tester.	57880	Range calibrator.
W.8140	Washer, composition.	56607	Range calibrator.
W.9086	Washer.	58354–7	Connection.
W.9087	Washer.	100800	Switch.
W.9448	Box, coupling.		

(D.N.A.S. 518/51/115.)

Amended by 353/60.

UNCLASSIFIED.

144.—Withdrawal of Resistors Pattern Z.244121 from Service.

In view of defects reported, all resistors, 18K ohm, pattern Z.244121, are to be withdrawn from service in H.M.A. ships and establishments and disposed of in accordance with current instructions.

2. Resistor, pattern Z.244121, has been superseded by pattern Z.113517 and requirements of the latter pattern should be demanded from the appropriate (S) Naval Store Officer in the usual manner.

(D.N.A.S. 519/66/4.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

145.—Victualling Stores—Clothing—Terylene Ties.

Black ties made of " Terylene " are now available on demand from H.M.A. Victualling Yards, for issue on repayment only.

2. These ties are similar in appearance to black silk ties and are very durable and crease resistant.

3. The official memorandum, Prices of Clothing Maintained for Issue to Ships' Companies, dated 1st August, 1959, should be amended to include details of nomenclature and price as follows—

Nomenclature.	*Price.* s.	d.
Ties, black, Terylene, each	8	6

4. Stocks of ties black silk and ties black rayon are to be utilized to meet all requirements for gratuitous issues and are also to remain available for issue on repayment.

(D.V. 917/83/7.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

146.—Books—A.B.R.4—Naval Storekeeping Manual—Amendments Nos. 1 and 2.

Amendments Nos. 1 and 2 to Naval Storekeeping Manual, A.B.R.4, will shortly be issued to all holders of the manual.

2. Amendment No. 1 incorporates revised instructions issued by Navy Order up to Navy Order 966 of 1959 and Amendment No. 2 up to Navy Order 1096 of 1959.

(D.N.A.S. 465/52/23.)

(*Navy Orders* 966 *and* 1096 *of* 1959.)

UNCLASSIFIED.

147.—Books of Reference—Distribution—B.R. 226B (100) 1958.

The following book of reference has been distributed to ships and establishments in accordance with approved allowances.

B.R. 226B (100) 1958 .. Establishment of Spare Parts, Tools and Accessories for Gun mountings 5.25 inch and below with their gyro gunsights, bomb and ammunition lifts, hoists, amplifiers and fuse setting machines —Part 100, fuse setting machine Mk. 7.

B.R. 226B (100) 1958 .. As above—Amendment A.N.1.

2. The publication supersedes the original B.R. 226B (100) and A.B.R. 226, folio 100, which are to be dealt with in accordance with current instructions.

(D.O.U.W. 465/52/91.)

RESTRICTED.

148.—Books—Libraries—Central Reference Libraries—Additions.

A list of books added in the quarter ending 31st December., 1959, to the Central Reference Libraries, in H.M.A. ships ALBATROSS, CERBERUS, and WATSON, is shown in the appendix to this order.

2. Officers and ratings who wish to borrow books from the Central Reference Libraries should apply to the Instructor Officer (or Education Officer) of the ship or establishment in which they are serving. This officer holds a complete catalogue of the Central Reference Libraries.

3. This order will be reprinted for posting on notice boards.

APPENDIX.

Classification and Author.	*Title.*	*Where held ALBATROSS, CERBERUS or WATSON.*
Journalism—		
Williams ..	Dangerous Estate	A.
Law—		
Harper and Sissons	Australia and the United Nations ..	A.C.
Moyle	The Institutes of Justinian	W.
Education—		
Mitchell and Belshaw	The Key to Your Career	C.
Economics—		
National Bureau of Economic Research	Short Term Economic Forecasting ..	W.

APPENDIX—*continued.*

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Astronomy—		
Spitz and Gaynor	Dictionary of Astronomy and Astronautics	W.
Science—		
Hyett	A Bushman's Year	A.W.
Vogel	Quantitative Inorganic Analysis	C.
Adams	Space Flight	A.
Lee	The Soviet Air and Rocket Forces ..	A.C.W.
Engineering—		
Parkman ..	A First Engineering Drawing Handbook ..	A.
Institute of Engineers	Engineering Drawing Practice	A.
Amos and Birkenshaw	Television Engineering	A.
Atherton ..	Workshop Practice—Vols. 1–8	C.
Practical Mechanics—		
Downville-Fife ..	Square Rigged Ships	A.C.W.
Rabl	Boatbuilding in Your Own Backyard ..	A.
Hiscock ..	Voyaging Under Sail	C.W.
Calahan ..	Yachtsman Omnibus	C.
Agriculture—		
Henderson ..	The Farming Ladder	C.
Cooking—		
Jervey	Rice and Spice..	C.
Business—		
Hendry.. ..	A Manual of Time and Motion Study ..	C.
Urwick ..	The Elements of Administration	C.
Allen	Management and Organization	C.
Karger and Bayha	Engineered Work Measurement	A.
Urwick ..	The Pattern of Management	C.
Photography—		
Beken	The Glory of Sail	A.
Kramer.. ..	Colour Photography Technique	A.
Hall	Colour Photography for the Amateur ..	A.
Amusements—		
Conrad.. ..	The Gates of Fear—Bullfighting in Spain ..	A.
History and Biography—		
Gooch	Under Six Reigns	A.C.W.
Raeder	Struggle for the Sea	A.C.W.
Slim	Unofficial History	A.C.W.
Russell	There Goes a Man—The Story of General Savige	A.
Woollcombe ..	The Campaigns of Wavell 1939–1943 ..	A.C.
R. St. John ..	Ben Gurion	A.C.

APPENDIX—*continued.*

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Modern History—		
Historical Section Admiralty	The Development of British Naval Aviation—Volumes I and II	A.
Historical Section Admiralty	War with Japan—Volume I, Background to the War	C.W.
Historical Section Admiralty	War with Japan—Volume III. The Campaigns of Solomons and New Guinea	A.C.W.
Historical Section Admiralty	War with Japan—Volume IV. South East Asia Operations and Central Pacific Advance	A.C.W.
Historical Section Admiralty	War with Japan—Volume V. The Blockade of Japan	A.C.W.
Historical Section Admiralty	Home Waters and the Atlantic—Volume I—September 1939 to April, 1940	C.W.
Historical Section Admiralty	Defeat of the Enemy Attack on Shipping 1939–1945—A study of Policy and Operations—Volume 1A	A.C.W.
Historical Section Admiralty	Defeat of the Enemy Attack on Shipping 1939–1945—A study of Policy and Operations—Volume 1B	A.C.W.
Historical Section Admiralty	Mediterranean—Volume I. September, 1939–October, 1940	C.W.
Historical Section Admiralty	Mediterranean—Volume II. November, 1940–December, 1941	C.W.
Historical Section Admiralty	Battle Summaries of Coral Sea and Midway	A.C.W.
Historical Section Admiralty	Convoy and Anti-Submarine Warfare Reports	A.C.W.
Historical Section Admiralty	Battle Summary—Aegean Operations 1943	A.C.W.
Historical Section Admiralty	Battle Summary—Leyte Gulf	A.C.W.
Historical Section Admiralty	Arctic Convoys—1941–1945	C.W.
Historical Section Admiralty	Submarines, Volume I. Operations in Home, Northern and Atlantic Waters including Operations of Allied Submarines	W.
Historical Section Admiralty	Submarines—Volume II. Operations in the Mediterranean	W.
Historical Section Admiralty	Submarines—Volume III. Operations in Far Eastern Waters	W.
Bryant	Triumph in the West	C.
Furneaux ..	The Seige of Plevna	W.

APPENDIX—*continued.*

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Modern History—continued.		
Historical Section Admiralty	Naval Operations of Campaign in Norway, Volume I	A.C.W.
Cameron ..	The Chinese Smile	W.
Mariani ..	Meeting with Japan	W.
Historical Section Admiralty	Naval Operations in the Assault and Capture of Okinawa—March to June, 1945	A.C.W.
Lloyd	The Capture of Quebec	W.
Cilento and Lack	A Historical Sketch of Queensland ..	W.

(D.N.E.S. 4575/52/53.)

(*Navy Order* 1031 *of* 1959.)

UNCLASSIFIED.

149.—Form A.S.1303X—Recommendation of Engine Room Ratings to Undergo Courses of Technical Instruction—Revision.

Form A.S.1303X has been revised and is available on demand from the Superintending Naval and Air Store Officer, Sydney.

2. Existing stocks of form A.S.1303X are to be destroyed.

(H.P.B. 464/54/74.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

811/60.—2

Registrar

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FOR OFFICIAL USE ONLY.

C.N.O.'s 150–166/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
3rd March, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

1019/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

150.—Assessment of Costs and Savings Resulting from Fleet Work Study Investigations.

In order to enable Fleet Work Study Teams to compare the costs of carrying out an investigation with the savings accruing as a result of the investigation it has been decided to lay down a standard method for costing personnel and stores for work study purposes.

2. The following figures are to be used in all Fleet Work Study calculations.

Capitation Costs—Officers—

3. (*a*) *General List, Instructor, Medical, Dental and Supplementary Lists—*

	per diem. £ *s.* *d.*	*per annum.* £ *s.* *d.*
Captain over 10 years	10 15 9	3,937 8 9
Captain under 10 years	9 9 1	3,450 15 5
Commander	7 19 4	2,907 16 8
Lieutenant Commander	6 10 1	2,374 0 5
Lieutenant	5 0 4	1,831 1 8
Sub-Lieutenant	3 18 6	1,432 12 6
A/Sub-Lieutenant	3 10 9	1,291 3 9

(*b*) *Special Duties List—*

Commander	7 19 4	2,907 16 8
Lieutenant Commander	6 3 4	2,250 16 8
Lieutenant	5 6 10	1,949 14 2
Sub-Lieutenant	4 18 8	1,800 13 4

4. In addition to the above rates the following allowances are to be added where applicable—

(*a*) *Medical and Dental Officers Allowance—*

Surgeon Lieutenant Commanders, Surgeon Lieutenant, Surgeon Lieutenant Commanders (D) and Surgeon Lieutenants (D)	1 7 0	492 15 0
Surgeon Commanders, Surgeon Captains, Surgeon Commanders (D) and Surgeon Captains (D)	1 7 6	501 17 6

(*b*) *Flying Pay—*

A/Sub-Lieutenants and Sub-Lieutenants (SD)	0 12 6	228 2 6
Sub-Lieutenants and Lieutenants (S.D.)	0 15 0	273 15 0
Lieutenant, Lieutenant Commander and Lieutenant Commander (S.D.)	0 17 6	319 7 6
Commander and Captain of less than 8 years pay seniority	0 10 0	182 10 0
Captain of over 8 years pay seniority	0 8 0	146 0 0

	per diem. £ s. d.	per annum. £ s. d.
Capitation Costs—Ratings—		
5. (*a*) *General—*		
C.P.O.	4 6 11	1,586 4 7
P.O.	3 17 2	1,408 5 10
Leading Rate	3 8 6	1,250 2 6
Able Rate	3 2 3	1,136 1 3
Ordinary Rate	2 15 1	1,005 5 5
(*b*) *Artisans—*		
Chief Artisan	4 6 3	1,574 1 3
Artisan I	4 0 4	1,466 1 8
Artisan II	3 17 0	1,405 5 0
Artisan III	3 12 3	1,318 11 3
Artisan IV	3 6 10	1,219 14 2
(*e*) *Artificers—*		
Chief Artificer	4 9 8	1,636 8 4
Artificer I	4 5 8	1,563 8 4
Artificer II	4 3 0	1,514 15 0
Artificer III	3 19 6	1,450 17 6
Artificer IV	3 12 8	1,326 3 4
(*d*) *Mechanicans—*		
Chief Mechanician	4 9 8	1,636 8 4
Mechanician I	4 3 0	1,514 15 0
Mechanician II and A/II	3 17 2	1,408 5 10

6. In addition to the above rates the following allowances are to be added where applicable—

(*a*) *Hard Lying Allowance* to all ratings in sea going ships	0 2 6	45 12 6
(*b*) *Flying Pay*	0 7 6	136 17 6

Capitation Costs—W.R.A.N.S.—		
7. (*a*) *Officers—*		
First Officer	4 3 10	1,529 19 2
Second Officer	3 8 2	1,244 0 10
Third Officer	2 16 4	1,028 1 8
(*b*) *Group I (Stewards)—*		
C.P.O.	2 9 3	898 16 3
P.O.	2 6 7	850 2 11
L. W.R.A.N.	2 2 2	769 10 10
W.R.A.N...	1 17 9	688 18 9
(*c*) *Group II (S.B.A.'s, M.T.D.'s and R.P.'s)—*		
C.P.O.	2 11 8	942 18 4
P.O.	2 8 11	892 14 7
L. W.R.A.N.	2 4 7	813 12 11
W.R.A.N...	2 0 2	733 0 10

	per diem. £ s. d.	per annum. £ s. d.
Capitation costs—W.R.A.N.S.—continued.		
(*d*) *Group III (Cooks and S.A.'s)—*		
C.P.O.	2 13 10	982 9 2
P.O.	2 11 4	936 16 8
L. W.R.A.N.	2 6 9	853 3 9
W.R.A.N...	2 2 4	772 11 8
(*e*) *Group IV (Writers and Regulators)—*		
C.P.O.	2 15 8	1,015 18 4
P.O.	2 13 0	967 5 0
L. W.R.A.N.	2 8 7	886 12 11
W.R.A.N...	2 4 2	806 0 10
(*f*) *Group V (Radio Operators)—*		
C.P.O.	2 17 7	1,050 17 11
P.O.	2 14 11	1,002 4 7
L. W.R.A.N.	2 10 6	921 12 6
W.R.A.N...	2 6 1	841 0 5

Capitation Costs—General Instructions—

8. Figures quoted in the foregoing paragraphs include an element for victualling allowance, marriage and separation allowances, medical and dental treatment, uniform allowance and Good Conduct Badge pay. Except in the cases in paras. 4 and 6 no adjustment is to be made to the capitation rates quoted.

9. Capitation rates will be reviewed annually.

Stores Costs.

10. All stores are to be costed in the following manner.

(*a*) *Stores drawn as a result of Work Study—*

Rate Book Stores at Rate Book price plus 55%.

Non pattern stores at prices supplied by (Superintending) Accountant at Base Offices. No on cost is to be added.

(*b*) *Stores returned as a result of Work Study—*

Rate Book Stores at rate book price less 55%.

Non pattern stores at prices supplied by (Superintending) Accountant at Base Offices. No on cost is to be subtracted.

(H.F.W.S. 80/1/4.)

RESTRICTED.

151.—Aviation—Instrument Rating—Weather Limitations.

Authorization of flights in Naval fixed-wing aircraft in conditions of low cloud and low visibility is to be governed by pilots' Instrument Ratings.

Award of Instrument Rating.

2. A pilot who successfully passes the Instrument Flight Test and Gound Oral Examination as described in Appendix A to this order and who is qualified in accordance with Appendix B to this order will be awarded an initial or renewed White, Green, or Master Green Instrument Rating valid for one year.

This Order cancelled 92 9/61 with exception of app A. B & C.

3. Application by a pilot for an award of an initial or renewed Instrument Rating is to be made on forms A.A. 26 in duplicate to his Commanding Officer. The application should normally be made one month before an Instrument Rating is due to be come invalid.

4. The Commanding Officer may make arrangements for the test and examination to be conducted by an Instrument Rating Examiner (*see* paragraph 14) or exceptionally by the Command Instrument Rating Examiner (*see* paragraph 13). The Instrument Rating Examiner or the Command Instrument Rating Examiner who conducts the test is to complete Section II. of the forms A.A. 26. Thereafter the Commanding Officer is—

(*a*) to sign the forms A.A. 26 and forward copies to the Flag Officer-in-Charge, East Australian Area, for onward transmission to Navy Office, and the Command Instrument Examiner (*see* paragraph 12 (*c*)); and

(*b*) if the pilot is considered suitable for the issue or renewal of an Instrument Rating, record the award of the Instrument Rating in Appendix D of the pilot's flying log book.

5. A pilot who has been awarded a White Instrument Rating may, during the course of the year of its validity and after becoming qualified in accordance with Appendix B to this order apply on forms A.A. 26 in duplicate to his Commanding Officer for award of a Green Instrument Rating. If the award is approved, the Commanding Officer is to—

(*a*) dispose of the forms A.A. 26; and

(*b*) sign the pilot's log book;

as in paragraph 4 above. The date of award of the Green Instrument Rating awarded in this manner is to be the same as the date of award of the White Instrument Rating held when the award is made.

6. A pilot who holds an R.N. or R.A.A.F. Instrument Rating may apply on form A.A. 26 in duplicate to his Commanding Officer for award of an R.A.N. Instrument Rating provided he is qualified in accordance with Appendix B of this order. If the award is approved, the Commanding Officer is to take action with the forms A.A. 26 and pilot's log book as in paragraph 4. The date of award of the R.A.N. Instrument Rating is to be the same as the date of award or renewal of the R.N. or R.A.A.F. Instrument Rating.

Instrument Rating Cards.

7. At the time of forwarding forms A.A. 26 (paragraphs 4, 5 and 6), the Commanding Officer is to issue a White, Green or Master Green Instrument Rating card, endorsed " Jet only ", " Propeller only ", or " Jet and Propeller " as appropriate, to the pilot or renew the Instrument Rating card already held by the pilot.

8. A Commanding Officer may withdraw a pilot's Instrument Rating card at any time if the pilot is considered incompetent to hold the rating. An entry is then to be made in Appendix D of the pilot's flying log book and Navy Office, F.O.I.C. E.A. and the Command Instrument Examiner are to be informed of the action taken.

9. Pilots who hold Instrument Rating cards endorsed " Jet and Propeller " may have them renewed after a test on the type of aircraft they currently fly. Pilots of turbo-propeller aircraft are required to hold Instrument Rating cards endorsed " Jet and Propeller " or " Propeller only " but when possible they should be tested on turbo-propeller aircraft for renewal of their Instrument Rating cards.

10. Pilots are to keep their Instrument Rating cards available to show to authorizing officers if required. R.N. and R.A.A.F. White cards are to be regarded as equivalent to R.A.N. White cards.

Command Instrument Rating Examiner.

11. A Command Instrument Rating Examiner will be appointed to R.A.N.A.S. Nowra. He will be a qualified Flying Instructor holding a Master Green or Green Instrument Rating. Where possible he should be experienced in both jet and turbo-propeller aircraft. The qualification is valid for twelve months and is to be renewed by re-examination at the R.A.A.F. Central Flying School.

12. The duties of the Command Instrument Rating Examiner are—

(*a*) To instruct and qualify selected pilots as Instrument Rating Examiners and to assist and advise them as necessary after qualification.

(*b*) To maintain a liaison with the Central Flying School and report on developments in instrument flying.

(*c*) To keep records of the issue of Instrument Rating cards and of Instrument Rating Examiner qualifications.

13. The Command Instrument Rating Examiner is to examine the instrument flying of a proportion of R.A.N. pilots each year and is to advise their Commanding Officer of any basic flying technique errors detected.

Instrument Rating Examiners.

14. To provide Instrument Rating Examiners as required for the conduct of tests and examinations (*see* paragraph 4), Commanding Officers of Naval Air Stations are—

(*a*) to select suitable senior pilots who hold Green or Master Green Instrument Ratings; and

(*b*) arrange for them to be instructed, tested and examined by the Command Instrument Rating Examiner.

Flight Authorizations.

15. A pilot who does not hold an Instrument Rating should not be authorized to fly in other than V.F.R. conditions except for specific cloud flying exercises.

16. A pilot who holds a White Instrument Rating should not be authorized—

(*a*) to take off or land when conditions are worse than the minima laid down in Appendix C of this order or the R.A.A.F. approach procedure charts for the airfield concerned.

(*b*) to make a ground controlled approach when the cloud base is less than 200 feet and visibility less than 1 mile.

(*c*) to make an extended flight under I.F.R. conditions unless an alternative airfield:

(i) with C.R. D/F, forecasting cloud base at least 500 feet above break-off altitude and at least 3 miles visibility; or

(ii) with G.C.A., forecasting a cloud base of at least 500 feet above the airfield level and not less than 1 mile visibility:

is within range for diversion.

17. A pilot who holds a Green Instrument Rating should not be authorized—

(*a*) to take off or land when conditions are worse than the minima laid down in Appendix C of this order or the R.A.A.F. approach procedure charts for the airfield concerned.

(*b*) to make a ground controlled approach when the cloud base is less than 200 feet and visibility less than ½ mile.

(*c*) to make an extended flight under I.F.R. conditions unless an alternative airfield:

(i) with C.R. D/F, forecasting cloud base at least 200 feet above the break-off altitude and not less than 2 miles visibility; or

(ii) with G.C.A., forecasting cloud base at least 300 feet above the airfield level and not less than ½ mile visibility;

is within range for diversion.

18. A pilot who holds a Master Green Instrument Rating is to conform to the same restrictions as those for a Green Instrument Rating except that he may make an extended flight under I.F.R. conditions provided an alternative airfield—

(*a*) with C.R. D/F, forecasting cloud base at least 100 feet above the break-off altitude and not less than 1 mile visibility; or

(*b*) with G.C.A., forecasting a cloud base of 200 feet above the airfield level and not less than ½ mile visibility;

is within range for diversion.

19. For a pilot holding a White, Green or Master Green Instrument Rating, the Commanding Officer may authorize a flight under worse conditions by day than those detailed in paragraphs 16, 17 and 18 as applicable, provided he is satisfied that the flight is within the pilot's competence. Conversely, for pilots of below average ability or for pilots who are not in flying practice on type, the Commanding Officer may stipulate greater minima than those indicated in paragraphs 16 to 18.

20. The term "cloud base" throughout this order is to be interpreted as the vertical distance between the base of the lowest cloud of 4/8th or more and the ground or water at the point of observation.

21. Transit flights are not to be made by aircraft without radio except under V.F.R. conditions within sight of the ground or sea.

22. The requirements to designate an alternative airfield as detailed in paragraphs 16, 17 and 18 may be waived when the airfield of destination is reported to have weather equal to or better than ceiling 3,000 feet and visibility 5 miles and forecast to remain so until one hour after the estimated time of arrival. However, this is liable to further restriction at airfields where there is high ground, obstructions or inadequate radio aids. Such information is published in Air Traffic Control publications.

23. The weather limitations for aircraft carriers are to be decided by the Commanding Officer after taking into consideration the type of aircraft, the ability of aircrews and the aids available.

24. Navy Order 117 of 1958 is hereby cancelled.

APPENDIX A.

INSTRUMENT FLIGHT TESTS.

Test	Remarks.	Requirements and Limits. White and Green.	Requirements and Limits. Master Green.
1. Take-off and initial climb ..	To be made solely by reference to instruments	No limits. Safe in all respects.	
2. Climb	Check speeds and limiting temperatures. Best climbing speed to be maintained	± 10°	± 5°
		± 10 knots	± 5 knots
		± 200 feet for level out	± 100 feet for level out
3. Rate one precision climbing turns through 360° in each direction	This is a "rate of turn" and co-ordination test. (Testing officer to assist in timing if required.) Rate of climb and speed to be as appropriate	± 10 secs.	± 5 secs.
		± 10°	± 5°
		± 200 feet throughout the turn	± 100 feet throughout the turn
4. Steep turns (full panel) ..	Minimum of 50° bank through not more than 360° in each direction. Jet aircraft to be flown at .7M	± 200 feet	± 100 feet
5. Steep turns (restricted panel) ..	Rate of turn appropriate to 45° bank through not more than 180° in each direction. Jet aircraft to be flown at .7M	± 300 feet	± 200 feet
6. High speed run and maximum deceleration (restricted panel). (Jet aircraft only)	Test of ability to maintain control at a speed at which compressibility effects become apparent, and to reduce speed as quickly as possible by use of airbrakes and throttle	± 500 feet	± 300 feet
		± 15° during deceleration	± 10° during deceleration
7. Recovery from unusual attitudes (restricted panel)	To include recovery from a spiral dive and a stall or near-stalled condition	Recovery to straight and level flight to be with minimum loss of height	
8. High or low-level controlled descent (restricted panel)	Where possible to feed into an instrument approach (e.g., G.C.A. or I.L.S.)	± 10 knots	± 5 knots
		± 10°	± 5°
		± 200 feet	± 100 feet
9. Instrument approach and missed approach procedure (full panel)	To include a runway instrument approach using G.C.A. or equivalent. If this is not possible a G.C.A. is to be simulated by the testing officer	Height and speed to be adequate for a safe approach	
10. Flight with asymmetric power ..	On multi-engined aircraft, the testing officer is to simulate engine failure during one of the exercises listed above	Appropriate action to be taken without delay	

APPENDIX A—*continued.*

Note.—Flight tests may be conducted in cloud or by using special equipment to create instrument flying conditions. They may only be conducted in cloud when the base of the cloud is high enough to provide an adequate safety margin.

GROUND ORAL EXAMINATION.

It is to be ensured that the pilot has a safe and sound knowledge of—

(*a*) Air Traffic Control regulations with special reference to instrument flight rules.
(*b*) Practical weather technique, including flight through turbulence, icing, &c.
(*c*) Principles of flight with special reference to range and endurance flying.
(*d*) Meteorology.
(*e*) Flight instruments.
(*f*) Pilot navigation.
(*g*) Airmanship.

APPENDIX B.

QUALIFICATIONS FOR INITIAL GRANT OR RENEWAL OF INSTRUMENT RATINGS.

White Instrument Rating.	*Green Instrument Rating.*	*Master Green Instrument Rating.*
Initial.	**Initial.**	**Initial.**
(I) Pass Instrument Flight Test and Ground Oral Test as described in Appendix A of this order	(I) 10 hours "actual" and "simulated" as first pilot in last 6 months	(I) 10 hours "actual and "simulated" as first pilot in last 6 months
(II) 50 hours as first pilot in past year	(II) Total of 50 hours "actual" and "simulated". At least 20 hours to be actual	(II) Total of 100 hours "actual"
	(III) 500 hours as first pilot	(III) 1,000 hours as first pilot
	(IV) 50 hours as first pilot in past year	(IV) 50 hours as first pilot in past year
Renewal.	**Renewal.**	**Renewal.**
(I) As in (I) above	(I) as in (I) above unless a Master Green Instrument Rating has been held within the past year	(I) As in (I) above
(II) 25 hours as first pilot in past year unless a Green Instrument Rating has been held within the past year	(II) 25 hours as first pilot in past year unless a Master Green Instrument Rating has been held within the past year	(II) 25 hours as first pilot in past year

Notes:

(*a*) "Actual" instrument flying is that flying time, day or night, when the aircraft cannot be controlled except by reference to flight instruments.

(*b*) "Simulated" instrument flying is that time when instrument flying conditions are created by use of special equipment.

APPENDIX C.

MINIMUM OPERATING CONDITIONS FOR R.A.N. AIRFIELDS.

Airfield.		*Green and Master Green.*		*White.*	
		Cloud Base.	*Visibility.*	*Cloud Base.*	*Visibility.*
R.A.N.A.S. Nowra	Take-off ..	0 ft.	500 yds.	200 ft.	1 N.M.
	Landing ..	950 ft.	2 N.M.	1,150 ft.	

Break-off altitude (QGH) .. .. 1,300 ft.

APPENDIX D.

APPENDIX D TO PILOT'S LOG BOOK—INSTRUMENT RATING AWARD, RENEWAL OR WITHDRAWAL.

(To be completed by Commanding Officer.)

Column A.—Enter " White ", " Green " or " Master Green ".
Column B.—Enter " Jet only ", " Propeller only " or " Jet and Propeller ".
Column C.—Enter " Awarded ", " Renewed " or " Withdrawn ".
Column D.—Enter date of award, renewal or withdrawal.

A.	*B.*	*C.*	*D.*	*Ship or Air Station.*	*Signature.*

(D.A.W.O.T. 303/2/9.)

(*Navy Order* 117 *of* 1958.)

UNCLASSIFIED.

152.—Medical—Morphia—Use in Ships not Carrying a Medical Officer.

Non-medical personnel who may be called upon to use morphia should in every case receive prior training by a Medical Officer.

2. The use of morphia is to be reserved entirely for the relief of pain and distress in the case of persons wounded or injured, including burning and scalding. It is on no account to be given to anyone suffering from pain not due to these causes. It should be avoided, if possible—

(*a*) in cases of head injuries, unless the patient is violent;
(*b*) in very cold climates.

3. It should be borne in mind that though wounds and injuries frequently cause shock, morphia should not be given where the shock exists without pain or unrest. A shocked patient may be abnormally quiet, and may not complain of pain, in which case morphia is not necessary and may even do more harm than good.

4. Morphia may be supplied in one or more of the following forms, depending on the scale of Medical Stores allowed—

(*a*) Syringe Ampoules, ½ gr. morphine per ampoule	For injection under the skin. (Tubunic syrette with needle attached)
(*b*) Tablets, Oral, Opium, ¼ gr. morphine per tablet	To be swallowed, crushed or otherwise, with a drink
(*c*) Lamellae, ¼ gr. morphine per lamel	In sheets of 24 squares. One square to be torn off at the perforations, placed under the tongue and dissolved
(*d*) Tablets, Hypodermic, ¼ gr. morphine, per tablet	Normally carried by Medical Officers but may be supplied for use as ordered. Dissolve under the tongue
(*e*) Ampoules, Hypodermic, ½ gr. morphine per ampoule	Injection under the skin. (Syringe and needle is provided in these scales).

5. The method by injection of the contents of syringe or syrette ampoules is by far the most effective. When the ampoules or syrettes are available they should certainly be used.

6. For the injection, select the skin preferably on the outer side of the upper arm or thigh or on a buttock, though any site may be chosen as circumstances permit. Cleaning the skin, if it means delay in giving the morphia, is not essential. Directions for using the syrette ampoule are given on a leaflet with diagrams contained in the box or tin. These should be studied.

7. The dose of each form of morphia is one unit, i.e., one syringe or syrette ampoule or one tablet. In cases of severe wounding or great pain, two tablets or lamellae may be given, but non-medical personnel should on no account inject the contents of more than one syringe or syrette ampoule at the same time.

8. The dose of one or two tablets or lamellae or of one syringe or syrette ampoule can be repeated if necessary provided **four hours** have elapsed since the previous dose was given.

9. All forms of morphia should be kept under lock and key in the charge of the Commanding Officer and, when morphia is requested, he or his representative should ascertain, to the best of his ability, that its use is justified. When the circumstances of the case make it necessary for the Commanding Officer to delegate the authority of administering morphia, he should arrange that those deputed are thoroughly conversant with the terms of this order.

10. All patients who have been given morphia in any form are to have a label firmly attached to their clothing with the following records—

(*a*) Name.
(*b*) Nature of injury.
(*c*) Dose of morphia given, i.e., one or two tablets or lamellae or one syringe ampoule.
(*d*) Date and time morphia given.

11. This procedure is to be carried out by the person who actually administered the morphia. The letter " M " written on the forehead with persistent material, ink, lipstick, indelible pencil, crayon, &c., may be used as an added precaution.

12. Expenditure of any type of morphia is to be entered immediately in the dangerous drugs account, form A.M. 177a.

(M.D.G. 327/54/13.)

RESTRICTED.

153.—Photography—Titling, Registration, Storage and Disposal of Photographic Negatives and Prints.

The following instructions show the procedure for the titling, registration, storage and disposal of photographic negatives and prints.

Titling of Ground Negatives.

2. All ground negatives of official photographs, including roll films, are to be titled on the rebate on the emulsion side as follows—

(*a*) Ship or establishment of origin.
(*b*) Negative serial number (from the ship's Ground Negative Register).
(*c*) Date when taken.

Example—MELBOURNE G.345. 16th January, 1958.

Titling of Air Negatives.

3. All air negatives other than those exposed on routine training are to be titled with the following information. Each printable negative frame is to be titled—

(*a*) Negative number	First Group.
(*b*) Camera position	First Group.
(*c*) Squadron number and parent ship ..	Second Group.
(*d*) Service of origin	Second Group.
(*e*) Sortie number	Second Group.
(*f*) Date	Third Group.
(*g*) Time	Third Group.
(*h*) Focal length	Third Group.
(*i*) Security classification	Third Group.

4. Items 3 (*a*) to 3 (*f*) will form an individual negative reference. Items 3 (*b*) to 3 (*f*), preceded by the serial numbers of the first and last negative on the roll, are also to be written on the unexposed portions at each end of the negative roll and on the film storage tin; this will constitute the film reference. As items 3 (*b*) to 3 (*i*) will normally remain constant for the duration of a photographic run, they can be written on a strip of transparent cellulose adhesive tape which should be fixed at the edge of the printing box register glass nearest the operator, so as to record on each print. The pilot's report must be checked frequently to ensure that the constants on the strip are not printed incorrectly. The strip or strips are to be affixed to the unexposed portion at the beginning of the film before storage.

Item (*a*).

5. The negative number which should run from 0001 consecutively through each roll, may be stamped using Ref. 14B/1239 Negative Numbering Machine and Ref. 14B/1240 Ink.

Item (*b*).

6. The camera position is to be indicated by one of the following symbols—

(*a*) **V—Vertical.** The single letter V indicates a single vertical installation of one camera not tilted more than 45° from the vertical. Where more than one vertical camera not forming part of a " fan " is installed, they are to be numbered V1, V2, &c., from nose to tail or port to starboard.

(*b*) **F—Fan.** The single letter F indicates a fan of two or more cameras. The F is to be followed by two digits: the first to indicate the number of cameras in the fan and the second to indicate the position of the camera in the fan. Cameras are to be numbered from port to starboard according to the position photographed on the ground by the camera.
e.g., A split fan .. F.21, F.22.
A 3-camera fan .. F.31, F.32, F.33.
When two or more fans with an equal number of cameras are installed the fan letter F is to be preceded by the number of the fan in sequence from the nose to tail. As in vertical installations a single F will indicate that only one fan with the indicated number of cameras is installed.
e.g., Foremost fan .. 1 F.31, 1 F.32, 1 F.33.
Second fan .. 2 F.31, 2 F.32, 2 F.33.

(*c*) **S—Starboard.** A starboard facing oblique camera pointing to within 45° of the starboard beam in the plane of flight and not depressed more than 45° below the horizontal.

(*d*) **P—Port.** A port facing oblique camera pointing to within 45° of the port beam in the plane of flight and not depressed more than 45° below the horizontal.

(*e*) **N—Nose.** A forward facing oblique camera pointing to within 45° of the forward axis of the aircraft and not depressed more than 45° below the horizontal. A single camera is to be indicated by the letter N, a dual installation by the letters N1 and N2, N1 being the camera situated on the port side.

(*f*) **T—Tail.** A rearward facing oblique camera pointing to within 45° of the rearward axis of the aircraft and not depressed more than 45° below the horizontal. A dual installation is to be indicated in the same manner as for a nose installation. T.1 being the port and T.2 being the starboard camera.

Item (c).

7. Squadron number and parent ship are to be indicated thus—
816 MELBOURNE. The ship's name may be suitably abbreviated.

Item (d).

8. The service of origin is to be separated from item (*c*) by a hyphen e.g.—
816 MELBOURNE-R.A.N.

Item (e).

9. The sortie number is to be taken from the pilot's report.

Item (f).

10 The date is to be written thus—
22 Jan. 58.

Item (g).

11. The time of photography is to indicate the mean time of a run. G.M.T. is to be used and the suffix Z should follow the time groups, e.g. 1430Z. A double hyphen is to separate item (*g*) from item (*f*) to indicate the end of the individual negative reference (*see* paragraph 4).

Item (h).

12. The focal length of the camera in which the negative was exposed is to be expressed in inches or millimetres thus—
36 in., 160 mm.

Item (i).

13. The security classification is to be written in full in capital letters and is always to be the last item in the title.
Example of a standard title—

0055 F.21 816 MELBOURNE-R.A.N. 26 12 Jan. 1958=1430Z 12 in.
RESTRICTED. (Any additional items, *see* paragraph 14).

Key: 0055	=	the stamped negative serial number.
F.21	=	camera position—The port facing camera in the 2 camera fan.
816	=	the squadron number.
MELBOURNE	=	the ship H.M.A.S. MELBOURNE.
R.A.N.	=	the service of origin.
26	=	the sortie number.
12 Jan. 1958	=	the date.
1430Z	=	the mean time of the photographic run in G.M.T.
12 in.	=	the camera focal length.

14. In special circumstances when the information required on a negative title is not covered by the items in paragraph 3, additional items may be added between the camera focal length and the security classification. For example the latitude and longitude, height of photography or the name of the locality, may be required, or in survey photography, the calibrated focal length of the camera, type of filter and lens and camera serial numbers. These additional items must, however, be self-evident in their meaning and should only be inserted when essential and on the instruction of the authority initiating the sortie.

Titling of Mosaics.

15. A title including the following information is to be stencilled on the northerly side of the original of all mosaics.

(*a*) Locality.
Map sheet.
Latitude and longitude, or grid co-ordinates of corners in the following order—
NW NE
SW SE (*see* example).
Unit taking the mosaic.
Date.
Scale line.
North point.
Copy negative number.

(*b*) An example of the title of a mosaic is as follows—

AREA-READING

TAKEN BY (UNIT)

MAP SHEET No. 109943–177938
109915–177903

NEG. No. H.M.A.S. " NONSUCH "

DATE 14.1.58 G.123

200 100 0 200 400 600 800 Yds. (approx.)

½ Nautical Mile (approx.).

(*c*) *Scale Line for Mosaics.* The details of the method of constructing the scale line are as follows—

The scale line is to be from 4 to 6 inches in length and of the open-divided type. It is to be a yard scale divided decimally, i.e., into tens, hundreds or thousands of yards. The fully divided division will be equal to one of the divisions on the open scale. For the convenience of persons using the scale, a distance in miles (¼, ½ or 1) is to be indicated under the scale line. It should be clearly indicated whether the statute or nautical mile is being used.

Registration of Negatives.

16. Separate registers are to be kept for air negatives and ground negatives—

(*a*) *Air Negative Register.*—This is to be arranged in five columns containing the following information—

First column .. Storage tin serial number (for internal use in the department).
Second column .. Film reference (*see* paragraph 3).
Third column .. Location of photography by name, latitude and longitude or map reference.
Fourth column .. Remarks.
Fifth column .. Eventual disposal.

Tin No.	*Film Reference.*	*Location.*	*Remarks.*	*Disposal.*
7	0001–0048 S 816 MELBOURNE–R.A.N. 25 13 Jan. 58	Cocos Is.	Beach Reconnaissance	D.N.I.

(*b*) *Ground Negative Register.*—This register is to be divided into seven columns in which the following information is to be entered—

First column .. Series letter G. Serial number of negative.
Second column .. Date exposed.
Third column .. Subject.
Fourth column .. Size of negative.
Fifth column .. Serial number of storage box.
Sixth column .. Remarks.
Seventh column .. Eventual disposal in accordance with paragraph 21.

Confidential and higher security graded negatives are to be entered in red ink.

Ship or Establishment series letter negative No.	*Date exposed.*	*Subject.*	*Size Neg.*	*Box No.*	*Remarks.*	*Eventual disposal.*
NONSUCH G.345	6 Jan. 57	Superstructure	9 x 12CM	4	To illustrate accident report	Destroyed 12 Jan. 58

Storage of Negatives.

Plate and Cut Film Negatives.

17. These are to be stored in serial order, in envelopes, in appropriate storage boxes. Plate negatives are to be stored in separate boxes from the cut film negatives. Boxes are to be given serial numbers and marked to show what negatives they contain. Separate boxes, which are to be kept under lock and key, are to be used for negatives of Confidential and higher security grading.

Roll Film Negatives.

18. Aerial roll films are to be stored in rolls, uncut, in the tins in which they are supplied. Two or more short lengths of film may be stored in the same tin but the reference of each must appear on the outside of the tin which should bear a serial number for internal use in the department. Air negatives of a security grading are to be kept under lock and key. Other roll films which would lose their continuity by being cut and treated as cut film negatives, are to be stored in the cartons in which they were supplied. These cartons should be numbered as if one negative were enclosed.

Security.

19. The following instructions on the security treatment of photographs are to be carefully followed. The term "photograph" as used in this paragraph includes any air or ground negative and any print therefrom.

(*a*) All negatives, whether taken from the air or on the ground, and whether with service or private cameras, should be accorded a security grading in one of the following categories, viz. "TOP SECRET", "SECRET", "CONFIDENTIAL" and "RESTRICTED", or should be marked "UNCLASSIFIED". In cases of doubt negatives and any prints should be classified "CONFIDENTIAL" and forwarded to the Director of Naval Intelligence, Navy Office, for assessment to be made.

(*b*) Security grading must be obtained from the service or authority initiating the order for the photographs to be taken.

(*c*) *Private photographs.*—The regulations governing the taking and disposal of private photographs are contained in Q.R. & A.I., Article 3815. When photographs are taken privately by Naval officers and ratings and are deemed to be of a classified nature, they are henceforth to be dealt with in all respects as officially taken classified photographs.

(*d*) Removal of photographs from any categories of security so that they become "Unclassified" is to be carried out on the authority of the service or department directly concerned.

(*e*) It is the responsibility of all concerned to ensure that classified photographs do not fall into the hands of unauthorized persons. All unclassified photographs that are not required for filing for record purposes, or for their historical or archaeological value, are to be destroyed.

(*f*) Photographs of "protected subjects" are automatically to be graded as "Confidential". A "protected subject" is any place, installation, establishment, equipment, material or like matter, photography of which is prohibited or controlled by the department concerned and in respect of which the department has made an order or regulation or issued an instruction.

(*g*) The following is a list of protected subjects; this list is subject to amendments and it is the duty of the persons concerned to be acquainted with all such amendments—

Naval .. .. Warships.
Dockyards.
Naval Armament Depots.
Experimental establishments and any subject regarding which special security instructions are issued.

Army	Arsenals. Military depots and dumps. Major defence works. Barracks. Gasoline bulk stowage depots. Research and development establishments.
Air Force	Air Force stations. Air Force maintenance and storage units. Experimental establishments. Gasoline bulk stowage.
Service—General ..	Units or establishments which are not shown in the Navy, Army or Air Force List.

Disposal of Prints and Negatives.

20. Prints and ground negatives are to be disposed of in accordance with the instructions issued by the authority initiating the order for photographs to be taken. The negatives should be retained in the parent ship unless specific instructions to the contrary are given.

(*a*) Unclassified prints and lantern slides may be considered as consumable and may be destroyed when no longer required.

(*b*) At the discretion of the Commanding Officer, two prints, or in the case of publicity, four prints, of each ground negative likely to be of interest are to be sent to the Secretary, Navy Office, for the information of the appropriate department as hereunder (for publicity prints and negatives *see* (iii) hereunder)—

(i) Security classified, operational, hydrographic—as soon as possible.

(ii) Unclassified—every three months.

(iii) Publicity—immediately by air mail or air freight (including cine negatives or prints), addressed to D.N.I. (for P.R.O.).

(iv) Operational and other air negatives showing any ground detail which may be useful for intelligence purposes are to be forwarded to the Director of Naval Intelligence.

Procedure on paying off or disbandment.

21. Ships when paying off and squadrons having photographic staff, on being disbanded, are to forward negatives considered to be of general service interest, together with appropriate negative register to the R.A.N. School of Photography, R.A.N. Air Station, Nowra, N.S.W. Remaining negatives are to be destroyed at the discretion of the Commanding Officer of the ship or establishment.

22. Navy Order 133 of 1958 is hereby cancelled.

(D.A.W.O.T. 164/2/7.)

(*Navy Order* 133 *of* 1958.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

154.—Band Branch—Marks of Respect.

Consequent upon the decision to change the uniform and titles of members of the Band Branch (Navy Order 5 of 1960) C.O.R. article 206 is cancelled.

(H.P.B. 930/51/15.)

(*Navy Order* 5 *of* 1960.)

UNCLASSIFIED.

155.—Geneva Conventions—Protection of Medical, &c., Personnel in War—Armlets and Certificates.

In accordance with the provisions of the Red Cross International Conventions concluded on 12th August, 1949, i.e.,

(*a*) Geneva convention for the amelioration of the condition of wounded, sick and shipwrecked members of Armed Forces at Sea; and

(*b*) Geneva Convention for the amelioration of the condition of the wounded and sick in Armed Forces in the Field;

the religious, medical and hospital personnel serving afloat, and those of hospital ships and their screws and also members of these staffs serving on land and in the air, are entitled in war to protection whilst on service for the succour of the wounded, sick and shipwrecked.

2. Medical and dental naval officers, nursing officers and wardmaster officers, chaplains, sick berth ratings, naval V.A.D. members, Wran sick berth ratings and dental surgery attendants should therefore each be issued, in war, with a Red Cross armlet and an identity certificate whether employed afloat or on shore.

3. Civilian personnel who do not wear uniform, such as ambulance drivers, pharmacists, laundry superintendents, laundry managers, physiotherapists, dental technicians, clerical and other civilian staff who are employed in Naval hospitals are likewise entitled to protection under the above-mentioned conventions. An armlet and an identity certificate is to be issued to each person when serving afloat or abroad in war, and care should be taken that in the event of the transfer abroad of any person entitled to protection under the above-mentioned conventions, he or she is issued with a Red Cross armlet and a certificate.

4. Members of the armed forces specially trained for employment, should the need arise, as hospital orderlies, nurses or stretcher bearers in the search for the collection, transport or treatment of the wounded or sick, are also protected under the conventions whilst so employed, and they should be issued, in war, with a white armlet bearing in its centre the red cross in miniature, and also an identity certificate. So far as the Naval Service is concerned, this category of protected personnel will in the main include Naval and Royal Marine personnel when detailed as stretcher bearers detached from H.M.A. ships.

5. Identity certificates and armlets in accordance with the foregoing arrangements are to be issued and stamped, and the certificates signed by the senior naval officer; or, in the case of a naval hospital or medical unit, the medical officer-in-charge or senior medical officer.

6. The issuing authority is to cause a register of certificates issued to be kept. All cases of loss of certificates are to be reported as soon as possible to the issuing authority.

7. A description of the identity certificates and armlets is appended—

Armlet.	*Certificate.*		*Issuable to.*
	Form No.	*Title.*	
Red cross on a white ground	F/Ident/107 ..	Identity card for medical staff and Chaplains of or attached to the armed forces	Naval and civilian staff as detailed in paragraphs 2 and 3 above
Red cross in miniature on a white ground	F/Ident/106 ..	Identity card for personnel specially trained and temporarily acting as medical orderlies, &c.	Naval and R.M. Staff detailed in paragraph 4

8. The certificates and armlets will be held by the Medical and Dental Store Officer, Sydney, and will be supplied on demand **when required for issue during war** to personnel entitled to protection under the Geneva Conventions who are serving in H.M.A. ships and establishments at the time.

9. Navy Order 186 of 1958 is hereby cancelled.

(M.D.G. 43/1/3.)

(*Navy Order* 186 *of* 1958.)

UNCLASSIFIED.

156.—Naval Dockyard Police—Eligibility for Entry or Transfer, and Conditions of Service.

This order sets out—

(*a*) The qualifications required of persons who desire to enter the Naval Dockyard Police from shore and of personnel who desire to transfer from the sea-going service, and

(*b*) The conditions of service in the Naval Dockyard Police.

Transfers from the sea-going service.

2. Ratings who are within 6 months of completing their current engagement and are between the age of 30 and 45 years will be permitted to transfer in the rating of Constable. They must have at least 9 years service, the last three years of which must be uninterruptedly " very good " for conduct, and be recommended for transfer. A roster of volunteers who wish to transfer to the Naval Dockyard Police is maintained by the Director of Naval Reserves. Ratings who are eligible for selection may

apply to be placed on the roster, and will be considered for employment in vacancies as they occur. In special cases, provided his services can be spared, a rating who has completed 17 years service may be permitted to transfer to the Naval Dockyard Police at any time provided a vacancy exists.

3. Special engagements in the sea-going service whilst awaiting transfer are to be discontinued. Ratings at present serving under such two year engagements will continue to be considered for transfer with other candidates whether eligible or not under the revised conditions laid down in paragraph 2 of this order.

Should transfer not take place during the currency of an existing special engagement, any subsequent re-engagement will be under normal service conditions and should any rating not be qualified under the rules set out in this order, his name will be removed from the roster until such time as he becomes eligible for transfer and volunteers to do so.

4. A rating will be removed from the roster on discharge to shore, but may apply to be placed on the list of volunteers for re-entry as a Constable, Naval Dockyard Police. It should be noted that opportunity for entry from shore is very limited.

5. Before submitting applications and recommendations, Commanding Officers are to be fully satisfied that, in addition to the prescribed standards of conduct, service and height, applicants possess the following qualities—

(*a*) Loyalty to the service in a high degree;

(*b*) Complete honesty and probity of character. (The last three years of service must have been uninterruptedly " very good ");

(*c*) Good sense of discipline and power to command;

(*d*) Good physique and smart appearance.

6. The duties of a member of the Naval Dockyard Police are in many ways similar to those of a Regulating Petty Officer and, in addition, involve the exercise of much tact, discretion and initiative in dealing with civilian personnel. Unless the Captain would be prepared to employ the rating concerned in a regulating capacity in his own ship, transfer to the Naval Dockyard Police should not be recommended.

7. Members of the Naval Dockyard Police, with few exceptions, are permanent watchkeepers involving absence from their homes during the evening and/or night for approximately 50 per cent. of their occasions of duty, and in these circumstances compassionate cases requiring the member's presence at home at night, should not be recommended for transfer. Recruiting officers also should be guided by these points before submitting applications for re-entry of ex-naval personnel into the Force.

Entry from Shore.

8. Ex-naval ratings, who have served in the Royal Australian Navy, the Royal Navy, the Royal Marines or the Naval Forces of the British Commonwealth for periods of not less than nine years over the age of 18 years, and are between the age of 30 and 45 years, may be re-entered in the rating of Constable, provided they have not been out of a Naval Service for more than five years. In such cases, normal recruiting procedure is to be followed.

9. Preference in selection will be made in the following order—

First—

R.A.N. serving personnel according to length of Naval Service and continuity of very good character;

Second—

Ex R.A.N. personnel (including ex members of the Naval Dockyard Police) according to length of service and date of discharge;

Third—

Ex Royal Navy, Royal Marines and British Commonwealth Naval Forces, according to length of service and date of discharge.

10. The medical standard is promulgated by the Naval Board from time to time. The minimum height of all applicants for transfer or entry is 5 ft. 7 ins.

Pay and Seniority.

1. *Pay.*—The rates of pay and allowances payable to members of the Naval Dockyard Police Force are aligned with those payable in the Seagoing Force. Marriage, Separation and/or Provision Allowances are payable to married personnel in accordance with normal rules and unmarried personnel are paid Living Out and Retention of Lodgings Allowances in accordance with the conditions applying to the Seagoing Force. Uniform Allowance and Badge Pay at the rates and under the conditions applying in the Seagoing Force are payable to all permanent Dockyard Police personnel.

12. Two scales of Active Pay are provided for members of the Naval Dockyard Police Force; viz., Scale "A" and Scale "B". The alignment of these scales with those applying in the Seagoing Force is as under.

SCALE "A."

Dockyard Police Rating and Seniority.	*Seagoing Force Rating and Seniority.*
Constable—less than 2 years:	Leading Seaman on advancement:
0/2 years.	0/2 years.
0/4 years.	0/4 years.
0/6 years.	Petty Officer on advancement:
0/8 years.	0/2 years.
0/10 years.	0/4 years.
0/12 years.	0/6 years.
Sergeant, 2nd Class, on advancement:	Chief Petty Officer on advancement:
0/2 years.	0/2 years.
Sergeant, 1st Class, on advancement:	
0/2 years.	0/4 years.
0/4 years.	0/6 years.
0/6 years.	0/8 years.

SCALE "B."

Constable, on entry:	A.B. on advancement:
0/2 years.	0/2 years.
0/4 years.	0/4 years.
0/6 years.	0/6 years.
0/8 years.	0/8 years.

Eligibility for Scale "A" Rates of Pay.

13. Scale "A" rates of Active Pay are payable from date of entry of all personnel entered in the Naval Dockyard Police Force prior to 28th March, 1951, and to such personnel entered on or after that date who—

(*a*) transfer from the Seagoing Forces holding the rating or equivalent rating of Leading Seaman or above; or

(*b*) enter the Dockyard Police after a break in service of not more than five years and who on discharge from the Seagoing Forces were holding the rating or equivalent rating of Leading Seaman or above.

Eligibility for Scale "B" Rates of Pay.

14. Scale "B" rates of pay are payable to Constables of the Naval Dockyard Police Force who—

(*a*) engage in the Dockyard Police Force after a break in service of over five years;

(*b*) are transferred from the Seagoing Force holding the rating or equivalent rating of Able Seaman; or

(*c*) were discharged from the Seagoing Force holding the rating or equivalent rating of Able Seaman.

Counting of Previous Service.

15. Provided his entry is effected within a period of five years from date of discharge from the Seagoing Forces a Constable eligible to receive Scale "B" rates of pay may be permitted to count towards increments of Active Pay and rate of pay on entry all time served in the rating or equivalent rating of Able Seaman and above. A Constable whose entry is effected after a break in service of over five years is not permitted to count any previous service towards increments of pay or rate of pay on entry.

16. A Constable eligible to receive Scale "A" rates of pay may, on transfer to, or entry in, the Naval Dockyard Police Force, be permitted to count, subject to the rules laid down for the Naval Forces, previous service in the Naval Forces in accordance with the following table—

Previous rating or relative rating.	*Pay seniority as a Constable (relative rating of Petty Officer).*
Leading Seaman ..	Date of entry as a Constable ante-dated by time, up to 6 years, served as a Leading Seaman and above. (*See* note).
Petty Officer	Date of entry as a Constable ante-dated by time served as a Petty Officer, plus an additional 6 years.
Chief Petty Officer ..	Date of entry as a Constable ante-dated by time served as a Petty Officer and Chief Petty Officer, plus an additional 6 years.

Note.—A Constable who, on discharge or transfer from the Sea-going Force, did not hold the rating of Petty Officer will not, in any case, be eligible for a rate of Active Pay higher than that applicable to a Constable after 4 years unless—

(*a*) whilst serving as a Leading Seaman, he had passed the professional examination for Petty Officer; or

(*b*) while serving as a Constable, he passes the prescribed qualifying examination in the Dockyard Police.

Where a Constable passes the prescribed qualifying examination in the Dockyard Police his pay seniority shall not, in any case, be earlier than the date 6 years prior to the date of so qualifying.

Conditions Governing Transfer from Scale " B " to Scale " A " Rates of Pay.

17. A Constable on Scale " B " rates of pay will be eligible for transfer to Scale " A " rates—

(*a*) on completion of 12 years' combined reckonable service in the Seagoing Force and the Naval Dockyard Police; or

(*b*) on completion of 12 years' service in the Naval Dockyard Police; or

(*c*) after 6 years' service in the Naval Dockyard Police and having passed the prescribed examination. In this latter case he will be transferred to Scale " A " rates at the rate applicable to " a Constable over 6 years " and his pay seniority will be adjusted accordingly.

Pay Seniority.

18. The pay seniority of all Constables is determined on entry in or transfer to the Naval Dockyard Police in accordance with the foregoing paragraphs. When a variation in pay seniority is brought about either—

(*a*) by transfer to the minimum Scale " A " rates of pay; or

(*b*) by passing the prescribed examination for the rate of pay of a " Constable over 6 years " on Scale " A " rates, the pay seniority will be re-assessed as follows—

(i) In the case of (*a*)—All previous service will be disregarded, i.e., the member's pay seniority will become the date of transfer to Scale " A " rates of pay;

(ii) In the case of (*b*)—No change will be made until the member has acquired six years' pay seniority. All reckonable service in excess of six years prior to date of passing the examination will be disregarded, i.e., the member's pay seniority will be ante-dated six years from date of passing the examination.

19. In the pay accounts of Constables, Scale " B " pay seniorities will be prefixed by the letter " B ". The pay seniorities of personnel entitled to the rate of pay of a " Constable of six years or more " on Scale " A " rates of pay, will be prefixed by an asterisk.

Seniority.

20. A Constable's seniority for purposes other than pay shall be determined by actual service in the Naval Dockyard Police.

Other Conditions of Service.

Advancement.

21. A Constable having completed three years' service will be eligible for selection to undergo a course to qualify for the rank of Sergeant, 2nd Class. Advancement will be subject to recommendation and vacancies existing in establishment. Sergeants, 2nd Class, may be advanced to Sergeant, 1st Class, subject to recommendation and vacancies existing in establishment.

Engagement.

22. Initial engagement of personnel from shore is for a period of six years. The re-engagement of personnel is in accordance with the provisions of Navy Order 500 of 1959.

Retiring Age.

23. The compulsory retiring age for all ranks and ratings is 55 years.

Other Conditions of Service.

24. Instructions applicable to the Seagoing Force regarding sick and recreation leave, medical and dental attention, travelling and meal allowance and removal expenses, apply to members of the Naval Dockyard Police.

(D.N.R. 302/54/4.)

(*Navy Order* 500 *of* 1959.)

UNCLASSIFIED.

157.—The Ian MacDonald Memorial Prize.

The Ian MacDonald Memorial Prize for 1958 has been awarded to Acting Sub-Lieutenant J. S. Merrillees (S) R.A.N.

2. Navy Order 595 of 1959 is hereby cancelled.

(H.P.B. 38/6/6.)

(*Navy Order* 595 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

158.—Ammunition—Cartridges Q.F. 40/60, H.E. of Propellant Lots KA 1141 and RNP 1634—Withdrawal.

(*A.F.O.* 2966/1959.)

Prematures have occurred in United Kingdom at annual proof of cartridges Q.F. 40/60 H.E. tracer of propellant lot KA 1141 assembled GD.8/45 and of lot RNP 1634 assembled GD.9/51.

2. Ammunition of these propellant lots is to be regarded as coming under N.M.E.R. (B.R. 862/56), Article 304, category (*dd*)—Dangerous if used and should be landed at an Armament Depot at first opportunity.

3. *R.A.N. Armament Depots only*—All 40/60 H.E. rounds of these two propellant lots in stock and subsequently landed are to be held under restriction and set aside pending further instructions.

(D.W. 726/66/20.)

UNCLASSIFIED.

159.—Gun Mountings—Auto Control—Run into Alignment Tests of Auto Equipment.

Unrealistic and misleading results are often obtained when the run-in performance of an auto system from small angles of misalignment in fine control only is tested by the methods shown in B.R. 2034, Chapter 6—Handbook for Routine Tuning, Periodic Trials and Testing Instruments for Gun Auto Systems.

2. If power is taken off the system to allow a dummy director to be offset by the required step-input value, and power is then restored for the system to run into alignment, the result obtained is not a true representation of the auto-performance owing to charging time-constants of the various amplifier networks and electric power drives.

3. In order to facilitate the production of true run-in records for small angles of misalignment in fine control only, the method detailed in paragraph 4 has been devised. This does not supersede the methods described in B.R. 2034 for testing coarse-fine changeover values, coarse phase advance and coarse-fine run-in performance.

4. An XCO transmitter magslip A.P. 10952, fitted in the Dummy Director, mark 2 P.F., or mark 2P, should be connected as shown in Navy Order Diagram Issue 4/60 (D.N.O. 10741) to a small sub-chassis on which a two-pole two-way switch and a potentiometer have been mounted.

5. The stores required, which should be demanded from Navy Stores quoting this Order as authority, are—

Quantity.	*Description.*	*Pattern No.*
1	Resistor I.K.	Z.215642
1	Potentiometer 5.K	A.P.60928
1	Two-pole two-way switch	Z.510504
1	XCO Magslip transmitter	10952

6. With the switch made to position 1, the cross winding of the XCO transmitter is short-circuited and S.H.M. or constant speed inputs can be applied to the system under test. Throwing the switch to position 2 will inject a step signal from the cross-winding, the value of which can be easily selected by adjustment of the potentiometer.

7. A suitable tally plate is to be fixed to the dummy director worded as follows—
" When an alignment test is being executed, care is to be taken to remove the terminal connector link or incline it at 45° to its normal position."

8. Navy Order 45 of 1958 is hereby cancelled.

(D.W. 736/53/9.)

(*Navy Order* 45 *of* 1958.)

UNCLASSIFIED.

160.—Guns—Procedure for Clearing Shell in Guns using Separate Loading Ammunition.

(*A.F.O.* 2729/1959.)

An instance has arisen in the R.N. where difficulty was experienced in clearing a shell from a 4.5-in. separate loading gun, using the shell ejector. A misfire had occurred and after the cartridge had been removed, attempts to eject the shell resulted in serious damage to the bore of the gun.

2. Whenever possible, ships and establishments with guns using separate loading ammunition are to clear such guns by firing, in preference to using the shell ejector.

(D.W. 705/51/5.)

UNCLASSIFIED.

161.—Naval Stores (General)—Automatic Emergency Lanterns, Pattern F2A/16457—Protection of External Thread and Contacts.

(*A.F.O.* 2792/1959.)

Automatic Emergency Lanterns, pattern F2A/16457, have hitherto been supplied complete with a cap and chain to provide protection during transit and storage for the external thread of the socket containing the contacts.

2. On installation of the lantern the cap and chain are no longer required and, in the interests of economy, it has been decided to discontinue their provision as part of the lantern. When it is necessary to provide protection for the socket, this can be achieved by the use of a 2-in. square of 0.005-in. Polythene sheeting secured by a 1¼-in. diameter clip made up from a length of 21 S.W.G. copper strip, ¼-in. wide, with the ends bent out at right angles, drilled No. 26 and clamped together by a 4 B.A. screw, nut and lock-washer.

(D.N.A.S. 518/60/16.)

UNCLASSIFIED.

162.—Naval Stores (General) (Class B, Group 11, Parts C to G)—Hand Tools—Introduction of New Specifications.

It has been decided that when existing stocks are exhausted Adjustable Spanners patterns 910–5954, 5955, 5956 and 5957 will be superseded by adjustable, open ended wrenches, patterns 910–5962, 5963, 5964, 5965 and 5966.

2. Appendix " A " to Navy Order 23 of 1959 is to be amended by inserting pattern numbers as shown against the undermentioned items at present shown as non-pattern items—

Insert in lieu—

Pattern.	*Description.*	*Specification.*
B11G/910–5962	Wrenches, open end, adjustable 4-in.	DEF (Aust.) 807 Type A
B11G/910–5963	Wrenches, open end, adjustable 6-in.	
B11G/910–5964	Wrenches, open end, adjustable 8-in.	
B11G/910–5965	Wrenches, open end, adjustable 10-in.	
B11G/910–5966	Wrenches, open end, adjustable 12-in.	

3. Appendix " B " to Navy Order 23 of 1959 is to be amended by adding the following—

Pattern.	*Description.*
B11G/910–5954	Spanners, adjustable, 4-in.
B11G/910–5955	Spanners, adjustable, 6-in.
B11G/910–5956	Spanners, adjustable, 9-in.
B11G/910–5957	Spanners, adjustable, 11-in.

(D.N.A.S. 506/71/50.)

(*Navy Order* 23 *of* 1959.)

UNCLASSIFIED.

163.—Naval Stores (General) (Class E, Group 4)—" Officers Leave Boards "—Reclassification as a Naval Store Item.

As from the date of this order, " Officers Leave Boards " will be accounted for as Naval Stores items under Class E, Group 4.

2. Full descriptions of these boards are as follows—

Class/ Group.	*Pattern No.*	*Description.*	*Ships Accounting Classification.*
E4	N.P.	Officers leave boards, Type A (to Garden Is. Drwg. 153/71)	P
E4	N.P.	Officers leave boards, Type B (to Garden Is. Drwg. 153/71)	P

Note.—Type A—for ships with up to 10 officers.
Type B—for ships with up to 20 officers.

3. Demands as necessary should be forwarded to the appropriate (S)N.S.O.

(D.N.A.S. 1281/51/9.)

UNCLASSIFIED.

164.—Naval Stores (General) (E4)—Obsolete Stores—Disposal.

(*A.F.O.* 2917/1959.)

The stores detailed in the appendix are now obsolete and except for any serviceable items which can be utilized in the immediate future (Superintending) Naval Store Officers are to dispose of any stocks held as surplus to requirements in accordance with existing instructions.

2. No further returns of the items listed are to be taken on main or repairable ledger charge.

3. Any of the patterns listed which are actually in use in H.M.A. ships or establishments are to be retained until due for normal replacement.

4. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Pattern No.	*Description.*	*Remarks.*
711	Chair, easy, for submarines, fireproofed	
905	Cabinet for test tubes (or bottles) for use with test sets for boiler feed water	
3010	Chair, tub, small	No longer in any scale of allowances.
3825	Rack, luggage, aluminium alloy	
3150	Chair, for R.D. office	

(D.N.A.S. 512/69/54.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

165.—Surgical Instruments—Care of.

It has been noted that surgical instruments stowed in canvas rolls show rusting when returned from ships to the Medical and Dental Store Officer.

2. Medical Officers and Sick Berth staffs are to examine such instruments in their charge and are to ensure that each instrument is protected by being wrapped in greaseproof paper and that after use is properly re-wrapped in greaseproof paper before being returned to the roll.

3. Attention is drawn to the Instructions for Care of Surgical Instruments on form A.M. 172.

(M.D.G. 1002/52/11.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

166.—Books—B.R. 1636 Interservice Catalogue of Electronic Components.

The Components Standardization Committee (Admiralty), Minister of Supply, and G.P.O. (Consultative) has discontinued work on the R.C.S.C. Catalogue of Electronic Components, no further amendments or re-issues will be undertaken.

2. Holders of the undermentioned documents will arrange disposal in accordance with paragraph 2513 (B) of A.B.R. 4.—

R.C. General Introduction, issue 2.
R.C.C. 11, 12, 13 and 14, issue 1, capacitors, fixed and variable.
R.C.C. 21, 24, 26 and 27, issue 1, resistors, fixed and variable.
R.C.C. 53, issue 2, relays, magnetic.
R.C.C. 56, part 1, issue 1, terminals.
R.C.C. 56, part 2, issue 1, plugs and sockets, electrical.
R.C.C. 56, part 3, valveholders.
R.C.C. 73, part 1, issue 1, vibrators.
R.C.C. 75, issue 1, rectifiers, metal.
R.C.C. 83, issue 1, waveguide components.
R.C.C. 97, issue 1, knobs, finger.

(D.N.A.S. 465/52/251.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

Registrar

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 167-187/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
9th March, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

1304/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

RESTRICTED.

167.—Medical—Venereal Disease—Kahn, Wassermann and Price Test Results.

The results of Kahn, Wassermann and Price Precipitation Reaction Tests are to be communicated as early as possible to the Medical Officer of the ship or establishment concerned in order that, where necessary, treatment may be instituted without delay.

2. If a ship has left the port before these tests have been completed, the results are to be forwarded by confidential letter **by quickest route** (air mail, if necessary) to the Medical Officer of the ship, and a copy to the Fleet Medical Officer.

(M.D.G. 327/54/14.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

808/61

168.—Benefits to Serving Members of the R.A.N. Under the Repatriation Act and Re-establishment and Employment Act.

Navy Order 754 of 1959 is to be amended as follows—

Section II, paragraph 10, last line—
Delete " 31st December, 1959 "
insert " 31st December, 1963 ".

(H.P.B. ~~347/1/7.~~ 347/501/4)

(*Navy Order* 754 *of* 1959.)

(347/1/7 in mg file)

UNCLASSIFIED.

169.—Conditions Concerning Re-engagement of Fleet Air Arm Personnel.

Consequent upon the recent decision not to re-equip the F.A.A. the Naval Board have decided that re-engagements of F.A.A. personnel should continue in accordance with the normal procedure as contained in Navy Order 500 of 1959 subject to the following provisions—

(*a*) Requirements of the Service.
(*b*) Ratings being re-engaged beyond 30th June, 1963, being warned of possibility of retrenchment when their services are no longer required.

2. In future, applications to re-engage by F.A.A. personnel should be forwarded to the Naval Board by signal in the following form.

(*a*) Name, rating and official number.
(*b*) Period of re-engagement required.
(*c*) Character and efficiency assessment at date of application.
(*d*) If member is under 21 years of age, that form A.R. 2 (Parent's Consent) has been completed.
(*e*) Whether medically fit for sea service, including medical category and any current ailments.
(*f*) Captain's recommendation.
(*g*) Whether advised of possibility of retrenchment.

3. Navy Order 500 of 1959 is to be noted accordingly.

(H.P.B. 307/4/9.)

(*Navy Order* 500 *of* 1959.)

UNCLASSIFIED.

170.—Films and Film Strips—Educational—Titles—" Encyclopaedia Britannica Physics Course "—" Unit VII—Atomic Physics " (Serial No. E.952)—" Unit VIII—Electronics " (Serial No. E.953)—Amendment.

Navy Order 795 of 1959 is to be amended as follows—

Delete paragraph 3 and *insert* in its stead—

" These films are in black and white with the exception of lesson 5 of Unit VII which is in colour, each lesson being issued on one spool ".

(D.N.A.S. 519/56/24.)

(*Navy Order* 795 *of* 1959.)

UNCLASSIFIED.

171.—Life Insurance for Flying Personnel in the Royal Australian Navy.

In order to secure the most favorable terms for Service Flying Personnel in respect of additional premiums charged by insurance companies in respect of their life insurance policies, representations were made on their behalf to the Life Offices' Association for Australasia.

2. Discussions on this matter have now been completed and the following advice has been received from the Association—

" Member offices have decided that, having regard to all the circumstances, it will be in the best interests of both the offices and R.A.N. flying personnel, if complete cover in respect of all service aviation is granted in consideration of the payment of the extra premiums, that is to say, the peace-time training and operational risk and any future war risk (whether arising out of flying or otherwise) will be covered.

It should be noted, however, that a new policy giving such cover and carrying extra premiums according to the enclosed scale, will not usually be issued by a Member office in future, if the life to be insured under the policy is under notice of posting to an area in which hostilities are taking place. Correspondingly, in respect of an existing policy which is currently subject to an aviation and/or war clause, the clause will not usually be waived in consideration for payment of extra premiums according to the enclosed scale, if the life insured is under such notice of posting. In either case, a member office may be prepared to quote a higher scale of extra premiums to cover the risk involved.

It will be appreciated that each member office must reserve the right to determine in each instance whether or not it will accept a proposal for a new policy, or to waive an aviation and/or war clause in respect of an existing policy, and also to determine the upper limit of the amount assured under the policy in respect of which full cover will be granted. It will be appreciated also that each member office must reserve the right to amend or withdraw at any time the enclosed scale of extra premiums, but such amendment or withdrawal would not affect policies then in force but only new policies subsequently to be issued.

The extensions of aviation cover secured by payment of extra premiums, referred to above, will not necessarily apply to such special additional benefits as those payable on accidental death or disablement."

3. The above information was provided on behalf of the undermentioned Member Offices of the Association—

Australian Mutual Provident Society.
The Australasian T. & G. Mutual Life Assurance Society Limited.
The Mutual Life and Citizens Assurance Company Limited.
The Colonial Mutual Life Assurance Society Limited.
The National Mutual Life Association of Australasia Limited.
The City Mutual Life Assurance Society Limited.
The Prudential Assurance Company Limited.
Australian Metropolitan Life Assurance Company Limited.
Australasian Catholic Assurance Company Limited.
The Australian Provincial Assurance Association Limited.
The Provident Life Assurance Company Limited.
The Equitable Probate and General Insurance Company Limited.
Norwich Union Insurance Society.

4. The scale agreed upon by the aforementioned member offices is as follows—

Rank or description at time of proposal.	*Age next birthday at time of proposal.*	*Annual extra premium per £100 sum assured initially at risk.*
		£ s. d.
Pilots—		
All ranks (including non-commissioned and trainees) up to Lieutenant inclusive	25 and under	1 10 0
	26 ,, ,,	1 8 0
	27 ,, ,,	1 6 0
	28 ,, ,,	1 4 0
	29 ,, ,,	1 2 0
	30 ,, ,,	1 0 0
	31 ,, ,,	0 18 0
	32 ,, ,,	0 16 0
	33 ,, ,,	0 14 0
	34 ,, ,,	0 12 0
	35 and over	0 10 0
Lieutenant-Commander and Commander	All ages	0 10 0
Higher ranks	All ages	0 5 0
Other Aircrew—		
All ranks (including non-commissioned and trainees) up to Lieutenant inclusive	30 and under	1 0 0
	31 ,, ,,	0 18 0
	32 ,, ,,	0 16 0
	33 ,, ,,	0 14 0
	34 ,, ,,	0 12 0
	35 and over	0 10 0
Lieutenant-Commander and Commander	All ages	0 10 0
Higher ranks	All ages	0 5 0

5. The above extra premiums are payable for the following periods—

Whole of life policies..	10 years.
Whole of life policies by limited premium payments —premium paying term 15 years or over	10 years.
Whole of life policies by limited premium payments —premium paying term less than 15 years	10 years extra premiums actuarially commuted and spread over half the actual premium term.
Endowment assurance policies—20 year term or greater	10 years.
Endowment assurance policies—less than 20 year term	Half the term.

6. The above extra premiums may, if premiums are payable more frequently than yearly, be increased by a small percentage, according to the practice of the member office.

7. It is again stressed that it is in the best interests of flying personnel to secure adequate life insurance cover. The above terms are considered reasonable observing that Supplementary Flying Pay at the rate of 1s. 6d. per diem (£27 7s. 6d. per annum) is payable where eligible personnel hold a suitable insurance policy in respect of which an annual premium of not less than that figure is payable.

8. All inquiries in this regard should be forwarded direct to the insurance company concerned.

(H.P.B. 271/201/3.)

UNCLASSIFIED.

172.—Married Quarters at Royal Naval House, Sydney.

Married Quarters have been completed at Royal Naval House, Sydney. This modern city accommodation can be used by Naval ratings, their wives and families. Recreation rooms, cafeteria, roof playground, laundry facilities and babies' cots are amongst the amenities available.

2. Charges will be 25s. a room if taken on a daily basis, and 21s. a room a day on a weekly basis. There is no charge for children, except 5s. a week for cots placed in the parent's room. Parents are responsible for the laundering of the linen on the children's cots.

3. Bookings should be made one week in advance to the Superintendent, Royal Naval House, Grosvenor Street, Sydney. This accommodation is specially designed for personnel who desire to have their families with them during leave periods. There is no restriction as to the length of time the Married Quarters may be occupied, but if there is a demand for the rooms one week's notice may be given to the occupiers.

4. This order will be reprinted for posting on notice boards.

(H.P.B. 108/51/9.)

UNCLASSIFIED.

173.—Passages by Sea, Air and Rail on Behalf of Admiralty—Monthly Reports.

Authorities issuing travel warrants for passages on behalf of Admiralty are to forward before the 10th of the following month to Navy Office a statement (marked "Attention Director Movements Division") showing the following details of such passages arranged during the month—

(*a*) Name
(*b*) Rank or rating and official number
(*c*) Journey from.....to.....
(*d*) Vessel or flight
(*e*) Date of departure
(*f*) Authority for arranging passage
(*g*) Cost of passage
(*h*) Cash advances made
(*i*) Value of any kit issued

2. Nil returns are not required.

(D.M.D. 187/51/2.)

UNCLASSIFIED.

174.—Passages to the United Kingdom for R.N. Loan and Exchange Personnel and their Dependants.

In order to assess shipping accommodation requirements to the United Kingdom, all Royal Naval personnel on loan to the R.A.N. are to forward to Navy Office, through their Commanding Officer, but not through administrative authorities, fifteen months prior to termination of loan service, details of their families, stating dates of birth and sex of children. Application for passages requiring special consideration are to be forwarded through the normal service channels.

2. Exchange personnel and Admiralty civilians are to take similar action.

3. In reporting the required details, officers and Admiralty civilians are to include their United Kingdom home address together with nearest railway station thereto.

(D.M.D. 187/51/23.)

UNCLASSIFIED.

175.—R.A.N.R. Officers—Examinations to Qualify for Command of Small Ships.

Reserve officers of the Seaman Specialization will be required for small ship commands in the event of mobilization.

2. Lieutenants of over two years' seniority may apply to be examined in any of the subjects of the syllabus, as laid down in the appendix to this order, during Annual Continuous Training. The passing of the examinations will not be a requirement for promotion to Lieutenant-Commander but possession of the qualification will be an advantage.

3. Examinations will be conducted in H.M.A. ships, or, with the prior approval of the Director of Naval Reserves, in H.M.A. establishments during periods of Annual Continuous Training. Captains of Reserve Training Establishments are to indicate an officer's readiness for any examination when applying for an appointment for Annual Continuous Training. Examinations will be carried out by appropriate specialist officers.

4. Mark assessments are not required, but the standard of pass is to be that which, in the opinion of the examining authority, is required by the Captain of one of H.M.A. ships of not more than 1,500 tons as shown in the Navy List.

5. The examination is not to be subdivided; each of the seven subjects must be taken in its entirety and if an officer fails in any part, the whole subject must be taken again.

6. A certificate is to be prepared and forwarded in duplicate to the Captain of the Reserve Training Establishment. The duplicate certificate is to be retained in the Reserve Training Establishment and the original forwarded to the Director of Naval Reserves.

7. The certificate is to be in the following form—

Reference Navy Order.....1960.

This is to certify that..... (name and rank of officer) has, after being employed on appropriate duties in H.M.A. ship under my command for a period of.....days, been examined in.....(Subject as listed) and has been..... (passed or failed).

.....

CAPTAIN.

8. Commanding Officers should arrange for reserve officers to be given as much experience as practicable in ship handling.

9. Officers who—

(*a*) obtain pass certificates in seven subjects enumerated in the appendix to this order, and

(*b*) hold a Modified (or Higher) Naval Watchkeeping Certificate, and

(*c*) are Lieutenants of six years' seniority (including probationary time), or of lesser seniority who are over 30 years of age, and

(*d*) have obtained a certificate from the Captain of a naval establishment, including Reserve Training Establishments, showing that they have been examined and found competent to handle ships or sea tenders at least the size of G.P.V.'s (90 tons, Navy List) will be shown in the Navy List as " (M.C.) ".

10. Recommendations for such a notation in the Navy List are to be made by Captains of Reserve Training Establishments when officers are qualified. Such recommendations are to include a certificate of competency as to ship handling, together with the dates on which pass certificates were obtained.

11. Navy Order 40 of 1958 is hereby cancelled.

APPENDIX.

GUNNERY.

A thorough knowledge is required of the capabilities and tactical handling of his weapons in battle, and of the responsibilities of his officers in gunnery matters.

2. A good knowledge is required of the duties carried out by his officers and men in connection with the operation and maintenance of the gunnery equipment, and he should appreciate the problems of his Gunnery Officer, and be an intelligent critic.

3. For this examination the degree of knowledge required by paragraph 2 of the operation and maintenance of equipment is to be confined to the armament of a " Type 15 " Frigate.

Command.

4. A thorough knowledge is required of—

(*a*) gunnery command and Tactical Control Orders;

(*b*) the responsibilities of the following officers in gunnery matters—

(i) The Executive Officer.
(ii) The Gunnery Officer.
(iii) The Officer of Quarters.
(iv) The Gunner.
(v) The Electrical Officer.

(*c*) the layout and purpose of the gun direction and control equipment and communications fitted for surface fire, bombardment, and A.A. fire, in the " Type 15 " Frigate.

5. A general knowledge is required of—

(*a*) the duties of the officers and men who operate the equipment detailed in paragraph 4 (*c*).

(*b*) the aim of the air defence organization of a force at sea.

(*c*) Force Gun Direction procedure.

(*d*) the Navy's responsibilities in aid of the civil power.

Gun Performance.

6. A thorough knowledge is required of the following as applied to a " Type 15 " Frigate—

(*a*) Expected performance of the mountings, guns and ammunition, together with the factors which affect this performance.

(*b*) The performance to be expected from the main armament in action.

7. An outline knowledge of the capabilities of other guns fitted in destroyers and frigates.

Gun Tactics.

8. A general knowledge is required of—

(*a*) the characteristics of probable enemy aircraft and ships, and expected types of attack.

(*b*) the effect of ship handling on gun accuracy.

(*c*) the effect avoiding action has on the chances of being hit by enemy missiles.

(*d*) screening dispositions and their relation to air defence.

(*e*) the type of shell fuzes most suited to various targets.

(*f*) when and how to use star shell and other illuminants.

(*g*) factors which affect the position and movements of a ship during bombardment.

Ship Training.

9. A general knowledge is required of—
   (*a*) the objects of the various types of firing, non-firing and gun direction practices and exercises, and their limitations;
   (*b*) safety restrictions in firing practices;
   (*c*) working up programmes and maintenance of efficiency after working up;
   (*d*) the importance and general interpretation of records and analyses.

Maintenance and Armament Stores.

10. A general knowledge is required of—
   (*a*) dockyards and other authorities responsible for the inspection and repair of gunnery equipment and the supply of armament stores;
   (*b*) the work entailed in maintaining the selected main armament;
   (*c*) the purpose and employment of seaman ratings qualified in gunnery;
   (*d*) the type of records kept by the Explosives Accountant Officer;
   (*e*) the regulations concerning the safety of explosives.

SIGNAL COMMUNICATIONS.

Radio.

11. An outline knowledge is required of—
   (*a*) propagation of wireless waves and systems of transmission, with particular reference to fleet radio-communication organization, radio policy, and considerations involved in breaking radio silence;
   (*b*) world-wide station and fleet radio-communication organization;
   (*c*) the capabilities and limitations of the radio-communication equipment fitted in small ships. (No technical knowledge is required);
   (*d*) radio warfare methods and fleet radio warfare organization;
   (*e*) how to use a voice wireless circuit. (A detailed knowledge of procedure is not required).

Signal Books and Visual Signalling.

12. An outline knowledge is required of—
   (*a*) the names and uses of the signal books.
   (*b*) Allied Naval Manœuvring Instructions. A good knowledge of Chapters 2–8. A fair knowledge of A/S operations and enemy reporting.
   (*c*) V/S Instructions. Executive signals.

13. Ability to read and send a plain language message by flashing, at a slow rate.

General.

14. A good general knowledge is required of—
   (*a*) initiating and drafting signals. Responsibilities of the originator, security classification, precedence, special instructions, expressing address and text, reference to classified messages. Physical security (B.R. U2D). Captain's responsibility.

15. An outline knowledge is required of—
   (*a*) the cryptographic system available to a small ship and the rules for the classification of messages. Re-encryptions;
   (*b*) the system for the training and advancement of Communications ratings. (Access to the appropriate publications is to be allowed in examinations).

16. A good general knowledge is required of—
   V/S instructions. Executive signals.

NAVIGATION.

17. The object of this examination is to ensure that officers are capable of carrying out navigation and pilotage duties in frigates and ocean minesweepers.

Astronomical Navigation and Chronometers.

18. (*a*) Obtain the compass error by time azimuth of any heavenly body.
   (*b*) Fix the ship's position by sights of all heavenly bodies including latitude by Polaris, using the Marc. St. Hilaire or the longitude method.
   (*c*) Find the time of rising and setting of sun and moon.
   (*d*) Care in use of watches, and when unfit to use.
   (*e*) Zone system of time-keeping.

Tides.

19. (*a*) Find the time and height of HW and LW at any port.
   (*b*) Find the height of the tide at any time for any place.
   (*c*) Use of Table of Tidal Levels.
   (*d*) Use of the tide tables. Table I for standard ports.
   (*e*) Rate and direction of tidal streams.

General Navigation and Pilotage.

20. (*a*) Pilotage in narrow waters; anchoring in a predetermined position. Navigation in fog.
   (*b*) Chernikeef and pitometer logs.
   (*c*) Echo-sounding equipment.
   (*d*) Practical use, limitations and operating of radar, Loran, and W/T equipment for fixing the position of a ship.
   (*e*) Chapters 1, 2, 4, 6 and 7 of "Remarks on Handling Ships". (Fair knowledge only.)
   (*f*) Water interaction between hulls of ships close aboard each other.
   (*g*) Handling a ship while engaged in towing.

Compass.

21. (*a*) Deviation, causes and changes.
   (*b*) Heeling error, causes; changes in H.E. and practical correction at sea.
   (*c*) D.G. coils and compass corrector coils, settings and methods of use.
   (*d*) The capabilities and limitations of the Admiralty Gyro Compass, mark 5.
   (*e*) Settings required for the mercury boxes, latitude rider, speed error and corrector.
   (*f*) The alarm system.

No details of other parts of the compass, or of electrical circuits.

Meteorology.

22. (*a*) Wind; Buys-Ballot's Law; permanent wind and pressure systems, monsoons.
   (*b*) Fronts; growth and movement of; weather associated with depressions and anti-cyclones.
   (*c*) Clouds; classification and significance.
   (*d*) Fog; sea fog, areas where prevalent.
   (*e*) Single observer forecasting.
   (*f*) Tropical revolving storm, rules for avoiding.
   (*g*) Fleet meteorological organization, and weather reporting from H.M.A. ships.

Fleet Work.

23. (*a*) Station-keeping by day, at night and in fog.
(*b*) Solution of changing stations and smoke laying problems.
(*c*) The use of the Battenberg.
(*d*) The principles of construction of searches and patrols.

Direction.

24. The object of this examination is to ensure that officers are fully conversant with A.I.O. and Warning Radar matters. Small ships are often dependent on the superior A.I.O. and Warning Radar equipment of larger vessels; it is necessary, therefore, that officers taking this examination should have a wide practical knowledge of these subjects.

Action Information Organization.

25. (*a*) General arrangements and layout in destroyers and escorts.
(*b*) The principles of manning A.I.O. and duties of the crew in destroyers and escorts.
(*c*) Internal communications.
(*d*) External communications and enemy reporting.
(*e*) The surface and underwater picture. The A.R.L. table.
(*f*) A.I.O. in convoy escorts and joint A/S warfare.
(*g*) The Air Picture.
(*h*) Use of I.F.F.
(*i*) Gun direction.
(*j*) Training.

Warning Radar.

26. (*a*) General description only of Radar including I.F.F. and beacons.
(*b*) Capabilities and limitations—maximum and minimum range; discrimination; shadow areas; effect of super-refraction; range and bearing accuracy; use of swept gain, short pulse and wide bandwidth.
(*c*) A general knowledge of the following sets, including their uses and performances:
Types 960, 277, 293 and 974. The signification of the suffixes (P, Q, &c.) should be known.
(*d*) Thorough knowledge of the operation of a P.P.I.
(*e*) General appreciation of jamming and its counter-measures.
(*f*) Knowledge of common Radar terms.
(*g*) States of readiness of personnel and sets.
(*h*) General appreciation of reporting and operating procedures.
(*i*) Radio hazards.

TORPEDO, ANTI-SUBMARINE.

Mine Warfare.

27. (*a*) General types of mines and assemblies and how used. The "Mixed Bag" minefield.
(*b*) Limitations of mining.
(*c*) Good knowledge of organization and equipment of demolition parties.
(*d*) Types of sweepers and their capabilities.
(*e*) Tactical and passive countermeasures in ships other than minesweepers.
(*f*) The safe distance to pass a minesweeper.
(*g*) Signals displayed by minesweepers with sweeps streamed.
(*h*) Use of degaussing and D.G. ranges.
(*i*) Shallow water diving. Equipment, training and safety precautions.

Anti-Submarine Warfare.

28. (*a*) Performance and capabilities of submarines.
(*b*) Types and capabilities of A/S equipments in A/S vessels.
(*c*) Good knowledge of control procedure.
(*d*) Good knowledge of conduct of an A/S action.
(*e*) Good knowledge of conduct of fleet screening and convoy escort work.
(*f*) Aircraft co-operation.
(*g*) Sea, air and anti-submarine exercises.
(*h*) Good knowledge of A.X.P.I.
(*i*) Subsidiary uses of Asdics.
(*j*) Effect of sea conditions on A/S operating. Use of Bathythermographs. Calibration ranges.
(*k*) Analysis, reports and returns.

A general knowledge of the above items is required except where otherwise indicated.

A.B.C.D.

Stability.

29. Fundamental principles. Centre of gravity and of buoyancy. Metacentre. Righting movement curves. Reserve of buoyancy. Dangers of free surface and topweight. Difference between list and loll and counter-measures for each e.g. preparing jettisoning bill.

Strength.

30. Strength of small ships. Arrangements of counter-measures (e.g. flooding of ballast) to reduce tendency for ship's back to break after heavy damage and flooding.

W/T Integrity.

31. Marking and control of openings. Care, maintenance and testing of water-tight compartments, doors, hatches, scuttles and valves. Principles of leak stopping and shoring. Reduction of speed to prevent spread of damage.

Flood Fighting.

32. Flood fighting arrangements, pumps, ejectors and systems as fitted in small ships. Portable pumps. Counter-flooding arrangements for correcting heel or trim.

Fire Fighting.

33. Types of first aid fire fighting equipment supplied to ships, their purpose and stowage. Typical layout of firemain and methods of supplying it in a small ship. Magazine and inflammable store flooding and spraying. Methods of introducing foam into and releasing steam in main machinery spaces, and steps which must be taken to prevent re-ignition. Types and use of breathing apparatus. Precautions when sending men into a compartment which may contain poisonous or explosive gases or where there is lack of oxygen. Types of gas to be expected after an explosion.

Machinery.

34. Requirements in four states of readiness, subdivision. Damage countermeasures to include effect on running machinery of damaged furnace fuel oil tanks or feed tanks, of heel and trim and of flooded engine rooms and boiler rooms. Effect of trailing turbines. Emergency valves and fittings and where operable. Alternative steering arrangements. Communications between command and engine room.

Electricity.

35. High power. Supply and distribution in small ship. Lower power. Why fitted. Motor-generated and battery supplies. Alternative and emergency arrangements for essential light and power, running emergency leads. Requirements of electrical machinery in four states of readiness. The internal communication system of a small ship. Maintenance and use of portable first aid lighting equipment.

A.B.C. Aspects.

36. War gases. Their effects and characteristics, personal protection, cleansing and decontamination. Atomic explosions—their characteristics and hazards arising from the effects of blast, underwater shock, heat, light and nuclear radiations, personal protection, cleansing and decontamination. Biological warfare.

Organization.

37. The four states of readiness and when used—responsibilities of the Captain and/or senior officer of squadron or group in ordering states to be set. Principles of dispersal of personnel. Duties of A.B.C.D. Officer. Damage Control Engineer Officer and Monitoring Officer. Collective protection—policy, methods and organization. Closing down trials.

SUPPLY DUTIES.

Victualling.

38. (*a*) Period to which ship should be stored;
(*b*) Sources of supply and preparation of demands for both service and non-service provisions;
(*c*) Stowage of dry provisions and refrigerated stocks;
(*d*) Zonal rates of victualling allowance;
(*e*) Victualling and check books;
(*f*) Repayment issue and accounts;
(*g*) Monthly accounts;
(*h*) Principles governing preparation of messing statements—and the source of the figures shown thereon.
(*i*) General messing and outline of system of accounting;
(*j*) Payment for supplies from contractor.

Cash and Loan Clothing.

39. Restrictions on issues. The procedure for obtaining other slop issues, i.e., from depots or affiliated ships, together with notes on rationing.

Mess Traps and Utensils.

40. Where the scale allowances are specified. Distinction between permanent, starred and consumable items. Inventory system of accounting for mess traps, &c. Principles of replacement of various categories of mess traps and utensils from Victualling Yards and reserve stocks.

Naval Stores.

41. (*a*) Responsibility of Captain and Naval Storekeeping Officer (S);
(*b*) What constitutes ship's outfit of Naval Stores;
(*c*) Period for which ship is stocked with consumable stores;
(*d*) How supplies of stores are obtained;
(*e*) How stores are returned to the yard;
(*f*) Procedure for internal issues and returns;
(*g*) Permanent and temporary loan procedure;
(*h*) Valuation;
(*i*) Naval Store Account;
(*j*) Stocktaking rules;
(*k*) Losses by accident and neglect;
(*l*) Stowage and preservation of stores—general principles and where to find detail.

Cash Duties.

42. *Cash*—custody, obtaining supplies, counting of. Contingent Accounts—Tenders payments—Foreign currencies—Non-public funds—Audits—Q.R. and A.I.—B.R. 1950.

General.

43. A general knowledge of—
(*a*) Small Ship's Office Manual.
(*b*) Frequency and methods of mustering of all types of stores.
(*c*) Boards of Survey and casual condemnations; when required and on what items.
(*d*) Procedure for dealing with losses. Compensation for losses of clothing; Key routines; security of valuable and attractive stores.

ADMINISTRATION—DISCIPLINE—ADVANCEMENTS.

44. General knowledge of—
(*a*) Chapter 31, Q.R. and A.I. (Instructions to Captains);
(*b*) Summary punishments;
(*c*) Framing charges;
(*d*) Punishment warrants;
(*e*) Service certificates;
(*f*) Conduct and History Sheets;
(*g*) Divisional Officers' Records;
(*h*) Recommendations for advancement;
(*i*) Training and advancement of junior ratings;
(*j*) Training recommendations and advancement of specialist ratings;
(*k*) Welfare—organization—rules for granting compassionate leave at sea and ashore;
(*l*) Customs regulations, trafficking and smuggling.

45. With reference to Supply Duties and Administration, no attempt should be made to memorize the regulations. A good working knowledge of the regulations and where to refer to details is what is required.

(D.N.R. 311/52/11.)

(*Navy Order* 40 *of* 1958.)

UNCLASSIFIED.

176.—Reserves—Training of R.A.N.R. (Seagoing) Officers, R.A.N.R., Officers and Ratings.

The following information relates to the training of R.A.N.R. (Seagoing) officers and R.A.N.R. officers and ratings.

2. Training of reserve officers and men may be classed under two headings—
(*a*) Practical training at sea;
(*b*) Courses in H.M.A. schools or training establishments.

3. Syllabuses of training are laid down in appropriate training manuals and current memoranda issued by training authorities.

4. It is particularly desirable that the fullest use is made of the very limited sea time available to reserve personnel. A large proportion of officers and men enrolled in the reserve forces has seen considerable service, with or without a sound basic training. The appropriation of reserves is intended to—

(*a*) refresh and develop their previous naval and specialist knowledge to enable them to carry out duties as members of a ship's organization. Officers, Chief and Petty Officers and Leading Ratings should be given as much responsibility as possible and opportunities of taking charge. It is most desirable that Reservists should feel, during their short periods of training, that they are useful members of the ships organization. It is essential that they should be given responsibility and that they be shown that trust is resposed in them.

(*b*) enable members to acquire knowledge of new gear which they may be required to operate if mobilized again.

(*c*) enable members to acquire knowledge which will assist them to advance substantively or technically in their Branch.

5. In the case of junior officers and ratings, as much of the period of training as possible should be spent under definite instruction. Although a necessary part of a seaman's training, part-of-ship work, such as scrubbing and chipping, should be reduced to a minimum for Reservists under training. In the short periods of their availability, emphasis should be placed upon practical training and the technical developments that have taken place in the last few years. A proper appreciation of ship safety is necessary for all persons, whatever their rank or rating.

Officers—R.A.N.R.(S), R.A.N.R. and R.A.N.V.R.

6. Whenever an officer in the above categories undergoes a period of training or a course lasting five days or more, a form A.S. 206 is to be completed, and forwarded to the Commanding Officer of the officer's Reserve Training Establishment (and in the case of R.A.N.R. (S) officers, to Navy Office).

7. While it is appreciated that, in so short a period, an accurate assessment of an officer cannot be made, it is important that the particular form of training he has undergone, and the progress he has made, should be recorded. The expressions " Under Training ", " Time Only " and " Insufficient Knowledge " should therefore be avoided.

8. To comply with this order, the officer under whose direction the individual served should make out the form, the Captain remarking on the individual as the senior officer.

Ratings.

9. The welfare of reservists under training is most important, and the selection of experienced divisional officers to take an active and personal interest in individuals is most desirable.

10. It is necessary that reserve ratings be given as much opportunity as possible during their training to develop qualities of leadership and organization, as well as to maintain and improve their technical efficiency. Their instruction and duties must be arranged with these objects in view.

11. After any period of training or course lasting five days or more, form R.A.N.R. 10x, y or z, and an appropriate history sheet (which should be prepared by Captains of Reserve Training Establishments and accompany the ratings proceedings on training) should be completed and returned to the Commanding Officer of the rating's Reserve Training Establishment with the man's Service Certificate. Forms R.A.N.R. 10x, y or z, should then, in turn, be forwarded to the Director of Naval Reserves and will be used as a guide in mobilization appropriations.

12. In completing form R.A.N.R. 10, prominence should be given to the man's capabilities displayed in performing the training undertaken, rather than to general qualities, character, &c. More than one line should be used for each individual, if necessary. Great importance is attached to a considered completion of form R.A.N.R. 10, and the expression " Under Training " or " Insufficient Knowledge " giving no guide as to a man's possibilities, should be avoided.

13. The reduced scales of kit allowed to Reservists for peacetime training, may, in certain cases, prevent them from complying with a ship's orders regarding dress, and care is to be taken that Reservists are not penalized as a consequence.

14. It is essential, also, in order to preserve the morale of the reserve forces, that payment be made on completion of training. Captains are to ensure that the relevant documents are completed and forwarded in ample time to enable ratings to be paid by the paying officer at the place of discharge from any particular period of training.

15. Navy Order 41 of 1958 is hereby cancelled.

(D.N.R. 311/52/10.)

(*Navy Order* 41 *of* 1958.)

UNCLASSIFIED.

177.—Training of Flying Personnel in the Daily Servicing of Aircraft, Aircraft Radio and Navigational Equipment.

The opportunity exists for pilots and observers to obtain the Q.S. qualification in aircraft servicing in the Airframe, Engine, Radio, Electrical and Asdic specializations under the conditions set out below.

2. The standard required is as follows—

(*a*) *Pilots and Officers holding the* (*F*) *qualifications*—

(i) The ability to carry out efficiently the Primary and Before Flight Inspections in accordance with the current instructions and the Volume 5, Part 2 (Supplement) of the relevant air publication when available.

(ii) The Q.S. qualification in those types of communication and homing radio, which are normally controlled from the pilot's cockpit. This does not include radar or special radio equipment.

Note: The intention is that pilots will be able to carry out a complete daily inspection of single-seat aircraft when special equipment, involving inspections by appropriate tradesmen, need not be used. Similarly, in the case of multi-seat aircraft, the pilot, together with an observer, will be able to carry out the complete daily inspection, except for special equipment.

(*b*) *Observers.*—The Q.S. qualification in radio and electrically operated navigational equipment in accordance with the basic inspection schedule.

Note: No restriction will be placed upon the equipment in which observers may become qualified.

3. The following are the objectives—

(*a*) To raise the standard of technical knowledge among aircrew.

(*b*) To give aircrew a better insight into the work of maintenance personnel.

(*c*) To foster closer relationship between aircrew and maintenance personnel.

(*d*) To improve the ability of aircrew to carry out Primary and Before Flight Inspections of their aircraft in times of emergency.

4. The essential requirements of the scheme are—

(*a*) Technical training during aircrew training.

(*b*) Improvements of technical knowledge and ability in first-line servicing so as to reach the standard in defined and progressive steps.

(*c*) Progression of the standard achieved.

(*d*) Maintenance of records of qualifications of aircrew in first-line servicing.

5. Requirement (*a*) in paragraph 4, is at present met only by aircrew who are qualifying or have qualified as pilots. Consideration is being given to the amendment of the syllabuses of pilots and observers to provide an improved basis of technical knowledge in the light of the standard to be obtained.

6. For (A), (E), (L), and (O) specializations, the requirement (*b*) in paragraph 4 is to be met by pilots in the following stages—

(*a*) (i) By improvement of their technical knowledge and ability so as to be capable of carrying out the Primary and Before Flight Inspections of one type of Naval aircraft in either (A) or (E) specializations in accordance with the inspection schedules.

(ii) By satisfying an examination board as to this capability and by being granted by the board a qualification " Q.S.(A) " or " Q.S.(E) " for one type of aircraft. The examination board is to consist of an Air Engineer officer not below the rank of Lieutenant-Commander and an aircrew officer nominated by the Commander (Air) of the ship or station concerned.

(*b*) (i) By further improvement of their technical knowledge and ability so as to be capable of carrying out the Primary and Before Flight Inspections of one type of Naval aircraft in both (A) and (E) specializations in accordance with the inspection schedules.

(ii) By satisfying an examination board, composed as in (*a*) (ii), of this capability and being granted by the board a qualification " Q.S.(A.E.) " for one type of aircraft.

(*c*) (i) By continued improvement in their technical knowledge and ability so as to be capable of carrying out Primary and Before Flight Inspections of one type of Naval aircraft in (A), (E), (L) and (O) specializations in accordance with current instructions and the Volume 5, Part 2 (Supplement) of the relevant air publication when available.

(ii) By satisfying an examination board of this capability and being granted by the board a qualification " Q.S." for one type of aircraft. In this case the board is to be composed as in (*a*) (ii), with the addition of the Air Electrical Officer of the ship or station concerned or a representative nominated by him, not below the rank of Lieutenant.

7. For radio and navigational equipment the requirement (*b*) in paragraph 4 is to be met by pilots and observers in the following stages—

(*a*) By familiarization with the operation and inspection procedure of the radio and/or navigational equipment fitted in a type of aircraft of particular mark and role, so as to be capable of carrying out the Primary and Before Flight Inspections in accordance with the inspection schedule.

(*b*) By satisfying an examination board as to this capability, and by being granted by the board a qualification " Q.S.(R) ", and " Q.S.(N) ", or " Q.S.(R.N.) " as applicable. The examination board is to consist of an electrical officer not below the rank of Lieutenant who has completed the Air Radio and Air Electrical courses as applicable, and an aircrew officer nominated by the Commander (Air) of the ship or station concerned. It is emphasized that the examination is to be so designed that candidates qualify separately in the equipment, and the inspection procedure for the aircraft carrying that equipment. The examination should, therefore, be divided into three separate parts, as follows—

(i) An oral examination dealing with each radio installation and/or navigational equipment fitted in the aircraft. The candidate must have an accurate appreciation of the uses and limitations of the equipment on which he is being examined. He must know how to carry out functional ground tests not requiring full supporting test equipment, and be competent to inspect it for security.

(ii) An oral examination dealing with various general aspects of aircraft maintenance procedure and organization. (This is required only for the initial qualification and for record purposes is to be regarded as part of (i) above.)

(iii) A practical examination in carrying out inspections on the actual aircraft. During this test, the examiners should pay particular attention to the candidate's knowledge of the equipment's controls and switching facilities, the positioning of the radio units, and the use of radio test equipment and portable ground power supply equipment.

8. Since the examinations referred to in paragraphs 6 and 7, particularly that outlined in paragraph 7 (*b*) (i), must of necessity be thorough, to save unnecessary interference with the duties of the examining officers it should be impressed upon prospective candidates that they should not request a " Q.S." board unless they consider themselves to have reached a reasonably high standard. Furthermore, with reference to paragraph 7, although aircrew are to be qualified in equipment and aircraft separately, **initial qualification is always to be by an examination covering a particular aircraft and its associated radio and/or navigational equipment.**

9. Requirement (*c*) in paragraph 4 is to be met by—

(*a*) Flying personnel holding qualifications "Q.S.(A)", "Q.S.(E)", "Q.S.(A.E.)", "Q.S.", "Q.S.(R)", "Q.S.(N)", or "Q.S.(R.N.)" carrying out, as opportunity arises, the Primary and Before Flight Inspections of aircraft as appropriate to the type of qualification held and by signing form A.700 for this work as required by the instructions for use of the form. **In doing so they are not to rectify any defects found or suspected, but are required to record such defects in the Change of Serviceability Log of the form A.700.**

(*b*) The process of examination and award as detailed in paragraph 6 (*a*), (*b*) and (*c*), being repeated at each stage for other types of aircraft.

(*c*) The process of qualifying in further types of radio and navigational equipment and in other types of aircraft in the following manner—

(i) Having been initially qualified in a particular aircraft fitted with certain equipment, aircrew may be examined and awarded the "Q.S." qualification in further equipments individually. These examinations may be held by an electrical officer, of not less than lieutenant's rank and suitably qualified, but should otherwise conform to the requirements of paragraph 7 (*b*) (i). Aircrew so qualified in additional equipments are not, however, to carry out inspection of those equipments until they have further qualified themselves in the inspection procedure for such equipment where fitted in aircraft. This latter examination need not be taken concurrently with the former, thus providing an opportunity for aircrew to establish their ability where equipment but not the aircraft is available.

(ii) Aircrew may be separately examined and awarded the "Q.S." qualification in other types of aircraft, provided that they have already qualified in the radio and/or navigational equipment normally fitted in those aircraft. Aircrew may also be separately qualified in other versions of a particular aircraft type in which a qualification is already held, provided that the "Q.S." qualification has already been obtained in the additional equipment involved. In these cases, only knowledge of the inspection procedure for the additional equipment is to be tested. These examinations need only be brief and may be held by a single electrical officer as in (i) above. They should otherwise conform to the requirements of paragraph 7 (*b*) (ii).

10. Requirement (*d*) in paragraph 4 is to be met as follows—

(*a*) *Personal Record.* Certificates, as appropriate, prepared in the form shown in the appendixes to this order, are to be pasted inside the flying log book of all aircrew. This form is to be completed and signed by all members of the examining board on each occasion of a candidate passing an examination in accordance with paragraphs 6, 7 and 9 (*c*).

(*b*) *Ship or Station Record.* The Squadron Commander is to maintain a record for each pilot, observer, rating aircrew borne showing—

(i) Type of qualification held.

(ii) Type of aircraft or equipment for which each qualification was awarded.

(iii) Date of each award.

11. It is not intended to make special provision for technical training other than when undergoing aircrew training, *vide* paragraph 5. Aircrew must use their own initiative to improve their technical knowledge and ability and are to be given, and should take, every opportunity to do so, without detriment to the maintenance task or their flying duties. The following means are particularly recommended—

(*a*) Study of appropriate aircraft and equipment technical publications.

(*b*) Study of general books dealing with radio theory and servicing practice.

(*c*) Study and appreciation of the work of first-line servicing.

(*d*) Use of any local instructional facilities and attendance at "Q.S." classes.

(*e*) Practical experience with qualified maintenance personnel under direct supervision of experienced supervisory ratings. (In so doing they are not permitted to sign form A.700.)

12. Navy Order 187 of 1958 is hereby cancelled.

Appendix A.

CERTIFICATE OF QUALIFICATIONS IN FIRST-LINE SERVICING OF AIRCRAFT.

Certified that.....has been examined and passed as competent to carry out Primary and Before Flight Inspections in accordance with the qualifications recorded below—

Unit.	*Aircraft Type.*	*Qualifications.*	*Date of Award.*	*Signature of Examining Officers.*

Appendix B.

CERTIFICATE OF QUALIFICATIONS IN FIRST-LINE SERVICING OF RADIO, ELECTRICAL, NAVIGATIONAL AND ASDIC EQUIPMENT (WITH EXAMPLE ENTRY).

Certified that.....has been examined and passed competent to carry our Primary and Before Flight Inspections in accordance with the qualifications recorded below—

(*a*) *Equipment.*

Unit.	*Type of Radio Equipment.*	*Type of Nav. Equipment.*	*Date of Award.*	*Signature of Examining Officers.*
X.Sqd. ..	1. ARI 5491	(A) G.M.4F	12.9.54	Lt.
	ARI 5489	Compass		
	2. ARI 18049			
	3. Z.B.X.	G.M.4B		
	4. AN/APX–6 ..	Compass		
				Lt.
Y.Sqd. ..	5. AYF	(B) ADRIS ..	12.7.55	
	6. A.I.17			
	7. A.1961			

(*b*) *Aircraft.*

Unit.	*Aircraft Type Mark and Role.*	*Equipment fitted (refer to (a) above).*	*Date of Award.*	*Signature of Examining Officers.*
X.Sqd. ..	Gannet A.S.1 ..	1, 2, 3, 4, 5, 7, A.B.	12.9.54	Lt.
Y.Sqd. ..	Sea Venom, Mk. 53..	1, 2, 3, 5, 6 and 7 A.B.	12.7.55	Lt.

(D.A.W.O.T. 311/4/35).

(*Navy Order* 187 *of* 1958.)

UNCLASSIFIED.

178.—Uniform—Flying Badges—Award, Wearing and Forfeiture.

The initial eligibility for a pilot's, observer's or aircrewman's badge will be on a provisional basis and the badge will not be considered to have been fully earned until the holder has been appointed to, and has actually undertaken, productive duties in a qualified capacity in a front line, training or miscellaneous unit.

2. Naval pilots under training will be awarded the flying badge on successful completion of the applied section of the Royal Australian Air Force Standard Syllabus for Pilot Training.

3. Naval Observers will be awarded the observer's flying badge on successful completion of training at the Royal Australian Naval Observer's School or R.N. Observer's School.

4. Aircrewmen will be awarded the aircrewman's flying badge on successful completion of the aircrewman's course.

5. Award of pilot's observer's or aircrewman's flying badges will be subject to the reservation in paragraph 1.

6. In addition to pilots and observers, the pilot's and observer's badge is to be worn, on production of evidence of the award, by all officers on the active or retired lists who have at any time qualified as pilots or observers in the Royal Australian Navy, or who have qualified as pilots or observers in another service, provided that the award of the badge has not been withdrawn at any time.

7. Normally the holder of an aircrew badge will continue to wear the badge after he has ceased to carry out flying duties. The aircrew badge may, however, be withdrawn if the holder has—

(*a*) been removed permanently from flying duties for disciplinary or other reasons within his own control;

(*b*) failed to complete his full qualifying aircrew training;

(*c*) failed to undertake successfully productive flying duties as defined in paragraph 1.

8. The withdrawal of the badge will be subject to Naval Board approval in each case.

9. Regulations for the method of wearing the badges are shown in the Appendix to the Navy List (R.N.) Uniform Regulations, Naval Uniforms (Officers) Section 43 and (Ratings) Section V.

10. Navy Order 208 of 1958 is hereby cancelled.

(D.A.W.O.T. 47/8/10.)

(*Navy Order* 208 *of* 1958.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

179.—Motor Generators—Newton Speed Governors for—Adjustment Procedure.

Difficulties have been experienced on D.C./A.C. motor generators fitted with speed governors of Messrs. Newton Bros. (Derby) Ltd. manufacture. In many cases the governor has been found incapable of meeting the frequency regulation requirements of the gunnery or navigation service on which it is used. Action is being taken to develop a different type of governor to replace the Newton governors now in service.

2. In order to get the best service from the existing Newton governors the setting procedure detailed herein should be followed in cases where present performance is unsatisfactory. Examination of the motor field circuit will show that two resistances are connected in series with the field coils. These two resistances may be in the form of a single tapped resistor. One resistance will be connected across the contacts of the governor, the other will be permanently in series with the motor field. The setting of these resistances is important and should be obtained as follows—

(*a*) (i) Check that the correct governor weights are fitted. The limits of the speed range covered by a particular set of weights are marked on the weights.
(ii) Check that the contacts are in reasonable order. Replace if necessary.

(*b*) (i) Run the machine until it is hot.
(ii) Turn out the fixed contact of the governor until it is completely clear of the rotating contact.
(iii) Short-circuit the governor contacts by a length of wire across the terminals.
(iv) Set the input voltage at 5 per cent. above normal voltage.
(v) Run the machine on no-load.
(vi) By adjustment of the resistance which is permanently in series with the motor field set the machine speed to 5 per cent. lower than the rated speed.

(*c*) (i) Allow the machine to cool.
(ii) Remove the short-circuit from the governor contacts.
(iii) Leave the fixed contact turned completely clear of the rotating contact.
(iv) Set the input voltage at 5 per cent. below normal voltage.
(v) Run the machine on full load.
(vi) By adjustment of the resistance which can be shorted by the governor contacts set the machine speed at 5 per cent. above the rated speed.

(*d*) Set the machine at the rated frequency on normal supply voltage at full load by adjustment of the fixed contact in the normal manner.

3. It is anticipated that the speed will gradually rise with time and the speed of the governed machine should be checked and corrected by adjustment of the governor at such periods as are found necessary by experience. The speed of the machine should be measured by tachometer, not frequency meter, as change in waveform of the output voltage can cause a considerable change in the meter reading.

4. For information it should be noted that spares for Newton speed governors are stored under the following references—

Governor with speed range 2100/3500 *revs/min.*

Brush and spring	Admiralty Pattern F2/59214
Brush holder complete	Admiralty Pattern 2021
Weights, contact and spring assembly ..	Admiralty Pattern F3/2976
Fixed contact	Admiralty Pattern 2022
Rotating contact	Admiralty Pattern 2975.

D.E.E. 1108/52/57.)

UNCLASSIFIED.

180.—Maintenance—Copper-Nickel-Iron—Sea Water Systems.

(*A.F.O.* 2393/1959.)

Introduction. Copper-nickel-iron alloy was adopted in 1948 as the most suitable material for salt water services in H.M. ships, after considerable investigation had been carried out on behalf of the Admiralty by the British Non-Ferrous Metals Research Association. This material has marked advantages over materials formerly used, viz., galvanized steel and copper, notably—

(*a*) Improved resistance to impingement attack.
(*b*) Reduction in maintenance due to corrosion pieces not being required at junctions with gunmetal fittings.
(*c*) Much saving in weight compared with galvanized steel piping.
(*d*) Better anti-fouling properties than galvanized steel piping.

2. *Reports of Defects in Systems.*—In view of the reports from sea concerning the incidence of defects in copper-nickel-iron sea water systems, an investigation has been made and the majority of the defects reported may be grouped as follows—

(*a*) Those occurring in way of flange joints.
(*b*) Those occurring in way of " Tee " joints.
(*c*) Those occurring in way of sharp bends.
(*d*) Those occurring in piping adjacent to valves and pumps.
(*e*) Those occurring in valves.
(*f*) Those occurring in way of orifice plates.
(*g*) Those due to the use of dissimilar metals, e.g., mild steel fittings in copper-nickel-iron systems.

3. *Basic Cause of Defects Arising.* Copper-nickel-iron, like many other materials, is subject to erosion in positions where the water flow is very turbulent. The cause of this erosion and the subsequent failure of the material, in the majority of cases found in reports from sea, is due to what is known as " impingement attack ". This form of attack is associated with rapidly moving streams of water with entrained air bubbles which mechanically strip the protective oxide film from the metal. The effect is sometimes accelerated by the presence of a more noble metal, e.g,. gunmetal in a copper piping system which also tends to strip the oxide film by de-polarization.

4. The materials in current use in sea water systems are copper-nickel-iron piping and gunmetal fittings. The copper-nickel-iron piping is resistant to impingement attack at water speeds up to 14-ft. per second; gunmetal fittings are resistant at water speeds up to 20-ft. per second. To ensure that these figures are not exceeded systems are designed to have a maximum water speed of 10-ft. per second. For all practical purposes copper-nickel-iron and gunmetal are equi-potential so that the de-polarizing effect previously mentioned will play only a minor role in assisting impingement attack.

5. In a perfectly streamlined system no impingement attack should take place. This ideal system, however, can never be achieved and the remedies must be, firstly to approach the ideal by good design, manufacture and installation, secondly, thicker where defects arise, to improve the streamlined flow of the water, and, thirdly, to use or more resistant materials where streamlining cannot be effectively carried out.

6. *Factors Leading to Failure by Impingement Attack.* Having established that the cause of the defects was principally impingement attack, the reports received were examined to see what conditions in existing piping contributed to setting up the necessary turbulent conditions.

7. Referring to the grouping of defects in paragraph 2 above, the contributory causes were found to be as follows—

(*a*) *Those occurring in way of flanged joints.* Caused by badly mated flanges allowing a step in the adjacent bores, by pipes not finishing flush with the flange face, and by protruding jointing material.

(*b*) *Those occurring in way of tee-pieces.* Tee-pieces impose severe directional changes on the water stream and thereby set up the damaging turbulent conditions. This is often aggravated by the use of such types of tee-pieces as the " Scotch " (or cup socket) type built up from lengths of piping. In this type of tee-piece failure also occurs because the brazing metal is exposed to the sea water, giving rise to the formation of an electrolytic cell.

(*c*) *Those occurring in way of bends.* Defects are more prevalent with sharper bends due to the formation of stronger turbulent conditions of flow.

(*d*) *Those occurring in way of valves, pumps, &c.* Particularly turbulent conditions with high local velocities occur in piping downstream of valves and these are accentuated by the comparatively high velocities on the downstream side of reducing valves and pumps. This effect is further aggravated by sharp changes in direction at bends or tee-pieces adjacent to the downstream side of reducing valves and pumps.

(*e*) *Those occurring in valves.* Valves of the screw-down type give very disturbed flow and are therefore not particularly suitable for use in seawater systems unless the general water speeds are low. Where high water speeds are encountered erosion of valve seats and disks is experienced. Except for sea valves, consideration is being given to fitting soft seated aluminium bronze disks in salt water systems.

(*f*) *Those occurring in way of orifice plates.* Orifice plates create turbulence which results in erosion of the plates themselves and also of adjacent pipes and fittings.

8. *Remedial Measures to be taken.* In order to assist in reducing the incidence of defects in copper-nickel-iron sea-water systems, a " Statement of Instructions ", embodying existing instructions, has been made for the benefit of relevant authorities in the maintenance of such systems and is contained in the Appendix to this order.

9. These instructions will reduce the liability to defects of piping systems but it must be appreciated that all danger points cannot, in practice, be obviated and it is only after a new system has been in service for some time that portions of the system which are liable to trouble can be positively identified and the corrective measures in the Appendix can be taken.

Note: Pending the issue of a Specification of Requirements similar measures are to be adopted when designing and installing copper-nickel-iron systems in New Construction vessels.

10. Admiralty has advised that B.R. 1988—Engineering Maintenance Instructions will be amended accordingly.

Appendix.

Copper-Nickel-Iron Sea Water Systems.

Maintenance Instructions.

General. Erosion is to be expected in positions where the water flow is turbulent. This may arise from various causes and it is only after a new system has been in service for some time that the portions liable to trouble can be positively identified and corrective measures taken. Experience has shown that the majority of defects mentioned in the subsequent paragraphs are the result of lack of attention in design, manufacture and installation, of the component parts of the systems. Provided sufficient attention to detail is given when making replacements, the incidence of defects is considerably reduced after the initial repairs have been made.

2. *Remedial Action to be taken.* (*a*) *Defects occurring in way of Flanged Joints.*—The following requirements are to be observed when effecting repairs to defects occurring in way of flanged joints—

(i) Pipe flanges are to be machined flush with the pipe to avoid steps on the joint faces. Pipe flanges must not be unduly thinned.

(ii) Alignment is to be checked to ensure that there are no steps between adjacent pipe bores. Any step that exists between bores of mating pipe, valve and fitting flanges is to be machined away at an angle not greater than 10° to the axis of the pipe.

(iii) The joint should be $\frac{1}{32}$-in. C.A.F. and should be cut to the bore of the pipe $-0+\frac{1}{64}$-in. on the diameter, so that the joint does *not* protrude into the bore of the pipe.

(*b*) *Defects occurring in way of Tee Pieces.* Branch pipes are generally to be connected to the main leads by gunmetal tee or lateral pieces. Where flow is in one direction only, " angle " or " swept " tees are to be fitted.

Where defects can be attributed to direct brazing the circumstances should be reported to the Admiralty. If direct brazing is subsequently permitted the " saddle branch " joint should be used. The " Scotch " (cup socket) joint should not be used.

(*c*) *Defects occurring in way of Pipe Bends.* Bends in pipes should be of the largest practicable radius and not less than four times the pipe bore. Where bends of smaller radius than this must be fitted, these should be in the form of gunmetal castings. Special attention in this respect is to be given in way of pump discharges, or immediately downstream of valves.

(*d*) *Defects occurring in Valves.* Where defects occur due to erosion of valve disks and seats the replace parts are to be renewed in aluminium bronze where practicable. Where the valve body design does not permit the use of a screwed in aluminium bronze seat consideration should be given to fitting a complete new valve of an approved type with aluminium bronze valve disks and seats.

(*e*) *Defects occurring in way of Orifice Plates.* Where replacements of eroded orifice plates are considered necessary these are to be made in aluminium bronze.

Where troubles occur in pipes and fittings in way of orifice plates consideration is to be given to replacing the orifice plates by valves of glandless rubber diaphragm design of approved type capable of being locked in any desired position.

(*f*) *Defects occurring in way of dissimilar metals.* Where fittings of totally dissimilar metals to copper-nickel-iron are fitted, e.g., steel, they are to be replaced by gunmetal, aluminium bronze or other approved non-ferrous fittings.

(*g*) *General Requirements.* (i) *Erosion Pieces.* Erosion pieces consisting of 12-in. lengths of copper-nickel-iron pipe, 2 gauges thicker than the normal piping are to be fitted on the downstream side of valves where excessive turbulence is experienced (reducing valves and ejector valves to bathroom ejectors are typical cases where erosion troubles occur). The bores of the erosion pieces are to be machined on a slight taper (10°) to match the bores of mating pipes or fittings.

(ii) *Bonding Strips.* Efficient electrical contact is to be made between mating flanges by bonding strips.

(iii) *Fasteners.* All nuts and bolts connecting flanges are to be of aluminium bronze. Phosphor bronze may be used as an alternative.

3. *Persistent Defects.* Where the remedial measures prove ineffective the defect is to be reported to Admiralty. The possible causes of failure should also be reported.

Notes.

(1) The British Non-Ferrous Metals Research Association have supplied the following information on the behaviour of copper-nickel-iron in order to amplify the foregoing instructions—

" Hot-shortness " due to the presence of lead impurities occurs when the metal is held and worked in the range 400° C. to 700° C. and is particularly marked where the alloy has been previously heated to 750° C. or higher. Ductility, however, is restored at temperatures of 750° C. or above. These findings have been confirmed by the Association who have also shown that copper-nickel-iron alloy containing about 0.003 per cent. lead can be made relatively free from hot-shortness by hot working in the later stages of manufacture at temperatures in the range of 650° C. and below and ensuring, in subsequent copper smithing operations, that hot working is effective over a similar temperature range. The Association's tests indicate that the safe *maximum* temperature for such a procedure is 700° C.

These observations are consistent with the view that at 750° C. and higher temperatures the lead is in solid solution, is dispersed through the grains and that re-heating this solution at lower temperatures, e.g. 600° C. to 650° C., causes segregation of the lead to the grain boundaries and resultant inter-crystalline weakness. The beneficial effect of hot rolling at 600° C. to 650° C. must then be ascribed to dispersal of the lead from the grain boundaries, presumably by spheroidization of the lead particles and movement of the grain boundaries away from them.

(2) It has been decided that brazing is to be carried out with silver solder, not because the use of brazing spelter involves higher temperatures but because, in salt water systems, it is extremely difficult to ensure that the brazing will not come into contact with the sea water. Brazing spelter very readily dezincifies in contact with sea water.

It is worth noting that, in the past, the effect of heat in lowering the corrosion resistance of copper-nickel-iron has been given a greatly exaggerated importance.

(D.N.C. 1211/51/88.)

RESTRICTED.

181.—Replenishment at Sea—6-in. Fuelling Equipment, Shut-off Valve, Pattern 6054 for Hose-Damage to Pump and Pipe Lines.

(*A.F.O.* 2973/1959.)

Damage to the relief valves and pipe lines of Replenishment at Sea tankers which has been occurring recently is attributed to the incorrect use of the pattern 6054 shut-off valve.

2. The valve was designed as a means of preventing spillage of oil in the event of an emergency breakaway involving the breaking of the pattern 6051 coupling. There is no authority for the use of the valve as a means of stopping the flow of oil quickly under normal conditions, although there is no objection to its being used, *after the tanker has ceased pumping*, to avoid the necessity of draining hoses.

3. Ships while being refuelled are not to shut off against the pumps of Replenishment at Sea tankers except in an emergency, otherwise irreparable damage to pumps, relief valves and pipe lines may be caused.

(D.N.C. 523/51/80.)

UNCLASSIFIED.

182.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2968/1959.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest Naval Armament Depot as early as practicable. H.M.A. ships which are unable to comply within three months from the date of this order are to report the fact to Navy Office for instructions—

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 926XA	SC 122	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 1067XB	SC 109	B.L. 6-in.; Q.F. 4.7-in.
RNC 848 ..	SC 061	B.L. 6-in.; Q.F. 5.25-in.; Q.F. 4.7-in.; 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1072XB		
RNC 1073XB		
RNC 6204XA	ASN/T 190-054 ..	Q.F. 4.7-in.; Q.F. 4-in. (F.A.).
RNC 6205XA		
RNC 6219XA		
RNC 6229XA		
RNC 6235XA		
RNP 1497XA		

2. Attention is drawn to article 211 of Naval Magazine and Explosives Regulations B.R. 862 and paragraphs 6, 7 and 9 of Naval Cordite Regulations, article 53, B.R. 862A.

3. Separate instructions have been issued to R.A.N. Armament Depots.

(D.W. 729/57/37.)

RESTRICTED.

183.—G.R.U.S., Mark 3, and G.S., Types 2 and 3—G.A.S.U., Type 1, Mods. 1 and 2—Replacement of Flexible Hoses.

(*A.F.O.* 3093/1959.)

(*a*) *Ships, Establishments and Authorities concerned*	Ships and establishments, fitted with F.P.S., mark 5, M.R.S.3 or radar, type 984; Dockyards; Gunnery Equipment Depots.
(*b*) *Types and marks of equipment*	G.R.U.S., mark 3, G.S., types 2 and 3.
(*c*) *Part of equipment affected* ..	G.A.S.U., type 1, mods. 1 and 2.
(*d*) *Purpose of modification* ..	To facilitate the replacement of flexible hose connections of air compressors.
(*e*) *Nature of modification* ..	Replacement should be by lengths of hose, Admiralty pattern E2/C2436 (which is a natural rubber hose with woven fabric reinforcement, of ⅜-in. internal bore, for up to 120-lb. test pressure). Each hose should be cut to length so that there is only sufficient length to allow a slight droop when the hose is installed. The end connectors of the discarded hose can be utilized to remake the hose.
(*f*) *Drawing or Navy Order Diagram*	D.W.S. 301 (Navy Order Diagram Issue 5/60).
(*g*) *By whom to be done* ..	Ship's staff.
(*h*) *When to be done*	When present stock of fabricated flexible hoses (Lockheed Avery Cat. No. 14A) is exhausted.
(*i*) *How to be treated* ..	As a defect.
(*j*) *Supply of Material* ..	Hose E2/C2436, is available from Naval Stores (supplied in 60-feet lengths for Low Pressure Air Services).

(D.W. 737/53/10.)

RESTRICTED.

184.—A/S Mortar Mark 10—Loading Equipments for "Type 12 Frigates" and "Darings".

The following modifications to loading equipments have been found necessary to prevent seizure of components through lack of lubrication. Navy Order 1033 of 1959 is to be amended by inclusion of the modifications in Section M, for "Loading Equipment and Associated Ships fittings".

Daring.	*Type* 15.	*Type* 12.	*Description.*	*Drawings.*	*Remarks.*
—	—	A.N.3	Projectile traps. Provision of additional lubrication	U.C.W. 20447/58 U.C.W. 20447/59 U.C.W. 20447/60 U.C.W. 20447/61 U.C.W. 20447/62	Dockyard
A.N.8	—	A.N.4	Hoist loading rack Interlocks and arms lubrication	"*Darings*". U.C.W. 22701/31 U.C.W. 22701/35 /16 U.C.W. 22701/38 /6, 7 & 11 "*Type* 12 *Frigates*." U.C.W. 20447/18 U.C.W. 20447/23 /26 U.C.W. 20447/25 /6, 7 & 11	Dockyard. Arrangements are being made to have Oilite type bushes supplied to Gunnery Equipment Depots

(D.W. 707/251/10.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

185.—Naval Stores (General) (Class E, Group 9)—Adoption of Joint Service Catalogue Numbers.

(*A.F.O.* 3099/1959.)

Joint Service Catalogue numbers are being adopted for the Oils (Class E, Group 9) detailed in the Appendix to this order.

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and commissioned establishments are to adjust their ledgers in accordance with Article 1812(*g*) of A.B.R. 4 (Naval Storekeeping Manual). The Joint Services Group/Class numbers need not be quoted on ledger pages or demands.

3. Future contracts for these oils under class E, group 9, will provide for the containers to be marked with the Joint Service Catalogue number, as shown in the Australian Joint Services Publication, "Handbook of Fuels, Lubricants and Allied Products for Australian Services".

APPENDIX.

Old Pattern Number.	*Description.*	*Container Size.*	*Joint Service Catalogue Number.*
	Joint Service Group/Class 9150.		
929A	Oil OMD–330	4½ gall. jerrican	910–0585
4427	Oil OM–1300	5 gall. drums	943–1329
937	Oil OEP–220	4½ gall. jerrican	910–0542
930A	Oil OC–600	4½ gall. jerrican	910–0536
4616	Oil ZX–7	5 gall. drum	910–0596
4617	Oil ZX–8	28 lb. keg	910–0597
1181	Oil OX–12	1 pt. tin	910–0587
4422	Oil OM–13	5 gall. drum	943–1324
7593	Oil OX–13	4½ gall. jerrican	910–0588
4428	Oil OM–33	5 gall. drum	943–1325
4428	Oil OM–33	1 gall. can	942–3224
4421	Oil OM–36	5 gall. drum	943–1328
4425	Oil OM–42	2 oz. bott.	910–0548
4424	Oil OM–52	5 gall. drum	910–0575
4582	Oil OX–52	5 gall. drum	910–0592
7590	Oil OC–300	5 gall. drum	943–7238
934	Oil OM–490	8 oz. botts.	910–0555
109B	Oil OM–16	1 gall. can	942–7822
109B	Oil OM–16	5 gall. drum	942–7823
109B	Oil OM–16	10 gall. drum	942–7824
109B	Oil OM–16	40/45 gall. drum	942–7825
6538	Oil OM–3	5 gall. drum	943–1323
4613	Oil ZX–3	5 gall. drum	910–0568
4600	Oil ZX–1	5 gall. drum	910–0558
4615	Oil ZX–2	5 gall. drum	910–0559
4614	Oil ZX–6	5 gall. drum	910–0562
	Joint Service Group/Class 8010.		
6982	Oil, Linseed, boiled	40 gall. drum	942–9213
		5 gall. drum	942–7804
6983	Oil, Linseed, Extra Pale, boiled	40 gall. drum	942–9214
6981	Oil, Linseed, Raw	40 gall. drum	942–9217
		5 gall. drum	942–7803

(D.N.A.S. 512/91/16.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

186.—Officer's Shoulder Straps—Availability from Victualling Yard.

Limited stocks of shoulder straps for Commanders, Lieutenant-Commanders and Lieutenants are maintained at Royal Edward Victualling Yard, Sydney and H.M.A. Victualling Yard, Port Melbourne and are available for issue on repayment.

2. The issuing price for shoulder straps will, in future, be advised yearly in the Official Memorandum "Prices of Clothing Maintained for Issue to Ships' Companies". Until the next promulgation of the price list the following prices will apply—

	£	s.	d.
Commander	2	18	6
Lieutenant-Commander	2	17	6
Lieutenant	2	9	6

3. Stocks are not to be maintained in H.M.A. ships and establishments and Supply Officers are to ensure that demands on Victualling Yards are for actual requirements, as only in exceptional circumstances will returns of shoulder straps be accepted.

4. Navy Order 686 of 1959 is hereby cancelled.

(D.V. 917/87/1.)

(*Navy Order* 686 *of* 1959.)

Section 7.
CANCELLED LIST.

UNCLASSIFIED.

187.—Cancellation of Navy Order.

Navy Order 120 of 1959 has been incorporated in I.P.I. and is hereby cancelled.

(H.P.B. 210/1/1.)

With reference to Navy Order 1094 of 1959, Navy Orders 37 to 183 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
15th March, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

188.—Planned Maintenance—Instructions.

The policy of the Naval Board on the introduction of Planned Maintenance was promulgated in Navy Order 512 of 1959.

2. To facilitate the working of the Planned Maintenance System in ships, separate detailed instructions have been issued for the Hull, Marine Engineering and Ordnance Engineering departments for inclusion in existing volumes of Maintenance Schedules. These instructions, which differ only in departmental detail, are published as appendixes to this order so that information on Planned Maintenance may be available in ships and establishments where Planned Maintenance is not in operation.

3. Instructions for Planned Maintenance in the Electrical Department were promulgated in Navy Order 678 of 1959.

4. In addition to the detailed instructions for operating the Planned Maintenance System, ship's officers are to be guided by the general notes set out in the succeeding paragraphs.

5. Changes in refit dates or refitting cycles make it impracticable initially to phase ship's staff Planned Maintenance with dockyard refits. It is therefore incumbent upon ship's officers, to keep under review all work coming into hand, to ensure that any necessary temporary adjustments are made to the programme to fit in with the dockyard refit, bearing in mind that the incidence of leave reduces the average availability of ship's staff labour during refits.

6. Inadequate complement or prolonged operational requirements may preclude the completion of the Planned Maintenance task for the quarter. Where such conditions arise, it will be necessary to abandon certain items of Planned Maintenance. In so doing, the responsible officer is to be guided by the circumstances that apply at the time, by the relative importance of individual items, by the general condition of the equipment concerned, and by the date of the previous examination.

7. Care must be taken, when meeting the requirements of maintenance schedules that the most practical and efficient way of carrying out the work is established, and that this is set down for guidance on future occasions. It should be noted that many tests which are readily carried out *in situ* require much more labour if assemblies are removed and replaced.

8. There is a wide scope for improvement in the planned maintenance of existing equipments and for improvements in design which will reduce maintenance requirements in future installations. In some cases it may be found that a purely functional test can be used to take the place of an examination requiring the dismantling of equipment. In others, small modifications may enable clearances to be established or examinations carried out without dismantling. Full use should be made of forms A.S. 2062Z—Maintenance Schedule amendment proposal and Form A.S. 2022—Report of defective material and design—to ensure that the experience gained in ships is passed to the appropriate authority for action.

9. Navy Order 54 of 1960 is hereby cancelled.

APPENDIX A.

INSTRUCTIONS FOR SETTING UP AND OPERATING THE R.A.N. HULL PLANNED MAINTENANCE SYSTEM.

THE MAIN ELEMENTS OF THE R.A.N. PLANNED MAINTENANCE SYSTEM FOR HULL.

The R.A.N. hull planned maintenance system for any ship uses the following elements—

(*a*) A simple check-off system for all daily, weekly and monthly maintenance routines.
(*b*) A card system for all quarterly and less frequent maintenance routines.
(*c*) A planning board giving a visual display of the maintenance and defect work-load for a few weeks ahead including work in hand at the moment.
(*d*) Key Maintenance Plans for all quarterly and less frequent maintenance routines.
(*e*) A system for the reporting of Maintenance.
(*f*) A system for the handling and reporting of defects.
(*g*) A system for the amendment of Planned Maintenance Documents.
(*h*) Maintenance Schedules.

These several elements of the planned maintenance system are described in sequence in paragraphs 2 to 8 inclusive.

Daily, Weekly and Monthly Maintenance Routines.

2. For each part of ship and special parties, copies of the daily, weekly and monthly items from the appropriate maintenance schedules are shown on boards. Thus for each part of ship, &c., there is one board for daily, one for weekly and one for monthly routines.

These boards should be issued to and kept by the Senior rating of the party concerned who should detail junior ratings to carry out the various items of maintenance. Provision is made for each item to be initialed and dated by the rating actually carrying out the work and for the completed board to be signed by the senior rating.

It should be arranged that, as far as possible, daily routines are completed on the first hour of the day, weekly routines on the first day of each week and monthly routines on the first 2 or 3 days of each month.

The Card System.

The Functions of the Card System.

3. The card system is built up from both the Maintenance Schedules and the Key Maintenance Plans and its functions are as follows—

(*a*) To ensure that all items included in the maintenance schedules to be carried out at quarterly or less frequent intervals are brought forward in the sequence in which they are due, and that the items required for the current quarter are assembled for ready reference.
(*b*) To facilitate short-term maintenance planning by the visual presentation of the maintenance jobs required to be done during the 4–6 weeks' period ahead.
(*c*) To enable the necessary orders for carrying out the normal maintenance to be issued with the minimum paper work.
(*d*) To present visually, the maintenance in hand.
(*e*) By virtue of the simplification of maintenance programming to enable officers and ratings to spend more time actually " doing the job ".

APPENDIX A—*continued.*

Description of Plastic Envelopes and Cards.

4. For each group of maintenance items (e.g., Bathrooms half-yearly items) there is, in the card system, a clear plastic envelope (approximately 8½-in. by 6-in., open at one end) which contains three cards as follows—

(*a*) A " marker " card on the top line of which is shown the basic information required for planning purposes. (This information can be read through the front of the envelope above the shorter schedule instruction card).

(*b*) A schedule instruction on which is a copy of all maintenance items for the Schedule and period concerned. (These items can be read through the front of the envelope.)

(*c*) A " Maintenance record " card showing the dates and results of previous examinations carried out on the item concerned. (This information can be read through the back of the envelope.)

(*d*) In certain cases a pink " How to do it " card, prepared by ships staff, giving details of methods, materials, and equipment to be used.

The Marker Card.

5. Each envelope is identifiable by the top-line information on the marker card. The sketch below is an example.

H.D.C. 38 Quarterly				1st	2nd	3rd	4th	
	Bathrooms					Skilled.	Unsk'ld.	
Serial No. 12		Hrs. Notice		Total Items 2	Man-Hours.	5	6	Years

The meaning of this information is as follows—

H.D.C. 38	Hull and Damage Control Schedule No. 38.
Quarterly	Frequency of routine.
Serial No. 12 ..	This is the twelfth card in the Quarterly Series.
Bathrooms	Item or items of structure, equipment or compartment concerned.
Rectangle above Hrs. Notice	Space for sub-section colour code system if required, as in Engineering schedules. To be left white on Hull Schedules
Hrs. Notice ..	If required, to indicate period necessary to carry out routine, and secure again for sea.
Blank Space ..	When this maintenance routine is taken in hand, this space is covered by a tab, showing name of rating and date of issue.
Total Items 2 ..	This period-group is comprised of two items of maintenance.
5, 6	Man-hours, skilled and unskilled, required to carry out the whole routine.
Years	No entry is required in this space except for biennial and less frequent routines. For biennial routines the word " **odd** " or " **even** " is entered in this space as requisite. Other routines show next two examinations, viz. 1962, 1965.

APPENDIX A—*continued.*

The Maintenance Record Card.

6. This card is used to record the results of the examination and the work carried out. Maintenance Record cards show only the identity of the item of structure or equipment and the period concerned. On the first occasion of each envelope coming onto the planning board the shipwright officer should as far as practicable ensure that the maintenance record card is prepared as follows—

(*a*) Each card should show as many successive examinations as possible and that the right information is given on each occasion. Each card should be appropriately ruled off to show where results are to be entered.

(*b*) Actual skilled and unskilled man-hours are to be entered in a convenient manner on each occasion bearing in mind that (i) these figures will be required for quarterly reports and (ii) after (say) three occasions of carrying out this maintenance routine it may be found that the man-hours on the card should be amended to the average figures obtained in practice.

(*c*) For biennial and less frequent routines where Sections of a system are examined quarterly (or half-yearly) the maintenance card should be completed to show precisely what parts of the system are to be examined each quarter (or half-year). This is essential to ensure that the whole system is fully covered in the total period concerned.

Storage of Envelopes.

7. For the envelopes of the Hull there is a storage box and a planning board. All envelopes for the current quarter are to be placed on the planning board and all other envelopes are in the storage box. Quarterly envelopes are therefore always on the planning board.

The Storage Box is a simple box or drawer large enough, to hold all half-yearly and less frequent envelopes. When all these envelopes are in the storage box they they are arranged in the following order starting from the front—

(*a*) Half-yearly envelopes for 1st and 3rd quarters, then for 2nd and 4th quarters.

(*b*) Annual envelopes for 1st, 2nd, 3rd and 4th quarters in succession.

(*c*) Biennial envelopes for 1st, 2nd, 3rd and 4th quarters of " **odd** " years.

(*d*) Biennial envelopes for 1st, 2nd, 3rd and 4th quarters of " **even** " years.

(*e*) Three-yearly, four-yearly and six-yearly envelopes.

From half-yearly to biennial (inclusive) separator cards divide off the quarters but there are so few envelopes in three-yearly and less frequent routines that separator cards are unnecessary.

Within each quarter the half-yearly, annual and biennial envelopes are arranged in order of the Serial Nos. on the marker cards. The three-yearly and less frequent envelopes are also arranged in order of their Serial Nos., there being only a single series in each case.

Checking for misplaced or lost envelopes.

8. As with any loose-card system it is possible that envelopes may be misplaced or lost and the following method of checking all envelopes in a storage box should be used as necessary.

(*a*) By a visual check of the distinctive colour for each period along the top edges of the envelopes it can be seen if any envelopes are in the wrong period (e.g. a quarterly envelope in an annual group).

APPENDIX A—*continued.*

(*b*) Again by checking the quarters in which the period colour is placed it can be seen if any envelope is in a wrong quarter (though in its correct period).

(*c*) Finally to check that no envelopes are missing from the storage box, or in the wrong order, the Serial Nos. should be checked in each quarter. (The highest Serial No. in each series is encircled in pencil). All these checks can be carried out without removing the envelopes from the storage box.

The envelopes for defect items.

9. As each defect is reported, a defect form is prepared (*vide* Para. 7) and inserted with a plain red marked card in a plastic envelope of the same type as used for maintenance items. The procedure described ensures that the repair of defects is considered in conjunction with the day to day planning of routine maintenance.

The Planning Board.

Description of Planning Board.

10. The planning board consists of a vertical row of pockets on a movable belt (mounted on rollers at top and bottom of the board) and a small box in front of the lower end of the belt. The overall height and width of the planning board is approximately 28 inches by 11 inches. The board is light and portable and can be mounted on a bulkhead or stood on a desk.

The small box at the base will hold all envelopes for one quarter's maintenance. The vertical row of pockets will hold 24 envelopes pitched 7 inches apart thus displaying the top line information of each marker card.

Initial Setting up of Planning Board for a Quarter's Maintenance.

Assume that it is desired to set up the planning board for maintenance for the 2nd quarter of 1960.

The envelopes are arranged as follows—

(*a*) First check that all the quarterly envelopes are in the box on the planning board, in their correct order of Serial Nos. and with no " foreign " envelope among them.

(*b*) Remove all the half-yearly envelopes for the 2nd-and-4th quarters from the storage box. Place each of these envelopes in turn immediately behind the quarterly envelope of the same unit, e.g., the 9.2 half-yearly envelope would be placed behind the 9.2 quarterly envelope (or where this envelope for the same unit (would be if one existed).

(*c*) In a similar way place each annual envelope of the 2nd quarter immediately behind the half-yearly envelope for the same unit (or where it would be if one existed).

(*d*) In a similar way also deal with the biennial envelopes of the 2nd quarter of " even " years.

(*e*) Finally 3–4, and 6-yearly envelopes must be checked through individually and any envelopes for the 2nd quarter of 1960 are placed in their appropriate positions.

As a final check that the whole of the envelopes for the quarter are present and in correct order they may be checked directly against the order shown on the 2nd quarter of the Key Maintenance Plan.

APPENDIX A—*continued.*

The first 20–24 envelopes in the planning board box are then inserted in the vertical row of pockets, starting from the top. (In practice it may be found desirable to leave alternate blank pockets near the top of the planning board to permit the feeding into the system envelopes for defects.)

Operating of the Card Systems and Planning Board during any Quarter.

11. The normal method of operating the card system is as follows—

(*a*) *Short-term planning.* Twenty envelopes displayed on the board will generally represent 3–6 weeks of maintenance. In planning maintenance from day to day the aim should be to give priority in accordance with the position of the envelopes on the board, but it must be borne in mind that the whole point of the visible display is to give a reasonable choice of work. This obviates any hitch in carrying on with maintenance when any of the highest priority work cannot be undertaken because of weather, &c. A particular point to be watched at all times is that any maintenance which requires extended notice for steam should be taken in hand before the opportunity has passed, even though it be of relatively low priority.

(*b*) *To put a maintenance routine in hand.* When a rating is instructed to carry out a routine, the marker card is tabbed (in blank space of top line) with the name of rating and date of issue and is replaced in the pocket from which it was taken. The board thus gives a visible record of the work in hand and of the employment of all skilled ratings.

(*c*) *Completion of a maintenance routine.* On completion of a maintenance routine, and after the record card is filled in, the envelope is temporarily placed in a special basket for review by the officer concerned as desired. (Actual man-hours expended on the job should be transferred to the Quarterly Maintenance Progress Record.)

When cleared by the officer responsible, the envelope is returned to storage in either the storage box (for half-yearly and less frequent routines) or to the planning board box, behind the " end of quarter " separator card (for quarterly routines).

As the top envelopes are removed from the board, on completion, the belt of pockets is moved up and further envelopes are inserted in the lower pockets.

(*d*) *Preparing the planning board for the following quarter.* Some weeks before the end of the current quarter the last envelope of the quarter should have been transferred from the planning board box to a lower pocket on the belt. The " end of quarter " card should be placed in the next pocket below it. The following quarters work is then prepared by removing all envelopes for that quarter from the storage box (i.e. half-yearly and less frequent) and inserting them one by one in their appropriate positions in the planning board box in the way already described for the initial setting up of envelopes.

The few quarterly envelopes remaining on the board above the " end of quarter " card are inserted in their proper positions in the planning board box as they are completed in the current quarter.

As the " end of quarter " card moves up the planning board the first envelopes of the following quarter are transferred to the pockets below it. Thus planning proceeds uninterruptedly.

APPENDIX A—*continued.*

12. The Key Plan covers in a condensed form, the whole of the hull maintenance of a ship for all quarterly and less frequent routines. In each calendar quarter it shows the groups of maintenance to be carried out by Ship's Staff and the order of maintenance work which should be aimed at in each quarter. The Dockyard component of maintenance is shown in two columns—" Annual refit " and " Intermediate docking ".

13. Although only four calendar quarters are shown, the plans are made " perpetual " by the use of simple symbols for groups of maintenance which are less frequent than annually, thus—

(*a*) Biennial groups of items are shown by either " Bo " or " Be " depending on whether they are to be carried out in " **odd** " or " **even** " years.

(*b*) 3-, 4- and 6-yearly groups of items are shown by a letter (T, F and S respectively) followed by a single figure indicating the year in which they are to be carried out e.g. T_2 indicates a 3-yearly group of items to be carried out in the 2nd year (of each 3-year period); F_3 indicates a 4-yearly group to be carried out in the 3rd year (of each 4-yearly period); S_1 indicates a 6-yearly group to be carried out in the 1st year (of each 6-year period).

14. Key Maintenance Plans are drawn up in Navy Office before the system is introduced, but attention is drawn to the following points.

(*a*) In certain instances routines of lower frequency quoted in the maintenance schedules have been replaced by quarterly or half-yearly routines. This practice is used in the case of systems (e.g. Heads and urinals) where it would be impracticable to examine the whole system at the same time. This position is overcome by examining small sections of the system more frequently, the **whole** system being covered in the period quoted in the schedules.

In such cases the key plan is marked with the letter of the card, suffixed by that of the whole routine—Thus Q.F. is a four-yearly routine, progressed quarterly.

(*b*) The man-hours figures shown on Key Plans are in all cases estimates of the labour required for Ships Staff Maintenance. Such estimates were essential to the preparation of the Key Plans and may, in practice, require revision and amendment.

15. When planned maintenance is introduced into a ship, copies of the Key Maintenance plans are to be issued to the Administrative Authority, the ship, and to dockyards.

Report on printed form.

16. Quarterly maintenance progress records are to be forwarded to Director of Naval Construction, Department of the Navy, direct, by each ship on planned maintenance. There is a separate form for each quarter of the year.

Each of the four different forms is virtually a copy of the maintenance routines (for the quarter concerned) as shown on the relevant key maintenance plans but with the man-hour columns left blank. The forms are thus peculiar to the individual ship and the few forms required by each ship will be issued from Navy Office.

Full instructions will be issued with the forms but the main points are as follows—

(*a*) On completion of each group of maintenance routines on each system or unit, the total skilled and unskilled man-hours reported on the maintenance record card are to be entered in the appropriate space on the quarterly report.

APPENDIX A—*continued.*

(*b*) At the end of each quarter any maintenance routines not carried out are to be crossed out by a single line leaving the letter still legible.

17. Any routines not printed on the forms which have been completed are to be inserted in ink. The man-hours are to be added to the total for the particular equipment or system.

(*a*) For each unit the figures entered in the man-hours columns are always to be the totals of the skilled and unskilled man-hours actually expended in carrying out maintenance on the unit in the quarter concerned.

(*b*) Totals of man-hours expended in daily, weekly and monthly routines are to be entered in the spaces provided.

Report by signal.

18. A common report for all Departments is to be forwarded by signal in accordance with Navy Order 946 of 1958.

19. The basic documents of the planning maintenance system are the maintenance schedules and Key Maintenance Plans. As planned maintenance affects Dockyard and will eventually apply to ships under different administrative authorities, the original issues of these documents will be affected by Navy Office.

All subsequent amendments to schedules, and the Dockyard sections of the Key Plans will be promulgated by Navy Office. Ships may adjust the ship's staff sections of Key Plans provided the balance between quarters is retained.

20. Holders of Maintenance Schedules and Key Maintenance Plans are to amend them in accordance with official amendments received and are also to make a notation on the page provided in the front of the maintenance schedule column or on the back of the Key Maintenance plan concerned.

In ships each amendment of either of the basic documents which originate in ships are to be forwarded through the administrative authority (for his remarks and recommendations) to Navy Office, on the form A.S. 2062Z. A separate form is to be used for each maintenance Schedule No. involved in the proposals.

While no amendments of the two basic documents may be made until they are approved by Navy Office, excepting as in para. 18 above it is to be clearly understood that planned maintenance makes no change in the responsibilities of officers either for the operation or maintenance of ships. Whenever it may be considered necessary for the safety or efficiency of the ship to depart from instructions in the basic documents, the responsible officer concerned must use his discretion but the circumstances should be reported on the proposal for amendment.

Reporting of Defects, &c.

21. As ships are brought on to planned maintenance they are to adopt the defect procedure detailed below, using form (A.S. 2061Z) defect record. It will be seen that by the use of copies of this form a defect is recorded, the work is planned and taken in hand, and finally reported.

22. When a defect arises—whether a " breakdown " defect or a defect found only during a routine examination—a defect form is to be made out in duplicate or triplicate as necessary and the procedure is to be shown in either (*a*) or (*b*) hereunder as applicable.

APPENDIX A—*continued.*

Generally speaking such operations as the cleaning of parts, the carrying out of simple adjustments, the repacking of glands, lubrication of door and hatch clips, &c., should be regarded as part of maintenance. A defect form should, however, be made out whenever spare gear has to be fitted, or where deterioration of any sort has been so serious that further operation of the equipment would have involved real danger of breakdown, or where the time involved in repair exceeds about 25 per cent. of the normal time required for the maintenance routine concerned.

(*a*) *Defects to be made good by ship's staff.* Two copies of the defect form are inserted in a plastic envelope together with a defect marker card (A.S. 3005). The defect envelope is then inserted in a pocket of the planning board corresponding to its desired priority in relation to maintenance work and other repair work.

(It is envisaged that, to conserve space on the planning board, small defects which can be dealt with as a group by one man will be inserted in the same envelope).

Repair jobs are issued in the same way as for maintenance work except that one copy of the defect form is retained with the marker card, so that the office has full information of all repair work in hand. On completion of repairs the rating concerned completes his copy of the defect form and returns it in its envelope to the office. The copy which has been retained on the board with the marker copy is then completed and placed in a weekly bundle of completed defects which is also to be forwarded each week to the Director of Naval Construction, Department of the Navy Office.

The defect form remaining in the ships (i.e. that filled in by the rating) is to be filed under the general heading for the structure or equipment concerned. These files should be kept in order of Schedule Nos. for each section of the ship. Thus the complete defect history of any structure or equipment can be quickly reveiwed at any time if desired.

(*b*) *Defects to be made good by Dockyard.* Three copies of the defect form are raised and initial disposal is as follows—

Original ..	.. Filed in ship pending preparation of Defect List.
Duplicate	.. Placed in weekly bundle for despatch direct to refitting authority.
Triplicate	.. Placed in bundle for weekly despatch to Administrative Authority.

After completion of the defect by dockyard the duplicate is returned to the ship, the original and duplicate forms completed with details of repair, any appropriate remarks and date of completion. If man-hour figures become available they should be inserted in the space provided. Disposal of the forms is then as follows—

Original ..	.. Placed in ship's file for structure or equipment.
Duplicate ..	.. Placed in bundle for weekly despatch ~~to Administrative Authority~~.

Deleted vide N.O. 144/62

APPENDIX A—*continued.*

~~Action by Administrative Authority.~~

23. ~~Defect forms for outstanding Dockyard defects will be held by the Administrative Authority pending receipt of completed copy. On receipt of this copy the outstanding form is to be cancelled and destroyed, the completed copy being forwarded to Navy Office.~~

~~This procedure ensures that the Administrative Authority is aware of outstanding Dockyard defects in ships, and provides Navy Office with material required for study of the relationship between maintenance and the incidence of defects.~~

Note:—When using form A.S. 2061Z it is important that the nature of the defect is clearly stated. **Do not** use this form for work which could properly be classed as planned maintenance. If no maintenance routine is scheduled propose one.

Maintenance Schedules.

24. These schedules detail the whole of the hull maintenance to be carried out by Ships Staff and by Dockyard on each type of equipment, system and structure in the ship on a calendar basis. There is a separate schedule for each type of equipment &c., and on each schedule the various items of maintenance are grouped under such of the following calendar periods as are applicable:—Daily, Weekly, Monthly, Quarterly, Half-yearly, Annually, Biennially, 3-yearly, 4-yearly and 6-yearly. (These periods are frequently referred to by the initial letter only, viz. D. W. M. Q. H. A. B. T. F. and S. respectively.)

On each schedule all maintenance items in each period-group are numbered within their own group. Thus the 3rd item in a half-yearly period group is referred to as item H.3.

When planned Maintenance is introduced into a ship, loose-leaf volumes of the maintenance schedules will be issued to the Administrative Authority, the ship concerned and the Dockyards. When the system is working it should seldom be necessary to refer to the maintenance schedules volume in a ship. The whole of the information in the schedules is given in a more convenient arrangement for normal use in the Key Maintenance Plans, the card system, and the check-off system.

Records Superseded by the Planned Maintenance System.

25. As from the date of changing over to the planned maintenance system in any ship the Record of Defects (A.S. 342), the Record of Examination of Accessible Compartments (A.S. 338) and the E.R.A.'s and Shipwright's work books will no longer be required to be kept by that ship.

The useful information embodied in these records will be available in some other form in the planned maintenance system.

The effect of reduced ships complement and increased operation periods.

26. If, due to either a reduction of the ships complement or to an increase in operational requirements, ships staff maintenance falls into arrears the fact will be shown up in the Quarterly Signalled Progress Reports. This position would in normal times be met by some combination or other of—

(*a*) Increasing the ships complement.
(*b*) Reducing operation requirements.
(*c*) Increasing repair ship facilities.
(*d*) Increasing dockyard component of planned maintenance.

APPENDIX A—*continued.*

In times of emergency where the position may not be fully rectified by these means, adherence to the maintenance time-table can only be achieved by taking planned risks in maintenance work, i.e. reduce maintenance work as far as necessary by means which are considered to involve the least risks in loss of safety and efficiency.

Ship's staff should be encouraged to find and report errors in the original schedules and to make suggestions for their improvement. Any suggested improvement, if approved, would automatically be issued by Navy Office to all ships using the schedule concerned.

If practical experience at sea shows that amendment of the Key Plans is desirable, the facts should be reported.

APPENDIX B.

THE R.A.N. SYSTEM FOR THE PLANNED MAINTENANCE OF MARINE ENGINEERING MATERIAL.

PART I.

DESCRIPTION OF THE SYSTEM.

The system for the Planned Maintenance of Marine Engineering Material comprises the following elements—

(*a*) Maintenance Schedules.
(*b*) A simple check-off system for all Daily, Weekly and Monthly Maintenance Routines.
(*c*) Key Maintenance Plans for all Quarterly and less frequent routines.
(*d*) A Planning Board giving a visual display of the maintenance and defect work load for a few weeks ahead, and the work in hand at the moment.
(*e*) A system for the reporting of maintenance.
(*f*) A system for the amendment of Planned Maintenance.
(*g*) A system for the handling and reporting of defects.

These several elements of the Planned Maintenance system are described in detail in the succeeding paragraphs.

Maintenance Schedules.

2. A separate schedule is provided for each type of equipment fitted showing maintenance routines required to be carried out at the following periods as applicable: Daily, Weekly, Monthly, Quarterly, Half-yearly, Annually, Biennially, 3-yearly, 4-yearly, 6-yearly and 8-yearly. These are frequently referred to by their initial letter only, viz., D. W. M. Q. H. A. B. T. F. S. and E. respectively.

3. On each schedule all maintenance items in each period group are numbered within their own group. Thus the third item in a Half-yearly group is H.3.

4. The Marine Engineering Schedules are divided into convenient sections depending on the class of ship each schedule being numbered within its own section; for example the schedule for a Main Circulator might be E.R. 4.

5. All machines of the same type are covered by one schedule, but to refer to an individual equipment the schedule number is used followed by a decimal figure. Thus Forced Draught fan No. 7 may be known as B.R. 2.7 and the quarterly group of maintenance on it as B.R. 2.7Q. This is known as a unit-period group of maintenance.

APPENDIX B—*continued.*

Check-off System for Daily, Weekly and Monthly Maintenance Routines.

6. For each section copies of the Daily, Weekly and Monthly items from the appropriate Maintenance schedules are shown on boards. Thus for each section there is one board for daily, one board for weekly and one board for monthly routines. These sections may be further subdivided to meet the requirements of individual ships.

7. Provision is made for each item on the boards to be initialled and dated by the individual carrying out the work and for the time taken to be inserted. The boards can be used repeatedly by rubbing out all signatures after checking.

Key Maintenance Plans.

8. The Key Maintenance plans cover, in a condensed form, the whole of the Marine Engineering planned maintenance of the ship for all quarterly and less frequent routines. In each quarter the plan shows the unit—period—groups of Maintenance to be carried out by ships staff and the order of maintenance work to be aimed at during the quarter. The Dockyard Component of Planned Maintenance is indicated by two columns headed Intermediate Docking and Dockyard refit. For convenience the various sections of the department are shown on separate sheets.

9. Although only four calendar quarters are shown the plans are made perpetual by the use of symbols for period groups of maintenance which are less frequent than annually, thus—

(*a*) Biennial groups of items are shown by either Bo or Be depending on whether they are to be carried out in odd or even years.

(*b*) 3-, 4-, 6- and 8-yearly groups are shown by the letter T, F, S, and E respectively followed by a single figure, indicating the year in which they are to be carried out, e.g., T2 indicates a 3-yearly group of items to be carried out in the second year of a 3-year period, F3 indicates a 4-yearly group to be carried out in the third year of a 4-year period.

10. Key Maintenance Plans are drawn up in Navy Office before the system is introduced. Attention is drawn to the following points—

(*a*) In certain instances period groups of maintenance may be split into two or more parts. Thus the Annual group for boilers might comprise A.I., A.II., A.III. and A.IV. each of which symbols appear separately on the Key Plan.

(*b*) In certain other instances routines of low frequency in the schedules have been replaced by one of higher frequency in the Key Plan. This practice is used in the case of systems, &c., where it would be impracticable to examine the whole at one time. This position is overcome by examining small sections at shorter intervals, so that the whole is covered within the scheduled period. The letter in the Key Plan in such a case is followed by the initial of the scheduled period in small type. Thus Qf in the Key Plan represents a 4-yearly routine progressed quarterly, Hb a Biennial routine progressed half-yearly and so on.

(*c*) The man-hour figures shown on key plans are estimates of the skilled labour required for ships staff maintenance. Such estimates are essential for the preparation of balanced key plans but may be found to be inaccurate.

APPENDIX B—*continued.*

The Card System.

The Functions of the Card System.

11. The card system is built up from both the maintenance schedules and the key maintenance plans and its functions are as follows—

(*a*) All quarterly and less frequent routines are brought forward by a simply operated system in the correct calendar quarter and in the order in which they are due.

(*b*) Short-term maintenance planning is aided by a continuous visual presentation of the maintenance work load for approximately four to six weeks ahead.

(*c*) The issue or orders for normal maintenance is effected without paper work.

(*d*) The maintenance in hand at any time is presented visually in the office.

(*e*) Officers and senior ratings, being relieved of the hitherto continuous problem of planning maintenance work, can devote more attention to the technical problems of maintenance and defects, and to the improvement of maintenance generally.

Description of the Plastic Envelopes and Cards.

12. For each unit-period-group of maintenance items, (e.g. the half-yearly items on the Main Circulating pump in the after Engine Room) there is, in the card system a clear plastic envelope which contains three or four cards as follows—

(*a*) A maintenance schedule card carrying the relevant items from the schedule concerned which can be read through the front of the envelope.

(*b*) A marker card on the top line of which is shown the basic information required for planning purposes. This information can also be read through the front of the envelope above the shorter schedule card.

(*c*) A maintenance record card showing dates and results of previous examinations together with time taken. This information can be read through the back of the envelope.

(*d*) In certain cases a pink instruction card, prepared by ships staff, giving details of methods, materials and equipment to be used. (Inclusion of this additional card should be noted on the marker card).

The Marker Card. A.S. 3004.

13. Each envelope is identifiable by the top-line information on the marker card of which the following is an example—

E.R. 4.2 Half-yearly		Red	Main Circulator Aft. E.R.	Orange 1st	2nd	Orange 3rd	4th	
						Skilled.	Unsk'ld.	
Serial No. 3		4 Hrs. Notice		Total Items	Man-hours	4	8	Years

The meaning of this information is as follows—

E.R. 4.2	.. ..	Schedule E.R. 4. Unit No. 2.
Half-yearly ..	..	Frequency of routine.
Serial No. 3	..	This is the third half-yearly card in the quarter concerned (*see* note 1).

APPENDIX B—*continued.*

Blank Space	..	When this routine is taken in hand the space is covered by a tab showing the name of rating and date of issue.
Red Rectangle	..	Indicates that this is an Engine Room card. (The colour code may be varied to suit the requirements of different ships.)
Four Hours Notice	..	Notice for steam required before routine is attempted. (Filled in by ship's staff.)
Main Circulator Aft. E.R.		Unit of machinery or equipment concerned.
Orange in 1st and 3rd spaces		A half-yearly routine due in the first and third quarters of the year. Colour code is— Red .. Quarterly. Orange .. Half-yearly. Yellow .. Annually. Green .. Biennially. Blue .. 3-yearly or less frequently.
4–8	.. ..	Man-hours, skilled and unskilled required to carry out the routine. (*See* note II).
Years	.. ..	No entry required except for biennial routines the word "**odd**" or "**even**" is entered in this space. For 3-, 4-, 6- and 8-yearly routines the actual date of two successive examinations is entered e.g. 1961 1965

Note (*I*) Cards of like frequency are numbered in pencil in the order in which they appear on the Key Plan, the number of the last card of the quarter being encircled in pencil.

(*II*) Unskilled man-hour spaces are left blank on issue, and should be filled in by ship's officers as experience is gained. The figures are in pencil to allow amendment.

The Maintenance Record Card. A.S. 3001.

14. This card is used to record results of examinations, &c., and should normally be used by the rating carrying out the particular routine. When supplied, the cards bear only the identity of the equipment and the period concerned. On the first occasion of the envelope coming into use the responsible officer should as far as practicable ensure that the record card is prepared as follows before being brought into use—

(*a*) By ruling off the card, provision should be made for the recording of skilled and unskilled man-hours required to complete the work and where applicable, space should be provided for tabulating any diameters, clearances, &c., of which permanent record is required.

(*b*) Where lower frequency (e.g., biennial) routines are progressed at shorter intervals, the card should be completed to show precisely which portions of the whole are to be examined throughout the whole period. This is essential to ensure that no part of a system is omitted.

APPENDIX B—*continued.*

The Instruction Card. A.S. 3003.

15. This card is provided to enable the experience of personnel carrying out routines to be passed on to those doing them later. On the card can be noted the best method of carrying out the job, and any special precautions to be taken as well as special tools, lubricants, &c., to be used. Frequently it may be desirable to note extracts from makers instructions and other publications, on the card. When the system is installed adequate supplies are provided for insertion by ship's officers where necessary.

Defect Marker Card. A.S. 3005.

16. Defect Marker Cards are coloured red and made in the form of a folder to contain Defect Record Forms A.S. 2061Z.

The Planning Board.

17. The planning Board consists of a vertical row of pockets carried by a movable belt on rollers mounted in a frame. At the bottom of the board is a small card box designed to carry all the cards making up one-quarter's Planned Maintenance for the section concerned.

There is a Planning Board for the envelopes of each section of the department (Engine Rooms, Boiler Rooms, &c.). All envelopes for the current quarter are on the Planning Board, whilst all other envelopes are in a main stowage box or drawer. Quarterly envelopes are therefore always on the Planning Board.

The Main Card Storage.

18. The main storage may be a box or boxes or a drawer, and can be arranged according to office space available. The cards are stored by sections and in each section are arranged in the following order—

(*a*) Half-yearly envelopes—1st and 3rd quarters then 2nd and 4th quarters.

(*b*) Annual envelopes for 1st, 2nd, 3rd and 4th quarters in succession.

(*c*) Biennial envelopes for 1st, 2nd, 3rd and 4th quarters of **odd** years.

(*d*) Biennial envelopes for 1st, 2nd, 3rd and 4th quarters of **even** years.

(*e*) 3-yearly, 4-yearly and 6-yearly envelopes.

From half-yearly to biennial inclusive, separator cards divide off the quarters, but there are so few envelopes in 3-yearly and less frequent routines that separator cards are unnecessary. Within each quarter the half-yearly, annual and biennial cards are placed in order of the serial numbers on the marker cards. The 3-yearly and less frequent envelopes are also arranged in order of serial numbers, there being only a single series in each case.

Checking for Misplaced Envelopes.

19. The following method of checking for misplaced or lost cards should be carried out periodically—

(*a*) A visual check along the top edges of the envelopes will show, by means of the distinctive colour band for each section, whether an envelope for another section is present.

(*b*) By a similar check of the colour for each period it can be seen if any envelopes are in the wrong period, e.g., a quarterly envelope in an annual group.

APPENDIX B—*continued.*

(*c*) Again, by checking the quarters in which the period colour is placed it can be seen if any envelope is in a wrong quarter, though it is in the correct period.

(*d*) Finally, to check that no envelopes are missing from the box, or in the wrong order, the pencilled serial numbers should be checked in each quarter. The highest serial number in each series is encircled in pencil.

These checks can be carried out without removing the cards from the storage box.

Cards for Machinery Maintained on an Hours-run Basis.

20. For each unit a progress card is provided on which a " bar " record is filled in daily to show the number of hours run. It is marked in steps of 25 hours and shows clearly when each routine is about to fall due.

21. For each routine on each equipment there is an envelope with its normal set of cards. The marker cards are identified by the space in the right hand corner being shaded black.

The Dockyard Component of Planned Maintenance.

22. To assist Ship's Officers in overseeing maintenance work being carried out by Dockyards, and to allow records of this work to be kept, envelopes containing cards are provided for dockyard planned maintenance as well as ship's staff work. These cards for Dockyard work are identified by the quarter spaces being shaded black.

Note:—In cases where these have not been supplied they should be drawn up by ship's staff.

23. To assist Dockyards in the advance planning of refits a summary of all the Dockyard Planned Maintenance is abstracted from the schedules. Set against these Maintenance routines is a tabular statement derived from the Key Maintenance Plan showing which individual equipments are to be taken in hand in successive refits.

24. Dockyards are also supplied with sets of cards for each class of ship on Planned Maintenance. These comprising Marker Record, and Schedule cards in plastic envelopes, are issued on the scale of one for each period group of Dockyard Maintenance on each type of equipment fitted in the class. Marker cards bear the name of the class of ship to which they refer as well as particulars of the equipment.

The Defect Record Form. A.S. 2061Z.

25. This form, takes the place of the **Record of Defects, A.S. 242** and has been designed to combine the functions of reporting the occurrence of defects, reporting when these defects have been made good, and serving as a permanent record for the equipment concerned. The completed form also shows where equipments have failed in service due to defects. Detailed instructions for its use are contained in Part II.—Instructions for Operating the System, paras. 10–14.

Amendments to Planned Maintenance Documents.

27. Amendments will be issued from time to time to both the Maintenance Schedules and to the Dockyard Component of Planned Maintenance. Holders of these documents are to amend them in accordance with amendments received and are to make a notation on the page provided or on a page attached for the purpose.

APPENDIX B—*continued.*

28. Adjustments to Key Maintenance plans may be made by ship's officers provided that the Dockyard component of Planned Maintenance is not affected. Such adjustments should only be carried out if they are of a permanent nature. For example the key plan may show numbers 1 and 3 Turbo Forced Draught Fans as having their annual routines at the same time. If it is more convenient to do numbers 2 and 3 together this would be a permanent alteration. The balance between the man-hours in each quarter should always be preserved as far as possible.

Proposals to amend **Planned Maintenance** Schedules or the **Dockyard** component Planned Maintenance are to be forwarded to Director of Marine Engineering, Department of the Navy (2 copies) on form A.S. 2062Z with copy to the ship's Administrative Authority.

THE R.A.N. SYSTEM FOR THE PLANNED MAINTENANCE OF MARINE ENGINEERING MATERIAL.

PART II.

INSTRUCTIONS FOR OPERATING SYSTEM.

Equipment Supplied.

When Planned Maintenance is introduced into the Marine Engineering Department of a ship the following items will be supplied.

(*a*) Plastic covered boards for checking Daily, Weekly and Monthly Routines.

(*b*) A complete set of cards for quarterly and less frequent routines on all equipments and additional cards for equipments maintained on an hours-run basis.

(*c*) One Planning Board for each section of the department.

(*d*) One copy of the Marine Engineering Key Maintenance Plans for the ship.

(*e*) One volume of Marine Engineering Maintenance Schedules for the Class.

(*f*) An initial supply of Pink instruction cards and defect Marker cards.

(*g*) Spare cards and envelopes.

(*h*) Quarterly Report Forms. (A separate form is supplied for each quarter of the year.)

(*j*) A tabular statement showing Dockyard Component of Planned Maintenance for the ship over six years.

Preliminary Arrangements.

2. Before putting the system into operation, it is necessary to provide suitable positions for the Planning Boards and the main card stowage. Wherever possible this should be in the Engineer's Office, but where space does not permit, other locations can be utilized. Each Planning Board occupies a bulkhead space of 28 inches by 11 inches and boards may be mounted adjacent to one another or separately. An existing drawer or drawers, can usually be adapted for the main card stowage.

Daily, Weekly and Monthly Routines.

3. Detailed arrangements for the use of Daily, Weekly and Monthly boards are left to individual ships, but it should be arranged as far as possible that all daily routines be completed in the first hour of the day, all weekly routines on the first day of the week and all monthly routines on the first two or three days of the month.

APPENDIX B—*continued.*

Quarterly and Less Frequent Routines.

Initial Setting up of a Quarter's Maintenance on the Planning Board.

4. Assume that it is desired to set up the **Engine Rooms** section for the fourth quarter of 1959.

(*a*) Place all E.R. Quarterly envelopes in the box in the front of the planning board, first checking by the pencilled serial numbers that all are present and in serial order. (Lowest numbers at the front.)

(*b*) Remove all half-yearly E.R. envelopes for second and fourth quarters from the main card storage. Place each of these envelopes in turn immediately behind the quarterly envelope of the same unit e.g. the 9.2 half-yearly envelope behind the 9.2 quarterly envelope or in the place that the quarterly would have occupied.

(*c*) In a similar way place each annual envelope of the fourth quarter immediately behind the half-yearly envelope of the same unit (or where it would be if one existed).

(*d*) In a similar way deal with the biennial envelopes of the fourth quarter of odd years.

(*e*) Finally the 3-, 4- and 6-yearly envelopes must be checked individually and any envelopes of the fourth quarter of 1959 placed in their appropriate positions.

The first twenty or so envelopes are then inserted in the vertical row of pockets, starting from the top. Spaces being left at intervals to carry defect envelopes.

Note:—Cards for **Dockyard Work** are not placed on the Planning Board. They are used only to control and record Dockyard work carried out during refits.

Operation of the Card System during the Quarter.

A. Short Term Planning.

5. The twenty envelopes displayed on the board will represent up to six weeks' maintenance. In planning maintenance from day to day the aim should be to give priority in accordance with the position of the envelopes on the board, but it must be borne in mind that the object of the visible display is to allow a reasonable selection of work in the event of those units highest on the board not being immediately available for maintenance.

B. Putting a Maintenance Routine in Hand.

The marker card is removed from the envelope and the envelope containing the schedule card, the record card and where appropriate the instruction card, is issued to the rating in charge of, or actually carrying out the job. The marker card is tabbed in the blank space with the name of the rating and the date of issue, and is then replaced in the pocket from which the envelope was removed.

Before issue as above it is important that the record card be ruled up for the recording of such information as the schedule requires. Where no specific information is required the following information is to be recorded—

(*a*) Items complete.

(*b*) Date completed.

(*c*) Man-hours (skilled and unskilled).

(*d*) Signature of responsible rating.

See also Part I., Description of System, paragraph 14.

APPENDIX B—*continued.*

C. Completion of a Maintenance Routine.

On completion of a maintenance routine the information required on the record card is filled in and the card returned to the office. The marker card is removed from the board and inserted in the envelope, and the envelope is temporarily placed in a special tray pending scrutiny by the responsible officer, and for action by the writer. Actual man-hours expended on the job should be transferred to the Quarterly Maintenance progress report. When cleared by the responsible officer, they are returned to storage in either the main storage box for half-yearly and less frequent routines, or the planning board box behind the " end of quarter " separator card for quarterly routines.

As the top envelopes are removed from the board the belt is moved up and further envelopes are inserted into the lower pockets.

D. Preparing the Planning Board for the following Quarter.

Towards the end of the current quarter the last envelope of the quarter should have been transferred from the planning board box to a lower pocket on the belt. The " end of quarter " card should be placed in the next pocket below it. The following quarters work can then be prepared in the box, any quarterly envelopes remaining on the board being placed in their appropriate positions in the box after completion of the routines.

E. Equipments maintained on Hours-run Basis.

At a suitable interval before any progress card shows that a maintenance routine is falling due, the appropriate envelope should be taken from the storage box and inserted in a pocket near the top of the planning board according to its priority. The envelope is then dealt with in the same manner as for calendar-basis equipment.

Reporting Progress of Planned Maintenance.

6. To avoid the necessity of listing and reporting routines not completed, record forms have been drawn up in the form of separate quarters of the key maintenance plans with man-hour columns left blank. The form is used as a day to day record of planned maintenance completed and man-hours taken during the quarter, after which it is totalled and forwarded direct to Director of Marine Engineering, Department of the Navy where the information is required for the analysis of maintenance. A separate form is provided for each calendar quarter of the year. In addition to this report a quarterly signalled report is to be made in accordance with instructions issued separately by Navy Order.

Amendments to the P.M. System—See Part I, Description of the System, paragraph 27.

Instructions for Completing Planned Maintenance Progress Record.

7. (*a*) On completion of each group of maintenance on each unit the total of skilled and unskilled man-hours reported on the maintenance record card is to be entered in the appropriate space on the Maintenance Progress Report.

(*b*) At the end of each quarter any maintenance routines not carried out are to be crossed out by a single line leaving the letter still visible thus Ø.

(*c*) Any routines which are not printed on the form but which have been completed are to be inserted in ink.

(*d*) Totals of man-hours expended on daily, weekly and monthly routines during the quarter are to be entered in the space provided.

APPENDIX B—*continued.*

Note:—For each unit the figures entered in the man-hours columns are to be the totals of the skilled and unskilled man-hours **actually expended** in carrying out planned maintenance on the unit in the quarter concerned.

Defects.

8. Form A.S. 2061Z, **Defect Record** combines the following functions—

(*a*) Initially records defect (in lieu of defect book).

(*b*) Reports outstanding Dockyard defects to administrative authority and to Refitting Authority.

(*c*) ~~Reports completion of outstanding Dockyard defects to Administrative Authority.~~

(*d*) Provides for ship's staff a permanent record of the defects which have occurred on individual equipments.

(*e*) Provides material for the statistical analysis of defects at Navy Office and defect history, including break-downs, of all equipments.

9. In order that these functions can be carried out effectively it is important that **Defect Record** Forms are completed accurately. The top headings are for the purpose of identifying the defective equipment and are to contain sufficient information to do this positively.

When completing the right hand column write " NO " in the space provided if the defect was not found in the course of planned maintenance. Otherwise write the schedule number and frequency. Remember that if the equipment has broken down in service, or been withdrawn from service involuntarily to prevent further damage, it is deemed to have been rendered unserviceable by the defect. Answer the question accordingly. In the event of such a failure consideration should be given to reporting the occurrence on form A.S. 2022—**Report of Defective Material and Design.**

Instructions for Using the Defect Record Form. A.S. 2061Z.

Ship's Staff Defects.

10. When a defect which will be made good by Ship's Staff arises, or is found in the course of Planned Maintenance an A.S. 2061Z is to be raised in duplicate. At this stage the form is given a serial number by which it can be identified.

Disposal of copies is then as follows—

Original	Placed in red marker card and plastic envelope and inserted in a vacant space on the planning board.
Duplicate	

11. When the defect is taken in hand the original is passed to the rating concerned in the plastic envelope together with a plain card for support. The duplicate remains on the planning board with the marker card which is tagged with the rating's name. When the defect has been made good the original is completed by the rating concerned and returned to the office.

12. After scrutiny by the responsible officer and editing where necessary the information recorded on this original copy is transcribed to the duplicate. Disposal of the forms is then as follows—

Original	Placed in ship's file for equipment.
Duplicate	Placed in bundle for weekly despatch to Director of Marine Engineering, Department of the Navy.

APPENDIX B—*continued.*

Dockyard Defects.

13. For Dockyard Defects A.S. 2061Z is raised in triplicate and initial disposal of forms is as follows—

Original ..	.. Filed in ship pending preparation of Defect List.
Duplicate ..	.. Placed in weekly bundle for despatch direct to refitting authority.
Triplicate ..	.. Placed in bundle for weekly despatch to Administrative Authority.

After completion of the defect by dockyard the duplicate is returned to the ship, the original and duplicate forms completed with details of repair, any appropriate remarks and date of completion. If man-hour figures become available they should be inserted in the space provided. Disposal of the forms is then as follows—

Original ..	.. Placed in ship's file for equipment.
Duplicate ..	.. Placed in bundle for weekly dispatch ~~to Administrative Authority.~~

Action by Administrative Authority.

14. Defect forms for outstanding Dockyard defects will be held by the Administrative authority pending receipt of completed copy. On receipt of this copy the outstanding form is to be cancelled and destroyed, the completed copy being forwarded to Navy Office.

This procedure ensures that the Administrative Authority is aware of outstanding Dockyard defects in ships, and provides Navy Office with material required for study of the relationship between maintenance and the incidence of defects.

Note:—When using form A.S. 2061Z it is important that the nature of the defect is clearly stated. Do Not use this form for work which could properly be classed as planned maintenance. If no maintenance routine is scheduled propose one.

APPENDIX C.

THE R.A.N. SYSTEM FOR THE PLANNED MAINTENANCE OF GUNNERY AND UNDERWATER WEAPONS AND DETECTION EQUIPMENT (MECHANICAL).

Introduction.

The information contained in these instructions has been divided into two parts.

Part I. describes the planned maintenance system as applied to Gunnery and Underwater Weapon and Detection Equipment (Mechanical).

Part II. contains Instructions for Operating the system.

2. For the application of the planned maintenance scheme the responsibility of the Ordnance Engineer Officer or the Officers appointed for Ordnance Engineering duties or, in the absence of an Officer the Senior Ordnance rating, to meet the maintenance requirements of the Gunnery and T.A.S. Officers, is laid down in Q.R. and A.I. Articles 4031 and 4032.

APPENDIX C—*continued.*

Part I.

The system for planned maintenance of Gunnery and Underwater Weapon and Detection Equipment (Mechanical) comprises the following elements:—

(*a*) Maintenance Schedules.
(*b*) Key Maintenance plans for all quarterly and less frequent maintenance routines.
(*c*) A card system for all quarterly and less frequent maintenance routines.
(*d*) A planning board giving a visual display of the maintenance and defect work load for a few weeks ahead and the work in hand at the moment.
(*e*) A simple check-off system for all periods less than quarterly maintenance routines.
(*f*) A system for the reporting of maintenance.
(*g*) A system for the handling and reporting of defects.
(*h*) A system for the amendment of Planned maintenance documents.

These several elements of the planned maintenance system are described in the succeeding paragraphs.

Maintenance Schedules.

2. These schedules detail the whole of the Gunnery and Underwater weapon and detection maintenance to be carried out by Ships Staff and by Dockyards on each type of machinery equipment and system in the ship on a calendar basis. A separate schedule is provided for each type of equipment fitted showing maintenance routines required to be carried out at the following periods as applicable—

Daily, Weekly, Monthly, Quarterly, Half-yearly, Yearly, 2-Yearly, 3-Yearly, 4-Yearly and 5-Yearly. These periods are frequently referred to by the initial letter only, viz.: D, W, M, Q, H, 2Y, 3Y, 4Y and 5Y.

3. On each schedule, all maintenance items in each period-group are numbered within their own group. Thus the third item in a half-yearly period group is referred to as item H3.

4. The Gunnery and Underwater weapon and detection schedules are divided into two sections: Gunnery (G) and Torpedo and Anti-Submarine (T.A.S.). Each schedule is numbered with its own section, e.g., the schedule for the Gun Direction System will be G.D.S., and that for air look-out sights Type 274 will be G.D.S.3.

5. All items of equipment of the same type are covered by the same schedule but to refer to an individual equipment the schedule number is used followed by a decimal figure. For example the left-hand Mk. 7 Fuze Setting machine in "B" Turrent is 4.5T.11.2.2 and the right hand Mk. 7 Fuze Setting machine in "Y" Turrent is 4.5T.11.3.1. The quarterly group of maintenance items for the second Mk. 7 Fuze Setting machine named above is 4.5T.11.3.1Q. Th s is known as a unit-period-group of maintenance.

Key Maintenance Plans.

6. The Key plans cover in a condensed form, the whole of the Gunnery and underwater weapons and detection maintenance of a ship for all quarterly and less frequent routines. In each quarter it shows the unit-period-groups of maintenance to be carried out by ships' staff, and the priority of maintenance work which should be aimed at each quarter. The Dockyard component of maintenance is shown in two columns "Periodical Refit, and Intermediate docking". Gunnery and underwater weapons and detection are shown on separate sheets.

APPENDIX C—*continued.*

7. Although only four calendar quarters are shown, the plans are made perpetual by the use of simple symbols for period groups of maintenance which are less frequent than annually, thus—

(*a*) 2-yearly groups of items are shown by either 2YO or 2YE depending on whether they are to be carried out in " **odd** " or " **even** " years.

(*b*) 3-, 4-, 5- and 6-yearly groups of items are shown by the symbols 3Y, 4Y and 6Y, respectively, followed by a figure indicating the year in which they are to be carried out, e.g. 3Y2 indicates a 3-yearly group of items to be carried out in the second year of each 3-year period: 4Y3 indicates a 4-yearly group to be carried out in the third year at each 4-year period. 6Y1 indicates a 6-yearly group to be carried out in the first year of each 6-year period.

8. Key maintenance plans are drawn up in Navy Office before the system is introduced. Attention is drawn to the following points—

(*a*) In certain instances period groups of maintenance may be split into two or more parts. Thus the annual group for 4.5 Mtg. pumps would comprise 5Y1 Part I. and 5Y4, Part II. each of which symbols appear separately on the Key Plan. This practice has, in general been limited to period groups of maintenance which involve large amounts of skilled labour.

(*b*) In certain other instances 2-yearly and longer routines quoted in the maintenance schedules have been replaced by Quarterly or Half-yearly routines on the Key Plans. This practice is used in the case of items (e.g. holding down bolts) where it would be impracticable to examine all at the same time. This position is overcome by examining small sections of the system more frequently, the whole system being covered in the period quoted in the schedules.

(*c*) When planned maintenance is applied to a ship from the date of first commissioning, the problem arises as to the point at which the less frequent routines should be carried out for the first time. If for example no 2-yearly routines were undertaken till they become nominally due, the whole of the 2-yearly routines in the ship would fall due in the same quarter every two years. If this practice were followed, planned maintenance would become unworkable.

The key plans have, therefore, been so arranged that at whatever point planned maintenance is commenced, a proportion of each of the half-yearly, annual and less frequent routines is included in each quarter from the outset.

(*d*) The man-hour figures shown in key plans are estimates of the skilled labour required for ship's staff maintenance. Such estimates are essential for the preparation of balanced key plans but may need to be revised.

The Card System.

The Functions of the Card System.

9. The Card System is built up from both the maintenance schedules and the key maintenance plans and its functions are as follows—

(*a*) All quarterly and less frequent unit-period-groups of maintenance for gunnery and underwater weapons and detection equipment are brought forward by a simple operated system in the calendar quarter (and in the priority within the quarter) in which they are due. It is virtually impossible for any maintenance work in the schedules to be overlooked.

APPENDIX C—*continued.*

(*b*) The short-term planning of maintenance is aided by a continuous visual presentation of the maintenance workload for approximately two weeks ahead.

(*c*) The issue of orders for the normal carrying out of maintenance is effected without paperwork.

(*d*) The maintenance in hand at any time is presented visually in the office.

(*e*) Officers and senior ratings, being relieved of the hitherto continuous problem of planned maintenance work, can devote more attention to the technical problems of maintenance and defects, and to the improvement of maintenance generally.

Description of the Plastic Envelopes and Cards.

10. For each unit-period-group of maintenance items (e.g. forward port air lookout sight quarterly items) there is, in the card system, a clear plastic envelope which contains three or four cards as follows—

(*a*) A maintenance schedule card carrying the relevant items from the schedule concerned which can be read through the front of the envelope.

(*b*) A " marker " card on the topline of which is shown the basic information required for planning purposes. This information can also be read through the front of the envelope above the shorter schedule card.

(*c*) A " maintenance record " card showing the dates and results of previous examinations carried out on the unit. This information can be read through the back of the envelope.

(*d*) In certain cases a pink instruction card, prepared by ship's staff, giving details of methods, materials and equipment to be used.

The Marker Card (A.S. 3004).

11. Each envelope is identifiable by the top line information on the marker end, of which the following is an example—

GDS.3.2. Yearly			Air Look-out Sight	1st	2nd	3rd	4th	
						Skilled.	Unsk'ld.	
Serial No. 2		Hrs. Notice	Type T.274	Total Items 4	Man-hours.	4	6	Years

The meaning of this information is as follows—

Column 1

Coloured Rectangle Indicates the department with which this routine should co-ordinate. The colour code for Column 1 is as follows—

Green .. Electrical
Blue .. Executive
Purple .. Engineering
Not coloured No other Department

G.D.S. 3.2 .. Port, Forward Air Lookout Sight, Type T274

Serial No. 2 .. This is the Gun Direction System 2-yearly card in the quarter concerned (*see* Note 1)

APPENDIX C—*continued.*

Column 2

Blank Space .. When this maintenance routine is taken in hand, this space is covered by a tab showing the name of the rating engaged and the date of issue to the rating.

Column 3

Coloured Rectangle Indicates the particular type of system to which the card applies. The colour code for Column 3 is as follows—

- Red .. Main Armament and system
- Orange .. Gun Direction Systems
- Blue .. Close Range Armament and systems
- Green .. Torpedoes and associated equipment
- Yellow .. Mortar Mountings and associated equipment
- Brown .. T.A.S. Miscellaneous.

Lower Half—Hours Notice For Gunnery and underwater weapons and detection planned maintenance systems this space will not be used, but no objection is made to use of this facility by Ships Officers.

Column 4 .. .. Air Lookout Sight T-274 Unit of equipment concerned.

Columns 5 to 8

Top Coloured Rectangles Indicate the type of periodical routine which must be carried out in each of the appropriate quarters of the maintenance year. For example, if the top half of the 5th Column is coloured yellow it indicates that it is a yearly examination which must be carried out in the first quarter. Similarly if the top half of the 8th Column is coloured green, it indicates that a 2-yearly routine must be carried out in the fourth quarter.

The colour code for Columns 5 to 8 is as follows—

- Red .. Quarterly routine
- Orange .. Half-yearly routine
- Yellow .. Yearly routine
- Green .. 2-yearly routine
- Blue .. Any routine in excess of a 2-yearly.

Column 5 .. .. Lower half total Items 4. This period group is comprised of four items of maintenance.

Lower Half—Columns 6 to 8 Ships Officers are to fill in the time taken to carry out the routines and compare the actual figure with those estimated on the key plan.

Column 9 .. .. Top half if coloured: Indicates following in accordance with the colour code

- Brown .. Routines to be carried out by T.A.S. " Users "
- Black .. Routines to be carried out " Before and after Firings "
- Not coloured All other routines.

APPENDIX C—*continued.*

Years .. .. No entry is required in this space except for 2-yearly and less frequent routines. For 2-yearly routines, the word " **odd** " or " **even** " is entered in this space as requisite. For 3-, 4- and 5-yearly routines the actual years of the next two examinations are shown, for example 1961, 1965.

Note I: Cards of like frequency are numbered in pencil in the order in which they appear on the key plan, the number of the last card of the quarter being encircled in pencil.

Note II: Unskilled man-hours spaces have been left blank on issue, and should be filled in by ships officers as experience is gained. The figures are in pencil to allow amendment.

The Maintenance Record Card. (A.S. 3001).

12. This card is used to record results or examinations, &c., and should normally be used by the rating carrying out the particular routine. When supplied, the cards bear only the identity of the equipment and the period concerned. On the first occasion of an envelope coming into use the responsible officer should as far as practicable ensure that the record card is prepared as follows before being brought into use—

(*a*) By ruling off the card, provision should be made for the recording of skilled and unskilled man-hours required to complete the work and where applicable, space should be provided for tabulating any diameters clearances, &c., of which permanent records is required.

(*b*) For 2-yearly and less frequent routines where sections of a system are examined quarterly or half-yearly, the quarterly or half-yearly maintenance card should be completed to show precisely what parts of the system are to be examined each quarter or half-year. This is essential to ensure that the whole system is fully covered in the total period concerned.

The Instruction Card.

13. This card is provided to enable the experience of personnel carrying out routines to be passed on to those carrying out the same routine later. On the card can be noted the best method of carrying out the job, and any special precautions to be taken as well as special tools, lubricants, &c., to be used. Frequently it may be desirable to note extracts from makers instructions and other publications, on the cards. When the system is installed adequate supplies are provided for insertion by ships officers where necessary.

Defect Marker Card. (A.S. 3005).

14. Defect Marker Cards are coloured red and made in the form of a folder to contain Defect Record Forms A.S. 2061Z.

The Planning Board.

The planning board consists of a vertical row of pockets carried by a movable belt of rollers mounted in a frame. There is a small box in front of the lower end of the belt. Each board is light and portable and can be mounted or hung on a bulkhead or stood on a desk. The small box at the base will hold envelopes for one quarters maintenance in the section concerned. The vertical row of pockets will hold 24 envelopes pitched $\frac{7}{8}$-in. apart, thus displaying the top line information of each marker card.

APPENDIX C—*continued.*

The Main Card Stowage.

15. The storage cabinet consists of four or more drawers large enough to hold all half-yearly and less frequent envelopes, which are arranged in the following order starting from the front—

(*a*) Half-yearly envelopes for first and third quarters, then for second and fourth quarters.

(*b*) Yearly envelopes for first, second, third and fourth quarters in succession.

(*c*) 2-yearly envelopes for all quarters of **odd** years.

(*d*) 2-yearly envelopes for all quarters of **even** years.

(*e*) 3-yearly envelopes for all quarters.

(*f*) 5-yearly envelopes for all quarters.

From half-yearly to yearly, inclusive, separator cards divide off the quarters.

For 2-yearly and less frequent routines quarterly separator cards are unnecessary.

All routine cards are arranged in order of the serial numbers of the marker cards.

Check-off System for Daily, Weekly and Monthly Maintenance Routines.

16. For each section copies of the Daily, Weekly, Fortnightly and Monthly items from the appropriate maintenance schedules are shown on cards. Thus for each section there is one card for daily, one for weekly, one for fortnightly and one for monthly routines.

(*a*) Provision is made for each item on the cards to be initialled and dated by the rating carrying out the work and for the time taken to be inserted. The cards can be used repeatedly by rubbing out all signatures after checking.

(*b*) Detailed arrangements for the use of the daily, weekly, fortnightly and monthly cards are left to ships, but it should be arranged as far as possible that all daily routines be completed in the first hour of the day, all weekly routines on the first day of the week and all monthly routines on the first two or three days of each month.

Checking for Misplaced Envelopes.

17. The following method of checking for misplaced or lost cards should be carried out periodically—

(*a*) a visual check along the top edges of the envelopes will show, by means of the distinctive colour band for each section, whether one envelope for another section is present.

(*b*) By a similar check of the colour for each period it can be seen if any envelopes are in the wrong period e.g. a quarterly envelope in an annual group.

(*c*) Again by checking the quarters in which the period colour is placed it can be seen if any envelope is in a wrong quarter, though it is in the correct period.

(*d*) Finally, to check that no envelopes are missing from the box or in the wrong order, the pencilled serial numbers should be checked in each quarter. The highest serial number in each series is encircled in pencil. These checks can be carried out without removing the cards from the stowage box.

APPENDIX C—*continued.*

The Defect Record Form A.S. 2061Z.

18. This form, takes the place of the Record of Defects A.S. 342 and has been designed to combine the functions of reporting the occurrence of defects, reporting when the defect has been made good, and serving as a permanent record of the register of the equipment concerned. The completed form also shows where equipments have failed in Service due to defects. Detailed instructions for its use are contained in the instructions for operating the R.A.N. Planned Maintenance system for Gunnery and underwater weapon and detection equipment.

The Dockyard Component of Planned Maintenance.

19. To assist Ship's Officers in overseeing maintenance work being carried out by Dockyards, and to allow records of this work to be kept, envelopes containing cards are provided for dockyard planned maintenance as well as ship's staff work. These cards for dockyard work are identified by the quarter spaces being shaded blue.

(*a*) To assist dockyards in the advance planning of refits a summary of all the dockyard planned maintenance is abstracted from the schedules. Set against these maintenance routines is a tabular statement derived from the key maintenance plan showing which individual equipments are to be taken in hand in successive refits.

(*b*) Dockyards are also supplied with sets of cards for each class of ship or planned maintenance. These comprise Marker Record and schedule cards in plastic envelopes, and are issued on the scale of one for each period group of dockyard maintenance on each type of equipment fitted in the class. Marker cards bear the name of the class of ship to which they refer as well as particulars of the equipment.

Records Superseded by the Planned Maintenance System.

20. The following forms and books are superseded by the planned maintenance system—

(*a*) Ordnance Artificers Workbook.

(*b*) Record of Defects A.S. 342.

(*c*) Ships on planned maintenance will continue to use the gunnery equipment Log S.1151 (with the exception of form S.1151 (*f*)) until the introduction of the ordnance engineering Master Record.

(*d*) S.1148(R).

Amendments to Planned Maintenance Documents.

21. The basic documents of the planned maintenance system are the Maintenance Schedules and Key Maintenance Plans.

(*a*) Proposals for the amendment of the maintenance schedules, are to be forwarded through the Administrative Authority (for his remarks and recommendations) to the Director of Weapons, Department of the Navy on a form A.S. 2062Z. A separate form is to be used for each maintenance schedule number involved in the proposal.

(*b*) Holders of maintenance schedules are to amend them in accordance with official amendments received, and are to make a notation on the page provided.

APPENDIX C—*continued.*

(*c*) Adjustment to Key Maintenance plans may be made by ship's officers provided that the Dockyard component of planned maintenance is not affected. Such adjustments should only be carried out if they are of a permanent nature. The balance between the man-hours in each quarter should always be preserved as far as possible.

(*d*) In ships, each amendment of the basic documents automatically involves a corresponding amendment in the card system and/or check-off system for daily, weekly, fortnightly and monthly routines. These latter amendments are to be carried out by ship's staff in conjunction with the amendment of the basic documents, and a notation of the amendment number is to be made on the cards and/or check-off cards.

THE R.A.N. SYSTEM FOR THE PLANNED MAINTENANCE OF GUNNERY AND UNDERWATER WEAPONS EQUIPMENT (MECHANICAL).

Part 2.

INSTRUCTIONS FOR OPERATING THE SYSTEM.

Equipment supplied.

22. When planned maintenance is introduced into the Ordnance department of a ship the following items will be supplied—

(*a*) Plastic covered cards for checking daily, weekly, fortnightly and monthly routines.

(*b*) A complete set of cards for quarterly and less frequent routines.

(*c*) One planning board for each section of the department (to be demanded from Naval Stores by ships concerned).

(*d*) One copy of the Gunnery Key Maintenance plans and one copy of the Underwater Weapon and Detection Equipment key maintenance plans.

(*e*) One volume of the Gunnery Maintenance Schedules and one volume of the Underwater Weapon and Detection Equipment Schedules.

(*f*) An initial supply of pink instruction cards and defect marker cards.

(*g*) Spare cards and envelopes.

(*h*) Quarterly Report forms. (A separate form is supplied for each quarter of the year.)

Preliminary Arrangements.

23. Before the system is put into operation, it is necessary to provide suitable positions for the planning boards and the main card stowage. Each planning board occupies bulkhead space of 28 inches by 11 inches and boards may be mounted adjacent to one another or separately. Filing cabinets like type GS 17 are supplied for the main card stowage (there cabinets are to be demanded from Naval Stores by ships concerned).

Daily, Weekly, Fortnightly and Monthly Routines.

24. Detailed arrangements for the use of daily, weekly, fortnightly and monthly cards are left to individual ships, but it should be arranged as far as possible that all daily routines be completed in the first hour of the day all weekly routines on the first day of the week and all monthly routines in the first week of the month.

APPENDIX C—*continued.*

Quarterly and Less Frequent Routines.

25. Initial setting up of a quarters maintenance on the planning board. Assume that it is desired to set up the gunnery section for the fourth quarter of 1960—

(*a*) Place all gunnery quarterly envelopes in the box on the front of the planning board, first checking by the pencilled serial numbers that all are present and in serial order. (Lowest numbers to the front.)

(*b*) Remove all half-yearly gunnery envelopes for second and fourth quarters from the main card storage. Place each of these envelopes in turn immediately behind the quarterly envelope of the same unit e.g. the 4.5T.2 half-yearly envelope behind the 4.5T.2 quarterly envelope.

(*c*) In a similar way place each annual envelope of the fourth quarter immediately behind the half-yearly envelope of the same unit.

(*d*) In a similar way deal with the two-yearly envelopes of the fourth quarter of even years.

(*e*) Finally the third and fifth yearly envelopes must be checked individually and any envelope of the fourth quarter of 1960 placed in their appropriate positions. The first twenty or so envelopes are then inserted in the vertical row of pockets, starting from the top, space being left at intervals to carry defect envelopes.

26. Operation of the card system during the quarter—

(*a*) Short term planning. The twenty envelopes displayed on the board will represent up to six weeks maintenance. In planning maintenance from day to day the aim should be to give priority in accordance with the position of the envelopes on the board, but it must be borne in mind that the object of the visible display is to allow a reasonable selection of work in the event of these units highest on the board not being immediately available for maintenance.

(*b*) Putting a maintenance routine in hand. The marker card is removed from the envelope and the envelope containing the schedule card, the record card, and where appropriate the instruction card, is issued to the rating in charge of, or actually carrying out the job. The marker card is tabbed in the blank space with the name of the rating and the date of issue, and is then replaced in the pocket from which the envelope was removed.

Before issue as above it is important that the record card be ruled up for the recording of such information as the schedule requires, where no specific information is required the following information is to be recorded—

(*a*) Items complete.

(*b*) Date completed.

(*c*) Man-hours. (Skilled and unskilled.)

(*d*) Signature of responsible rating.

Completion of a Maintenance Routine.

(*c*) On completion of a maintenace routine the information required on the record card is filled in and the card returned to the office. The marker card is removed from the board and inserted in the envelope, and the envelope is temporarily placed in a special tray pending scrutiny by the responsible officer. Actual man-hours expended on the job should be transferred to the quarterly maintenance progress report. When cleared by the responsible officer, they are returned to storage in either

APPENDIX C—*continued.*

the main storage box (for half-yearly and less frequent routines) or the planning box behind the " end of quarter " separator card for quarterly routines. As the top envelopes are removed from the board the belt is moved up and further envelopes are inserted into the lower pockets.

Preparing the Planning Board for the Following Quarter.

(*d*) Towards the end of the current quarter the last envelope of the quarter should have been transferred from the planning board to a lower pocket in the belt. The " end of quarter " card should be placed in the next pocket below it. The following quarters work can then be prepared in the box, any quarterly envelopes remaining on the board being placed in their appropriate positions in the box after completion of the routines.

Instructions for Completing Planned Maintenance Progress Record (Quarterly Report).

27. (*a*) On completion of each maintenance routine on each unit, the skilled and unskilled man-hours reported on maintenance record card are to be entered in the appropriate space on the report.

(*b*) At the end of each quarter, any maintenance routines not carried out are to be crossed out by a single line leaving the letter still legible thus—~~Q~~.

(*c*) Any routines which were not carried out in the previous quarter but which have been completed in the current quarter are to be inserted in the current quarters report and enclosed in a square, thus [Y] or [2 Y].

(*d*) Any routines belonging to a future quarter which are carried out (in advance) in the current quarter are to be inserted in the current report and enclosed in a circle thus (Y) or (2-Y).

(*e*) Any routines which, having been carried out in advance in a preceding quarter are no longer required to be carried out in the current quarter, are to be both crossed out and enclosed in a circle in the current quarters report, thus (~~Y~~) or (~~2-Y~~).

(*f*) For each unit, the figures entered in the man-hours columns are to be the totals of the skilled and unskilled man-hours actually expended in carrying out maintenance on the unit in the quarter concerned.

(*g*) Totals of man-hours expended in daily, weekly, fortnightly and monthly routines are to be entered in the space provided.

(*h*) Brief reasons are to be given under " Remarks " regarding maintenance routines not completed in the quarter also skilled man-hours available for planned maintenance. The information provided by this form is required by Navy Office but it is also essential to the ship's officers in assessing the position for their own purposes. The forms are to be forwarded direct to Director of Weapons, Department of the Navy, Melbourne.

(*i*) A common report for all departments is to be forwarded by signal in accordance with current instructions.

APPENDIX C—*continued.*

Reports.

28. Reports are to be forwarded on 1st March each year through the Administrative Authority to the Secretary, Department of Navy, giving a list of all three to five yearly examinations, modifications and alterations and additions (Ship's Staff and Dockyard) carried out during the preceding year and quoting the schedule and routine numbers for examination with registered numbers of equipments or units concerned.

Reporting of Defects.

29. (*a*) Defects of Gun Armament material (i.e. breech mechanisms, barrels, liners, &c.) will continue to be reported on forms S.1148(H) in accordance with established procedure.

(*b*) Defects on Gunnery and T.A.S. Equipment that are due to defective material and design are to be reported on form A.S. 2022 in accordance with current instructions.

(*c*) When forms S.1148(H) and A.S. 2022 are prepared there will normally be a corresponding form A.S. 2061Z and cross reference should be made.

30. Form A.S. 2061Z Defect Record combines the following functions—

(*a*) Initially records defects (in lieu of defect book).

(*b*) Reports outstanding dockyard defects to Administrative Authority and to refitting authority.

~~(*c*) Reports completion of outstanding Dockyard Defects to Administrative Authority.~~

(*d*) Provides for ship's staff a permanent record of the defects which have occurred on individual equipments.

(*c*) Provides material for the statistical analysis of defects at Navy Office and defect history including break-downs of all equipments.

31. In order that these functions can be carried out effectively it is important that Defect Record Forms are completed accurately. The top headings are for the purpose of identifying the defective equipment and are to contain sufficient information to do this positively.

(*a*) When completing the right hand column write " NO " in the space provided if the defect was not found in the course of planned maintenance. Otherwise write the schedule number and frequency. Remember that if the equipment has broken down in service, or has been withdrawn from service involuntarily to prevent further damage, it is deemed to have been tendered unserviceable by the defect. Answer the question accordingly. In the event of such a failure, consideration should be given to reporting the occurrence on form A.S. 2022—Report of defective material and design.

(*b*) In addition to the requirements of paragraph 30 a defect record form A.S. 2061Z is to be prepared whenever a gunnery firing takes place. If the shoot or recording arrangements are affected by mechanical failures including mishandling or wrong assembly the nature of each failure and the action taken to remedy it is to be clearly stated on

APPENDIX C—*continued.*

separate forms. In such cases the form will be a triplicate of that proposed in accordance with paragraph 30. If the shoot is free of mechanical failures a form A.S. 2061Z is to be endorsed accordingly.

(*c*) The form A.S. 2061Z prepared in accordance with paragraph 31 (*b*) is to be given to the gunnery officer for inclusion in the analysis of firing.

(*d*) Administrative Authorities should add their remarks to the back of the defect forms forwarded to Navy Office.

Instructions for Using the Defect Record Forms A.S. 2061Z.

32. When a defect arises which will be made good by Ship's staff, or is found in the course of planned maintenance an A.S. 2061Z is to be raised in duplicate. At this stage the form is given a serial number by which it can be identified. Disposal of copies is then as follows—

Original and Duplicate	Placed in red marker card and plastic envelope and inserted in a vacant space on the planning board.

33. When the defect is taken in hand the original, is passed to the rating concerned, in the plastic envelope together with a plain card for support. The duplicate remains in the planning board with the marker card which is tagged with the rating's name. When the defect has been made good the original is completed by the rating concerned and returned to the office. The information recorded on the original copy is then transcribed to the duplicate. Disposal of forms is as follows—

Original	Placed in ship's file for equipment.
Duplicate	Placed in bundle for weekly despatch to Director of Weapons, Department of the Navy.

Dockyard Defects.

34. For dockyard defects A.S. 2061Z is raised in triplicate and initial disposal of forms is as follows—

Original	Filed in ship pending preparation of the defect list.
Duplicate	Placed in weekly bundle for despatch direct to refitting authority.
Triplicate	Placed in bundle for weekly despatch to Administrative Authority.

After completion of the defect by dockyard the duplicate is returned to the ship, the original and duplicate forms completed with details of repair, any appropriate remarks and date of completion. If man-hours figures become available they should be inserted in the space provided. Disposal of the forms is then as follows—

Original	Placed in ship's file for equipment.
Duplicate	Placed in bundle for weekly despatch ~~to Administrative Authority~~.

deleted with N.O 14/62

APPENDIX C—*continued.*

Action by Administrative Authority.

35. Defect forms for outstanding dockyard defects will be held by the Administrative Authority pending receipt of completed copy. On receipt of this copy the outstanding form is to be cancelled and destroyed, the completed copy being forwarded to Navy Office. This procedure ensures that the Administrative Authority is aware of outstanding dockyard defects in ships, and provides Navy Office with material required for study of the relationship between maintenance and the incidence of defects.

Note:—When using form A.S. 2061Z it is important that the nature of the defect is clearly stated.

Do **not use** this form for work which could properly be classed as planned maintenance. If no maintenance routine is scheduled, propose one.

(D.C.C. 1209/51/2.)

(*Navy Orders* 946 *of* 1958 *and* 512 *and* 678 *of* 1959 *and* 54 *of* 1960.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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C.N.O.'s 189-204/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
15th March, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

1332/60.

CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED.

189.—Courses in Moral Leadership.

Courses in moral leadership are conducted on a joint Navy-Army basis and have as their aim the strengthening of the Christian faith and moral principles of members of the Services, thus enabling them to exercise a more positive Christian influence on others. It is considered that by strengthening the spiritual qualities which are the basis of morale, discipline and fighting spirit, the courses will confer considerable benefit upon the Services and the nation as well as upon the individual.

2. In the selection of personnel for the courses, consideration is to be given to the character and sincerity of applicants, and to their capacity for exercising influence on their messmates in their daily life. Key personnel should be encouraged to attend.

3. The courses are open to all officers, ratings and WRANS (as appropriate) serving in shore establishments in New South Wales and Victoria who may volunteer to attend and whose applications are recommended by their Chaplains and approved by the Commanding Officers.

4. The courses are conducted in the following denominational groups—

(*a*) Roman Catholic
(*b*) Church of England
(*c*) Other Protestant Denominations

and under the direction of the appropriate Chaplains. Separate courses are held for women members.

5. The courses consist of lectures, discussions and films with emphasis on group discussion. Each course lasts ten consecutive days—week-end leave is restricted.

6. A notation "attended Moral Leadership Course No....." is to be made on service certificates and Officers' records as appropriate, for those attending these courses.

7. The programme of courses for 1960 is as set out in the Appendix. Venue for New South Wales courses will be signalled.

8. Navy Order 286 of 1959 is hereby cancelled.

APPENDIX.

The following moral leadership courses will be held during 1960—

For women (5 from the Navy, 15 from the Army) at 30 W.R.A.A.C. Barracks, Mount Martha, Victoria.

Course No.	*Dates.*	*Denomination.*	*Applications Close.*	*Personnel Eligible.*
33 ..	23 May–3 June	C. of E. ..	11 April (Naval Board)	W.R.A.N.S. in East Australian Area and Victoria
34 ..	19 Sept.–30 Sept.	O.P.D. ..	15 Aug. (Naval Board)	
38 ..	24 Oct.–4 Nov.	R.C. ..	16 Sept. (Naval Board)	

APPENDIX—*continued.*

For men (15 from Navy, 25 from Army) at either 5 R.D., Randwick or North Head.

Course No.	*Dates.*	*Denomination.*	*Applications Close.*	*Personnel Eligible.*
39 ..	18 July–29 July	O.P.D. ..	6 June (F.O.I.C.E.A.)	Officers and ratings in East Australian Area
40 ..	1–12 Aug.	R.C. ..	24 June (F.O.I.C.E.A.)	
41 ..	15–26 Aug.	C. of E. ..	4 July (F.O.I.C.E.A.)	

For men (15 from Navy, 25 from Army) at F.N.D., Victoria.

Course No.	*Dates.*	*Denomination.*	*Applications Close.*	*Personnel Eligible.*
35 ..	12–23 Sept.	R.C. ..	1 Aug. (Naval Board)	Officers and ratings in Victoria
36 ..	26 Sept.–7 Oct.	C. of E. ..	12 Aug. (Naval Board)	
37 ..	17 Oct.–28 Oct.	O.P.D. ..	5 Sept. (Naval Board)	

(D.P.S. 323/1/2.)

(*Navy Order* 286 *of* 1959.)

UNCLASSIFIED.

190.—Sea Venom Pilots—Catapult Indoctrination.

Sea Venom pilots without catapult take-off experience are to be given a demonstration flight, as a passenger in a Sea Venom, before their first solo accelerated take-off.

2. Navy Order 416 of 1958 is hereby cancelled.

(D.A.W.O.T. 4006/23/123.)

(*Navy Order* 416 *of* 1958.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

191.—Electric Cables—Use in H.M.A. Ships and Establishments.

In practically all classes of existing ships it is essential to save weight whenever possible. To assist in this direction the greatest possible use must be made of polychloroprene (P.C.P) sheathed electric cables in preference to lead sheathed types. A list of equivalent lead cased and P.C.P. cables for the more commonly used patterns is shown in the appendix to this order.

2. Any replacement of, or addition to, the wiring in H.M.A. ships of the classes listed below must be carried out with P.C.P. sheathed cables to the maximum extent feasible even though this may be attended by additional work in the replacement of or alteration to glands, clips, &c.—

(*a*) Aircraft carriers
(*b*) Cruisers
(*c*) Destroyers
(*d*) Frigates
(*e*) Survey ships
(*f*) Minesweepers
(*g*) Submarines.

3. It will be necessary to continue the use of lead sheathing for the following purposes—

(*a*) As a screening medium for circuits susceptible to interference, or those liable to cause interference, as defined in the appropriate specifications or drawings.
(*b*) For cables entering the type of watertight equipment where plumbing of the gland to the cable sheath is required.

Although existing drawings or instructions may specify lead sheathed cables for other than the foregoing services, equivalent P.C.P. patterns must be used as far as practicable.

4. To implement the requirements at paragraph 3 and for those requirements only, stocks of the following limited range of lead cased cables which have P.C.P. equivalents will continue to be made available—

(*a*) *Varnished Cambric Cables*

Pattern No.	*Pattern No.*	*Pattern No.*
13968	13974	13976
13973	13975	

(*b*) *Rubber Insulated Cables*

Pattern No.	*Pattern No.*	*Pattern No.*
6178	12352	2525
6191	12353	2527
6192	12355	2530
6193	12356	2533
6194	2520	2534
6195	2521	2540
6199	2522	2500
12350	2523	2501
12351	2524	

5. Stocks of the cables listed in paragraph 4 will be maintained at a comparatively low level, and in consequence, expected requirements for large quantities of any particular pattern should be reported in sufficient time to enable special procurement to be effected where necessary. When lead cased cable is considered essential to make good defects in H.M.A. ships, details should be reported by signal to the appropriate dockyard as soon as the requirement is known.

6. P.C.P. sheathed cables are also to be used in lieu of lead sheathed cables for the wiring of ship-type equipment installed in establishments when existing stocks of lead cased cables become exhausted.

7. When replacing lead sheathed varnished cambric insulated cables by P.C.P. sheathed varnished cambric types, the replacement cable may be of the same conductor cross section despite the fact that published current ratings for the P.C.P. sheathed cables are lower than those for lead covered cables.

8. The foregoing instructions do not affect any existing instructions in the use of paper insulated, wire braided cables, or steel wire armoured cables or special flexing cables for certain services, nor do they apply to the Uni-Radio Series or the group of cables used mainly for office wiring, e.g. cables to DEF.10.

9. In order to reduce to a minimum the possibility of failure of all types of cables in service and, at the same time enable existing stocks to be expended wherever possible, the following policy is to be used to determine the permissible age of cables, other than mineral insulated copper sheathed and paper insulated types, for installation in H.M.A. ships and establishments.

(*a*) *New Construction and New Shore Installations*—Cable to be no more than 5 years old when the ship or installation is scheduled for completion.

(*b*) *Large Refits and Conversions*—Cable to be no more than 5 years old if ship has expected life of about 10 years or more.

(*c*) *Normal Refits and Defects*—As for 9(*b*) except for—

(i) Local wiring for which cable up to 8 years of age may be used.

(ii) Unimportant services for which cable over 10 years of age may be used provided the insulation resistance is not less than 75% of that specified and that examination of insulant and sheath shows these to be in satisfactory condition.

10. The above policy is based on an estimated service life of 15 years for all cables with exception of paper insulated types which have an estimated life of at least 20 years, and mineral insulated, copper sheathed types which have an indefinite life only limited by the condition of the copper sheath.

11. Paper insulated cable of over 10 years of age is therefore not to be used in New Construction but will be permitted for refits and conversions provided the insulation resistance is not less than 75% of that specified and that examination of insulant and protective covering shows these to be in satisfactory condition.

12. It has been decided that where the weight saved from the use of polychloroprene cable in H.M.A. ships is in excess of 200 lb., the figure is to be reported to Navy Office through the appropriate authorities.

Appendix.

ELECTRIC CABLE.

Patterns affected by the change-over from lead sheathed to P.C.P. sheathed cables.

Standard Electrical Specification—No. 17 *Part I.*

Table 1.—*Single Core, Rubber Insulated Cables.*

Lead Sheathed Cables.	*P.C.P. Equivalents.*		*Lead Sheathed Cables.*	*P.C.P. Equivalents.*	
6178	30009	Electric Light and Power Circuits, &c.	6194	24274	Electric Light and Power Circuits, &c.
6191	24271		6195	24275	
6192	24272		6196	24276	
6193	24273				

Appendix—*continued.*

Table 2.—*Twin and Multicore, Rubber Insulated Cables.*

Lead Sheathed Cables.	*P.C.P. Equivalents.*		*Lead Sheathed Cables.*	*P.C.P. Equivalents.*	
2500	24237	Fire Control Services, &c.	2536	24242	Fire Control Services, &c.
2501	24238		2537	24243	
2507	24247		2538	24244	
2520	24229		2540	24245	
2521	24230		2543	24246	
2522	24231		6109	24248	
2523	24232		12350	24221	
2524	24233		12351	24222	
2525	24234		12352	24223	
2527	24235		12353	24224	
2530	24236		12354	24225	
2533	24239		12355	24226	
2534	24240		12356	24227	
2535	24241		12357	24228	

Standard Electrical Specification.—No. 17 *Part IV.*

Table 1.—*Single Core, Varnished Cambric Insulated Cables.*

Lead Sheathed Cables.	*P.C.P. Equivalents.*		*Lead Sheathed Cables.*	*P.C.P. Equivalents.*	
13963	None	Electric Lighting and Power Circuits, &c.	13971	13507	Electric Lighting and Power Circuits, &c.
13964	13500		13972	13508	
13965	13501		13973	13509	
13966	13502		13974	13510	
13967	13503		13975	13511	
13968	13504		13976	13512	
13969	13505		13977	12376	
13970	13506				

Table 2.—*Twin and Three Core, Varnished Cambric Insulated Cables.*

Lead Sheathed Cables.	*P.C.P. Equivalents.*		*Lead Sheathed Cables.*	*P.C.P. Equivalents.*	
12340	12341	Electric Lighting and Power Circuits, &c.	13455	24250	Electric Lighting and Power Circuits, &c.
12373	30136		13456	24251	
12374	None		13457	24252	
12711	24255		13458	24253	
12712	24256		13459	24254	
12713	24257		13471	30133	
12714	24258		13472	30135	
13450	30130		24268	24249	
13451	30131		24269	24259	
13452	30132		24270	24260	
13454	30134				

APPENDIX—*continued.*

Table 3.—Multicore, Varnished Cambric Insulated Cables.

Lead Sheathed Cables.	*P.C.P. Equivalents.*		*Lead Sheathed Cables.*	*P.C.P. Equivalents.*	
13871	13528	D.G. of H.M.A. ships	13893	13548	D.G. of H.M.A. ships
13872	13529		13894	13549	
13873	13530		13895	13550	
13874	13531		13896	13551	
13875	13532		13897	13552	
13876	13533		13898	13553	
13877	13534		13899	13554	
13878	13535		13900	13555	
13879	13536		13901	13556	
13880	13537		13902	13557	
13881	13538		13903	13558	
13882	13539		13904	13559	
13885	13540		13905	13560	
13886	13541		13906	13561	
13887	13542		13907	13562	
13888	13543		13908	13563	
13889	13544		13993	30085	
13890	13545		13994	30086	
13891	13546		13995	30087	
13892	13547		13996	30088	

(D.E.E. 519/73/50.)

UNCLASSIFIED.

192.—Radio and Electronic Equipment—Routine Operation to Reduce Deterioration and Failure Rate.

In peace-time conditions, when much of the radio and electronic equipment fitted in H.M.A. ships is not in continuous use, deterioration and failure may arise principally from the effects of moisture. The purpose of this order is to serve as a guide to practice designed to combat the problem. This practice pre-supposes that adequate inspection of spaces containing energized equipment can be arranged.

2. Measures taken hitherto to combat the moisture problem, e.g., the provision of heaters when equipment is switched off; early switching on before equipment is required for operational use; periodic switching on when equipment is not required for operational use have not provided, in all cases, a satisfactory solution. While those measures should continue to be employed where necessary, it is considered that advantage is to be gained by keeping in a permanently energized state, as much radio and electronic equipment as possible.

3. Captains of H.M.A. ships are, therefore, recommended to implement the latter measure to the fullest extent practicable remembering that with weapon systems care must be taken to avoid mechanical jitter or other such movements conducive to wear and consequent backlash.

4. The particular attention of everyone concerned with energized radio and electronic equipment is drawn to B.R. 1257 (Ship Fire Fighting Manual) and especially chapter 3.4, chapter 11.25 and Appendix I. In radio equipment there is, inherently, a potential fire risk which is high relative to other installations. Arrangements must therefore be made to ensure that users and maintainers are fully aware of the necessity for taking prompt and effective action on discovering a fire in, or endangering a radio installation.

5. Careful attention is to be given to the ventilation of spaces housing energized (or otherwise heated) radio and electronic equipment, and to the state of self-contained air conditioning units sited in affected spaces. Ventilation should be no more than sufficient to prevent dangerously high temperatures in the hottest part of the equipment under normal operating conditions. Rapid changes of temperature of incoming air should be avoided, as this leads to condensation. Modern equipment is designed to operate at 70° C., and " hot spots " should not be in excess of this temperature.

6. In cases where power is not available, precautions must be taken to keep either the equipment, or the spaces in which it is installed, dry. Equipment which has been in this unenergized condition for some considerable time should be warmed before it is used operationally.

7. Care must always be taken to ensure that waveguides are dry before the sets of which they form a part are used operationally.

8. The general principles above should be followed in Shore Wireless and Naval Air Stations.

9. Navy Order 319 of 1958 is hereby cancelled.

(D.E.E. 4518/1/1335.)

(*Navy Order* 319 *of* 1958.)

UNCLASSIFIED.

193.—Introduction of Stainless Steel Wire Thread Inserts into the R.A.N.

It has been decided to authorize the repair of stripped internal threads by the fitting of stainless steel wire thread inserts.

2. Owing to the more frequent use of aluminium alloys and the necessity of using screws instead of studs and nuts, ships' Officers may authorize the fitting of wire inserts as a repair for stripped internal threads. In addition they may authorize this fitting where screws are likely to cause the stripping of internal threads.

3. It is not practicable to supply ships with the stores and facilities to carry this out, owing to the large variety of threads, sizes, and suitable lengths for each type and size, together with the special tools required for fitting.

4. When required, full details are to be furnished to the Dockyard as a defect as early as practicable before a refit showing—

(*a*) Items where inserts are required to be fitted.

(*b*) Numbers required.

(*c*) Size and type of thread.

(*d*) Thickness of material in which to be fitted.

5. Dockyards are to demand from Naval Stores the inserts necessary to carry out defects. Special tools required for fitting are also to be demanded for each particular size of insert required to be fitted if not previously held.

6. Dockyards are to make assessments from experience and forward recommendations to Navy Office for a permanent stock to be held of the most common sizes used if this is considered advantageous.

7. Superintending Naval Store Officers are to satisfy Dockyard requirements by purchase from local sources until the holding of permanent stocks have been resolved and approved.

8. The inserts are to be accounted for in class B, group 10, part F and the special tools in class B, group 11, part F.

(D.W. 505/61/23.)

UNCLASSIFIED.

194.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2618/1959.)

Navy Order 31 of 1960 is to be amended as follows—

Propellant Lot No.

Delete: " RNC 986XH ".

Insert in its stead: " RNP 986XH ".

(D.W. 729/57/34.)

(*Navy Order* 31 *of* 1960.)

UNCLASSIFIED.

195.—Gun Mountings—4.5 Twin R.P. 41 Mountings Mks. 6, 6* and 6* Mod. I—Prevention of Foul between Training Alignment Mark and Operating Gear for Cartridge Hoist Control Valve Interlock.

Consequent on completion of Vickers Mod. No. 246, interference may occur between the training alignment mark block, N.51450 item 11, and the cartridge hoist control valve interlock bolt operating tappet, item 28 of N.36467.

2. Ships and establishments holding the above equipments are to examine these items for scoring indicative of such fouling.

3. The mountings are to be trained to the bearings where interference could occur and the cartridge hoists operated.

4. If necessary, the thickness of the alignment mark block N.51450/11 may be reduced until satisfactory clearance is obtained.

5. The alignment mark pointer, N.51450 item 13, on the revolving structure is then to be bent to maintain a clearance of 0.05-ins. between it and item 11.

6. Care is to be taken that correct training alignment is maintained between the two marks.

(D.W. 736/259/14.)

UNCLASSIFIED.

196.—Guns (Other than Aircraft) Q.F. 4.5-in., Mark 5 Gun—Defective Cams, Retracting, BP 509—Action to Avoid Breakage.

(*A.F.O.* 132/1960.)

BP 509 Cam, retracting, Q.F. 4.5-in. mark 5 gun, is liable, because of its design, to burr and then fracture at the junction of its base and leaf and has led on occasion to gun stoppage and other damage.

2. To avoid fractures, staffs of H.M.A. ships should specially examine this item, when preparing guns for firing, remove any burrs and dress the edges to ensure movement of the cam in the crank body.

(D.W. 706/51/23.)

UNCLASSIFIED.

197.—Naval Armament Stores—Introduction of Vacuum-Sealed Containers

(*A.F.O.* 3094/1959.)

The introduction into service and details regarding vacuum-sealed containers N7, for packing Detonators N5 used with Charges, Demolition, SC., 1-lb., were promulgated in Navy Order 534 of 1958 (*title as above*).

2. It has been reported that a large quantity of the Detonators are being destroyed at R.N. Armament Depots having been returned by H.M. Ships in containers which have been opened.

3. Attention is drawn to paragraph 3 of Navy Order 534 of 1958 which emphasized that the containers should not be opened, unless and until the contents are actually required for use. Detonators returned in opened cylinders cannot be issued again and have to be scrapped.

(D.W. 735/52/39.)

(*Navy Order* 534 *of* 1958.)

UNCLASSIFIED.

198.—Torpedo Tubes—P.R. Mark 4—Repair and Prevention of Corrosion Battle and Daring Class Destroyers.

Reports have been received of corrosion occurring to the P.R. mark 4 aluminium alloy torpedo tubes fitted in H.M.A. Battle and Daring Class Destroyers.

2. In order to repair any defects which have occurred and to minimize the effects of corrosion in the future, ships and authorities concerned are to arrange for the following work to be carried out—

(*a*) All corroded areas on the actual tubes are to be built up with inert arc welding (argon arc) using a filler rod depositing a similar alloy to that of the tube. Until inert arc welding can be undertaken, the areas are to be thoroughly cleaned by wire brushing or sand blasting, degreased and sealed off with Araldite. Where local pitting of the torpedo tubes exceeds .125-in. depth (i.e. half the tube thickness) or where extensive pitting has occurred in a longitudinal direction and is of average depth greater than .0625-in., the tubes should not be fired until they have been repaired by welding.

(*b*) Stop Valve, Charging Valve and Range Spindle Access pads on all tubes are to be modified by the fitting of stainless steel wire thread inserts, which should be obtained as required from the nearest Gunnery Equipment Store. The threads in the aluminium pads are to be coated with pattern 4945 barium chromate paste on assembly, and all securing bolts are to be cadmium plated.

(*c*) Existing mild steel cable guard plates, cable clips and screws are to be replaced by guard plates and clips made of aluminium with composition similar to that of the tube, which should be secured with zinc plated or cadmium plated mild steel screws.

(*d*) Existing mild steel cable glands in the tube girders are to be replaced by bushes of Tufnol (N.S. pattern synthetic resin bonded insulating paper).

(*e*) The local firing steel turret is to be lifted clear of the torpedo tubes, and the area of corrosion between the turret and the tubes is to be cleaned off and re-painted with yellow zinc chromate primer. When replaced, the turret is to be kept clear of the torpedo tubes by fitting ¼-in. thick Tufnol washers between the turret and the tubes in way of the securing bolts. These bolts are to be cadmium or zinc plated.

Note:—In R.A.N. ships, the local firing turret is made of aluminium alloy but is fitted with a steel angle base.

(*f*) All torpedo tubes are to be lifted clear of the carriage, surfaces throughly cleaned, any deficiency in the zinc coating made good, and a polythene joint .03-in. thick fitted under each tube foot, with a ¼-in. thick Tufnol washer under the head of each holding down bolt. These bolts are to be cadmium or zinc plated. Drain holes, ½-in. diameter, are to be drilled in the carriage between the tube feet to ensure that salt water does not remain in contact with the joints.

If repairs are to be made to corroded Support Feet, Drawing No. D.O.U.W. A/74119 is to be strictly adhered to.

(*g*) Brass screws securing tally plates, &c., are to be replaced in mild steel which is cadmium or zinc coated. Brass tally plates are to be replaced in aluminium having a composition similar to that of the tube. Yellow zinc chromate primer is to be used on assembly.

(*h*) Brass clips and screws securing the copper pipes from the firing gear to the top stops and the brass Arens control pipes are to be removed and the pipes insulated with a serving of pattern 15067 P.V.C. tape. The pipes are to be re-secured by cadmium or zinc plated mild steel clips and screws. Screws and nuts may be used if necessary, provided that the head of the screw inside the torpedo tube does not project beyond the surface of the torpedo guide strip. Insulating pads are to be fitted underneath the clips, and are to be of hardwood or Tufnol, approximately ¼-in. thick. A hygroscopic material such as leather is not to be used. The clips, pads and screws are to be coated with yellow zinc chromate primer.

(*i*) Torpedo tube lip end securing bolts and nuts are to be replaced with cadmium or zinc plated bolts and nuts.

(*j*) Rear door stop rubbers are to be secured with cadmium or zinc plated screws.

(*k*) Pistol pocket access door hinges are to be fitted with 2 in number pattern 4986 grease nipples in accordance with Drawing No. T.P. 15987(AN).

(*l*) The channel plating under the rear end of each mounting is to be renewed as necessary.

(*m*) All surfaces exposed for repairs are to be repainted with two coats of like pattern 5362 yellow zinc chromate primer followed by one coat of like pattern 5342 grey undercoat and one coat of like pattern 4941C grey paint.

3. Where possible, the work of preservation should be progressed by ship's staff. Where Dockyard assistance is necessary, items should be included in the Defect Lists, specifying the defects. It is desired to emphasize the importance of arresting corrosion in its early stages and every effort should be made to ensure that the work involved is carried out at the earliest opportunity.

4. This order supersedes the instructions given in Admiralty letter D.21127/54 dated 25th February, 1955, and Admiralty letter D.16861/55 dated 29th September, 1955.

(D.W. 4431/13/90.)

UNCLASSIFIED.

199.—Naval Stores—Accounting—Squadron Mobile Equipment.

Squadron Mobile Equipment (including Air Stores and Publications) is required to be accounted for on forms A.S. 1099, in accordance with A.B.R. 4 article 1913. Subsequent transactions in Permanent Stores should be dealt with in the same manner as for tenders, *vide* A.B.R. 4 article 1902 paragraphs (4) to (13). A.B.R. 4 article 1913 will be amended accordingly.

(D.N.A.S. 4401/34/11.)

UNCLASSIFIED.

200.—Naval Stores (Air)—R.A.F. Vocab. Section 27KC—Powered Operated Controls—Transfer to Sections 27KF, 27KH, 27M, &c.

(*A.F.O.* 3033/1959.)

The items at present held under Section 27KC are to be transferred as detailed below—

(*a*) The following to Section 27KF under their existing reference numbers—

216, 221 to 224	975 to 978
230, 233 to 236	994 to 1002
239 to 242	1016, 1017
244 to 247	1075, 1076
249, 250	1185, 1218, 1236
253, 255	1302, 1414, 1417
260 to 264	1434 to 1444
266, 267	1498, 1547, 1621
269 to 280	1625 to 1632
310 to 315	1946 to 2272
317, 318	2317 to 2353
523, 531, 536	2364 to 2367, 2438
538, 544, 552	2666, 2688, 2700 to 2713
555 to 558, 638	2718, 2803, 2809 to 2811
644, 646, 647	2832, 2833, 2836 to 2840
665, 683 to 688	2843 to 2860
691 to 693	2881, 2896 to 2899
695 to 698	2965 to 2967
700, 701, 717	3099 to 3101
719, 721	3132
813 to 822	

(*b*) The following to Section 27KH under their existing reference numbers—

841, 1132, 1143	2362
1334, 1446, 1491	2441 to 2496
1505 to 1508	2648, 2649
1681, 1686, 1688	2781, 2782
1690, 1693 to 1695	2792 to 2802
1699, 1702, 1708 to 1945	2887 to 2889
2273 to 2298	

(*c*) The following as shown below—

Old Ref. No.	*New Ref. No.*	*Old Ref. No.*	*New Ref. No.*
Section 27KC	Section 27DL	350	11190
346	5611	351	11191
		356	11195
Section 27KC	Section 26FY	358	11197
347	2259	359	11198
Section 27KC	Section 27M	661	11199
		662	11346
Major items	Major items	740	11207
354	1193	742	11209
660	859	743	11210
663	860	791	11254
Minor items	Minor items	979	11271
292	11151	980	11272
321	11161	1281	11345
323	11163	1282	11287
324	11164	1501	11293
325	11165	1503	11295
326	11166	1504	11296
328	11168	1511	852
329	11169	1618	855
330	11170	Tools—	Tools—
331	11171	671	11309
332	11172	672	11310
333	11173	673	11311
334	11174	674	11312
337	11177	675	11313
338	11178	676	11314
339	11179	677	11315
340	11180	678	11316
341	11181	679	11317
342	11182	680	11318
343	11183	681	11319
344	11184	682	11347
345	11185	810	11348
348	11188	811	11349
349	11189	812	11350

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with article 1812 (*a*) and (*b*) of A.B.R. 4 (Naval Store Keeping Manual).

3. A.B.R. 4 will be amended.

(D.N.A.S. 603/77/149.)

UNCLASSIFIED.

201.—Naval Stores (General) (Class E, Group 5)—Standard Diving Equipment—Revised Allowances.

The interim allocation of Standard Diving Equipment has been reviewed and the revised allowances are as follows—

F.O.I.C.E.A. (for Sub-Sunk)	2 sets.
H.M.A.S. WATSON (for Diving School)	3 sets.
G.M.W.D.	1 set.

2. Equipment held in excess of the above allowances should be returned to store.

3. Sets of Standard Diving Equipment will be maintained as special reserves at the following Naval Store Depots—

Sydney	10 sets.
Melbourne	2 sets.
Fremantle	2 sets.

(D.N.A.S. 512/74/30.)

UNCLASSIFIED.

202.—Rationalization of Photographic Equipment.

With a view to rationalizing photographic equipment in the R.A.N., all ships and establishments are required to furnish returns (in duplicate) detailing all photographic equipment (permanent items of Naval Stores, Class F, Group 5) held on charge as at 31st December, 1959.

2. The returns should be forwarded through the respective administrative authorities and despatched so as to reach Navy Office, Canberra, not later than 31st March, 1960.

(D.N.A.S. 519/55/41.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

203.—Canned Meat Packs for the R.A.N.

To provide a greater variety of canned meat packs for use in the R.A.N., the range of items available has been amended by the addition of five new packs and the deletion of meat and vegetable ration. The items available have been divided into two categories, as follows—

Category " A "—Stocks will normally be maintained in Victualling Yards.

Corned beef	12-oz., 2-lb. and 6-lb. cans.
*Lamb and green peas	16-oz. cans.
*Casserole steak	16-oz. cans.
Meat paste	2-oz. cans.

Category " B "—Purchase will be arranged by (S) Victualling Store Officers as required to meet demands lodged by H.M.A. ships and establishments.

Camp pie	12-oz. cans.
Ox tongues	6-lb. cans.
Pork sausages	30-oz. cans.
Sheep's tongues	12-oz. cans.
Steak and kidney pudding	16-oz. cans.
Boiled beef and carrots	16-oz. cans.
*Sausages and vegetables	16-oz. cans.
*Mince and spaghetti	16-oz. cans.
*Meat, bacon and beans	16-oz. cans.

2. In demanding items in Category " B ", H.M.A. ships and establishments should give maximum possible notice to the (Suptg.) Victualling Store Officer concerned to enable purchase to be arranged.

3. Fixed issuing prices for the items marked with an asterisk will be promulgated at a later date. Pending such advice, issues of these items are to be charged for in accordance with C.O.R. article 420 clause 2.

(D.V. 912/95/9.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

204.—Books—B.R. 125—Lloyds Register of Shipping—Volumes I, II, III and IV (1959-60) Editions and Superseded Copies.

The following revised establishment for B.R. 125 Lloyds Register of Shipping—Volumes I, II, III and IV (1959–60 Edition) has been approved—

Volume I (1959–60 *Edition*).

F.O.C.A.F.	D.N.I.
F.O.I.C.E.A.	D.M.E.
N.O.I.C. (Q)	S.O. (T.).
Capt. D9	N.O.I.C. (Vic.).
Capt. D10	N.O.I.C. (W.A.).
Capt. F1	N.O.I.C. (S.A.).
	N.O.I.C. (Tas.).

Volume I (*Superseded Edition*).

H.M.A.S. ANZAC.
H.M.A.S. VOYAGER.
H.M.A.S. VAMPIRE.
H.M.A.S. QUIBERON.
H.M.A.S. QUICKMATCH.

Volume II (1959–60 *Edition*).

F.O.I.C.E.A.	S.O. (T.).
D.M.E.	G.M.W.D.

Volume II (*Superseded Edition*).

N.O.I.C. (Vic.).
N.O.I.C. (W.A.).
N.O.I.C. (S.A.).
N.O.I.C. (Q.).

Volume III (1959–60 *Edition*).

F.O.I.C.E.A. .. .. S.O. (T.).

Volume III (*Superseded Edition*).

N.O.I.C. (Vic.).
N.O.I.C. (W.A.).

Volume IV (1959–60 *Edition*).

F.O.I.C.E.A.	D.M.E.
	S.O. (T.).

Volume IV (*Superseded Edition*).

G.M.W.D.
N.O.I.C. (Vic.).
N.O.I.C. (W.A.).

2. Any copies held in excess of the approved allowances should be returned to the S.N.S.O., Sydney.

3. Allowances will be further revised on the expected publication, late in 1960, of Allied Logistic Publication No. 4 (ALP4) " Particulars of Seagoing Merchant Ships " which will contain most of the information contained in B.R. 125, together with certain additional information.

(D.N.A.S. 465/57/16.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

1332/60.—2

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
16th March, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

205.—Books—Distribution of Non-accountable Publications during January, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series, contained in the appendix to this order, have been distributed to ships and services during January, 1960. Section 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " series amendments and A.P. amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	6th November, 1959.
Aeroplane	13th November, 1959.
Aeroplane	20th November, 1959.
Aeroplane	4th December, 1959.
Aeroplane	11th December, 1959.
Aeroplane Index	January–June, 1959.
Aircraft	Volume 39, No. 4, January, 1960.
Australian Joint Service Telecommunications, Components and Valves	S/N 42—November, 1959. S/N 43—December, 1959.
Braganza	September, 1959, No. 2.
D.E.F. 1234	Amendment 8.
E.M.E.I.'s Telecommunication F.569–1	Issue No. 1, dated 27th November, 1959.
Fibres and Plastics	Volume 20, No. 10, November, 1959.
Flight	30th October, 1959.
Flight	6th November, 1959.
Flight	13th November, 1959.
Flight	20th November, 1959.
Flight	27th November, 1959.
Flight	4th December, 1959.
A Guide to Optimum Frequencies	February, March, April, 1960.
Joint Services Recognition Journal	Volume 14, No. 9, September, 1959.
Joint Services Recognition Journal	Volume 14, No. 10, October, 1959.
Journal of the Institute of Navigation	Volume XI., No. 3, July, 1958 Volume XI., No. 4, October, 1958 Volume XII., No. 1, January, 1959 Volume XII., No. 2, April, 1959.
Journal of Naval Engineering	Volume 12, No. 1, June, 1959.
Journal of R.N. Scientific Services	Volume 14, No. 5, September, 1959.
Manual of the Audit Act and Treasury Regulations	Issue 13, dated 10th September, 1959.
United Nations Review	Volume 6, No. 5, November, 1959.
United States Naval Institute Proceedings	Volume 85, No. 11, November, 1959.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
B.R. 1	26.
B.R. 11	1.
B.R. 16	39.
B.R. 70	September, 1959, Supplement.
B.R. 70	October, 1959, Supplement.
B.R. 91B/1958	Amendment 3.
B.R. 100/1958	2.
B.R. 122 (19th Edition, 1958)	Supplement No. 9.
B.R. 125—1959/60	Supplement No. 5, November, 1959.
B.R. 125—1959–60	New Entries No. 5, November, 1959.
B.R. 128 (1)	Supplement No. 3.
B.R. 155C (3)	Amendment No. 4.
B.R. 155C (4)	Amendment No. 2.
B.R. 226C (10)	4.
B.R. 664	32.
B.R. 763	Supplement No. 1 to the Preface.
B.R. 763	Supplement No. 1 to Volume 3.
B.R. 922/58	Australian Amendment No. A.N.I.
B.R. 923	Amendment 1.
B.R. 1047—1959	1.
B.R. 1203—Part III.	1.
B.R. 1492B	17.
B.R. 1545	10.
B.R. 1613	4.
B.R. 1709 (1)	Erratum to Amendment 20.
B.R. 1714	4.
B.R. 1768 (1) to (5)	15.
B.R. 1837 (3), Division R, Section R.D.	5.
B.R. 1837 (3), Division R, Section R.P.	3.
B.R. 1837 (3), Division R, Section R.V.	5.
B.R. 1837 (3), Division R, Section R.W.	5.
B.R. 1837 (3), Division R, Section R.X.	5.
B.R. 1837 (3), Division R, Section R.Y.	5.
B.R. 1837 (3), Division S, Section S.A.	5.
B.R. 1837 (3), Division S, Section S.B.	5.
B.R. 1837 (3), Division S, Section S.D.	5.
B.R. 1837 (3), Division S, Section S.G.	4.
B.R. 1837 (3), Division S, Section S.H.	5.
B.R. 1837 (3), Division S, Section S.V.	3.
B.R. 1837 (4), Division U, Section U.F.	3.
B.R. 1837 (4), Division U, Section U.K.	4.
B.R. 1837 (4), Division U, Section U.Q.	4.
B.R. 1837 (4), Division U, Section U.R.	4.
B.R. 1837 (4), Division U, Section U.S.	3.
B.R. 1837 (4), Division U, Section U.T.	3.
B.R. 1837 (4), Division U, Section U.V.	3.
B.R. 1837 (4), Division U, Section U.X.	2.
B.R. 1870 (1)	Amendments 2 and 3.
B.R. 1870 (2)	Amendments 2 and 3.
B.R. 1917S	2.
B.R. 1917 (1)	40.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 1917 (2)	42.
B.R. 1917 (2A)	29.
B.R. 1925	11.
B.R. 1928	47.
B.R. 1948/54	Australian Amendment No. A.N.I.
B.R. 1988	Amendments 22 and 23.
B.R. 2065 (6)	5.
B.R. 2065 (10)	1.
B.R. 2092	3.
B.R. 2101 (3)	7.
B.R. 2127	10.
B.R. 2133	2.

DISTRIBUTION OF A.F.O. "S.C." SERIES, ETC.

Publication.	*"S.C." No.*	*Amendment No.*
A.T.P. 10	—	Correction No. 2.
A.T.P. 16	—	Change No. 1.
A.C.P. 124B	—	Change No. 1.
A.C.P. 131	S.C. 2/60	R.N. Correction No. 4.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
1086, Book 2 (2nd Edition)	A.L. 91.
1181, Vol. 2	(A.L. 95)–B.74 (Alt. 1 inc.)
	(A.L. 94)–B.76 (Alt. 1 inc.)
	(A.L. 91)–B.78
	(A.L. 92)–B.79
	(A.L. 93)–B.80
	(A.L. 96)–B.81.
1182 (N), Vol. 2	(A.L. 77)–C.25.
1182A, Vol. 2, Part 1	E.18
	E.19
	E.20
	G.9
	H.4.
1182C, Vol. 1	A.I.L. 2/59.
1182C, Vol. 2	(A.L. 77)–F.16.
1275A, Vol. 2	(A.L. 90)–B.2.
1275E, Vol. 2, Part 1	(A.L. 203)–H.66
	(A.L. 204)–H.67.
1275G, Vol. 2	(A.L. 137)–A.7 (Alts. 1–3 inc.).
1355, Vol. 2, Part 1	(A.L. 127)–D.133.
1374C, Vol. 2, Part 1	(A.L. 63)–Z.18.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1464D, Vol. 1	A.L. 199.
1464D, Vol. 2, Part 1	No. 39 (A.L. 1 inc.).
1464G, Vol. 2	No. 101
	No. 102.
1661, Vol. 2, Part 1	G.1.
1664A, Vol. 1	A.L. 149.
1664A, Vol. 2, Part 1	A.114
	A.115.
1803, Vol. 2, Part 1	B.49
	D.135 (A.L. 1 inc.)
	D.154
	E.104 (A.L. 2)
	E.108 (A.L. 1)
	E.114 (A.L. 1)
	E.125
	E.126
	E.129
	F.88.
1803A, Vol. 1	A.L. 62.
1803D, Vol. 1, Book 1	A.L. 57.
2029A/2441A, Vol. 3, Parts 1 and 4 (2nd Edition)	A.L. 2.
2234E, Vol. 2, Part 1	M.4 (Alt. 1 inc.).
2240A, Vol. 2, Part 1	No. 116.
2337, Vol. 1, Book 1	A.L. 46.
2337, Vol. 2	(A.L. 167)–A.32
	(A.L. 170)–C.61 (Alt. 1).
2538HA, Vol. 2, Part 1	(A.L. 123)–B.48.
2538Q, Vol. 2	(A.L. 5)–B.4.
2552J, Vol. 3	A.L. 7.
2552L, Vol. 2	(A.L. 23)–B.16 (Alt. 1).
2887N, Vol. 2	(A.L. 25)–B.18.
2887Q, Vol. 2	(A.L. 8)–B.6
	(A.L. 9)–B.7.
2892F, Vol. 2	(A.L. 80)–A.1
	(A.L. 81)–B.66 (Alt. 1)
	(A.L. 86)–B.67 (Alt. 1).
3042, Vol. 1, Book 1	A.L. 2.
3158, Vol. 2	(A.L. 479)–A.21
	(A.L. 484)–B.22 (Alt. 2 inc.)
	(A.L. 483)–B.28 (Alt. 3 inc.)
	(A.L. 482)–B.37 (Alt. 1)
	(A.L. 478)–J.6.
3358	A.L. 1 and 2.
4099J, Vol. 2	(A.L. 328)–H.15 (Alt. 3 inc.)
	(A.L. 330)–H.27
	(A.L. 326)–K.16.
4099J, Vol. 3, Part 2	A.L. 47 and 48
4121C, Vol. 2, Part 1	(A.L. 98)–F.11
	(A.L. 99)–G.9 (Alt. 1).
4282A, Vol. 1	A.L. 67.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4288, Vol. 2	(A.L. 317)–B.185 (Alt. 1) (A.L. 309)–B.230 (A.L. 312)–B.232 (A.L. 314)–B.234 (A.L. 316)–B.235 (A.L. 318)–B.236 (A.L. 319)–B.237 (A.L.320)–B.238 (A.L. 321)–B.239 (A.L. 300)–I.5 (A.L. 1 inc.).
4288, Vol. 4, Part 6 (N), Issue 2	A.L. 2.
4303B, Vol. 2	(A.L. 25)–B.19.
4303C, Vol. 2, Part 1	(A.L. 11)–B.8.
4320B, Vol. 2	(A.L. 102)–G.29.
4343, Vol. 1	A.L. 159.
4343A, Vol. 2	(A.L. 67)–B.6.
4343B, Vol. 2	(A.L. 133)–D.1 (A.L. 134)–P.21 (Alt. 1 inc.) (A.L. 130)–P.22.
4343C, Vol. 2	(A.L. 39)–Z.5.
4343D, Vol. 1, Book 2, Sections 7 to 13	A.L. 18.
4343D, Vol. 1, Book 3	A.L. 42, 43, 44, 45, 46 and 48.
4343D, Vol. 2	(A.L. 51)–I.1 (Alt. 1) (A.L. 53)–O.3 (A.L. 52)–V.1 (with Marker Card).
4343E, Vol. 4, Part 6	A.L. 19.
4343S, Vol. 1	A.L. 76.
4343X, Vol. 2	(A.L. 46)–X.1.
4361G, Vol. 2	(A.L. 153)–F.4 (Alt. 1) (A.L. 152)–P.12.
4677A, Vol. 1 and 6	A.I.L. 1/59.
N.A.M.O. Engines	A.L. 51 X.1 (Issue 8), Pages 5 to 10 (23/9/59). S.T.I./Double Mamba/4 (30/9/59) STI/Leonides Major/Index (23/9/59) STI/Propellers/Index, Pages 3 to 6 (23/9/59).
N.A.M.O. Gannet	A.L. 21 STI/Index (1/10/59) STI/58A (29/9/59).
N.A.M.O. General	STI/Instruments/85 (25/9/59).
N.A.M.O. Sea Venom	A.L. 22.
N.A.M.O. Westland Whirlwind	A.L. 13 X.1 (Issue 4) (21/9/59).
R.A.N.A.M.O. Dakota	A.2 (December, 1959) (Issue 2).
R.A.N.A.M.O. Double Mamba	SI/RAN/4 (December, 1959).
R.A.N.A.M.O. Ejection Seat	STI/RAN/11 (September, 1959).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
R.A.N.A.M.O. Firefly	SI/RAN/21 (November, 1959).
R.A.N.A.M.O. Gannet	A.16 (September, 1959) A.21 (November, 1959) STI/RAN/56 (August, 1959) (Issue 3) SI/RAN/13 (November, 1959) (Issue 2) SI/RAN/30 (November, 1959).
R.A.N.A.M.O. General	W.15 (Issue 2) (November, 1959) STI/Flying Clothing/RAN/9 (September, 1959) STI/Safety Equipment/RAN/13 (July, 1959).
R.A.N.A.M.O. Sea Venom	A.36 (June, 1959) A.38 (September, 1959) A.40 (December, 1959) STI/RAN/30 (September, 1959) (Issue 2) STI/RAN/63 (June, 1959) STI/RAN/66 (December, 1959) (Issue 2) STI/RAN/69 (October, 1959).
R.A.N.A.M.O. Sycamore	A.8 (November, 1959).
R.A.N.A.M.O. Vampire Trainer	A.16 (November, 1959) A.17 (November, 1959) STI/RAN/39 (July, 1959) STI/RAN/40 (September, 1959) STI/RAN/41 (September, 1959) STI/RAN/42 (December, 1959) STI/RAN/43 (November, 1959).
R.A.F. Flight Information Publications—Catalogue of Charts—Terminal Approach Procedures	A.L. 10 and 11 Charts 1, 2 and 3 (4/1/60).
R.A.F. Flight Information Publications—Terminal Approach Procedure Charts Far East Area, High and Low Altitudes	A.L. 2 to T.A.P. Check List (31/10/59) A.L. 3 to T.A.P. Check List (31/10/59) A.L. 4 to T.A.P. Check List (31/10/59).

Title.	*Date.*
Lloyds Shipping Index	4th January, 1960.
Lloyds Shipping Index	11th January, 1960.
Lloyds Shipping Index	18th January, 1960.
Lloyds Shipping Index	25th January, 1960.

(D.N.A.S. 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
18th March, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

1618/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

206.—Accidents—Power Operated Directors, Turrets and Mountings—Safety Precautions.

Despite the issue of frequent reminders, in the form of Navy Orders or amendments to Drill Books concerning the safety precautions to be observed when working with, or in the vicinity of, power operated mountings, potentially dangerous practices continue to be observed. Instances are still occurring, for example, of turrets being tuned with the rear door open and hooked back, of men entering moving turrets and of mountings being clutched to auto without a careful inspection around the mounting having been carried out. If these practices continue, sooner or later a serious accident will occur.

2. It is not thought that any useful purpose would be served by adding to the many visual or audible signs of danger that are at present in existence.

3. The Board wish however to emphasize two basic requirements—

(*a*) The need to ensure that all officers and ratings are made fully aware of the risks involved when in the vicinity of power-operated directors and mountings, this to be primarily the responsibility of all training establishments.

(*b*) The need for the strict observance of all existing rules and regulations on the subject, this being a normal responsibility of Commanding Officers.

4. Any infringement of these rules for safety must be regarded as endangering life.

5. Navy Order 283 of 1958 is hereby cancelled.

(D.W. 4227/99/32.)

(*Navy Order* 283 *of* 1958.)

UNCLASSIFIED.

207.—H.M.A.S. BANKS—Commissioning.

H.M.A.S. BANKS commissioned at Maryborough, Queensland on 16th February, 1960, under the command of Lieutenant D. M. Davidson.

(H.N.B. 1236/1/5.)

UNCLASSIFIED.

208.—Naval Public Relations—Television.

The use of commercial television for naval publicity is approved provided the material to be televised—

(*a*) does not contravene security regulations;

(*b*) does not involve Government or Naval Board policy;

(*c*) does not make known some fact which should first be announced by the Minister;

(*d*) is not introduced as being " by courtesy " of any commercial undertaking.

2. Subject to the prohibitions listed above, every effort should be made by Flag and Commanding Officers to use this medium for naval publicity.

3. Navy Order 368 of 1958 is hereby cancelled.

(C.N.P.R. 3474/15/2.)

(*Navy Order* 368 *of* 1958.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

209.—" Braganza "—Journal of Naval Gunnery.

Admiralty has advised that due to lack of support and material, the above publication has ceased.

2. Issue No. 2 of September, 1959, will be the last issued to R.A.N. ships and establishments.

3. Navy Order 1099 of 1959 is hereby cancelled.

(D.N.A.S. 465/58/31.)

(*Navy Order* 1099 *of* 1959.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

210.—Fire Control—Flyplane Electric Predictor Mark 3—Modification No. A.N.2.

(*a*) *Ships, establishments and authorities concerned* — Ships and establishments so fitted, gunnery equipment depots.

(*b*) *Type of equipment* .. F.E.P.3.

(*c*) *Purpose of modification* .. To correct deficiency in existing arrangements.

(*d*) *Nature of modification* ..
- (i) Servo 303. To fit an additional transformer 91/11554 with two 25K resistors (similar to the input stage of a mark 1 cathode follower) across 1T and 2T of the deflection resolver.
- (ii) Servo 305. To fit a potentiometer pattern W.9981 and capacitor pattern Z112513 for control of Tacho feedback.
- (iii) A.F.B. unit No. 1. To short out capacitor C4 (integrated range rate).
- (iv) S.U. relay No. 5. To bridge out contacts to enable slewing relay No. 2 to be energized in S.U. control.
- (v) Mark 9F amplifiers. To modify amplifiers for T.C.U. rate, E.C.U. rate, servo 318, vector deflection, deck plane deflection and two spares, to incorporate internal sensitivity potentiometers.

(*e*) *Drawings* .. .. Details of modifications are included in H.M.A.S. VOYAGER. Report on setting to work of F.E.P.3 dated February–July, 1957.

(*f*) *By whom to be done* .. Dockyard. As a defect.

(*g*) *When to be done* .. Outstanding modifications at (*d*) above are to be carried out at the first opportunity. H.M.A.S.'s VOYAGER and VAMPIRE have already been modified.

2. This modification is to be recorded as modification No. A.N.2 to F.E.P.3.

(D.W. 737/51/1.)

UNCLASSIFIED.

211.—Ammunition—Pyrotechnics—KF 040 Cartridges, Signal, 1½-in. Brown Smoke Puff—Reduction in Allowances.

(*A.F.O.* 1815/1959.)

Allowances of cartridges signal 1½-in. brown smoke puff for simulating A.A. fire to aircraft making mock air attacks have been reduced and will now be as follows—

	Annual Allowance.
Destroyers and Frigates	60
S.A.R. Craft	12

2. Allowances for use by Gannet aircraft in H.M.A.S. MELBOURNE remain unchanged.

3. Warrants of Naval Armament and Aircraft Armament Stores will be amended.

(D.W. 727/56/11.)

UNCLASSIFIED.

212.—Ammunition—Pyrotechnics—Line-Throwing Equipment—Future Policy—Revised Allowances of 2-lb. Rockets.

(*A.F.O.* 2133/1959.)

The line-throwing rifle will remain the standard method of making contact between H.M.A. ships at sea.

2. However, as the extra distance achieved by a rocket might be a vital factor in connection with life-saving and salvage work, the 2-lb. rocket and its associated equipment will continue in service for the following classes of ships—

Diesel and Fleet Tugs—	
LT 027 rockets L/C 2-lb.	12
LT 002 cartridges	20
LT 042 lines ½-in. (Nylon)	6
LT 004 formers 12-in.	1
FQ 019 pistol	1
S.A.R. Craft—	
LT 027 rockets L/C 2-lb.	6
LT 002 cartridges	10
LT 029 lines ¾-in.	2
LT 004 formers 12-in.	1
FQ 019 pistol	1

3. The Schermuly nylon sheathed line (LT 042) gives a greater range to the rocket than the LT 029 line and has a better shelf life than the older hemp line and is impervious to bacteria and moisture. Each line is packed in a weather-proof container which packs in the service box line Schermuly M.33.

4. Supplies of LT 042 line are not yet available, so, in the meantime, LT 029 lines will be issued in lieu.

5. In view of the higher cost of the nylon lines, it will be necessary to make every effort to recover them intact when used for exercises.

(D.W. 728/63/4.)

UNCLASSIFIED.

213.—Gun Mountings—40 MM. Mark 9* Mountings. Modification to Slip Ring Unit—Modification No. 20.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted, gunnery equipment depots and dockyards.
(*b*) *Type and marks of gun mountings*	40 mm. mark 9* mountings.
(*c*) *Parts of gun mounting affected*	Slip ring unit.
(*d*) *Purpose of modification* ..	To improve the watertightness of the slip ring unit.
(*e*) *Drawing or Navy Office diagram*	D.F. 101/1, D.F. 101/1/1 to D.F. 101/1/12.
(*f*) *By whom to be done* ..	Dockyards.
(*g*) *When to be done*	During next routine lifting of the mounting or at suitable earlier opportunity.
(*h*) *How to be treated* ..	As a defect.

(D.W. 736/64/5.)

UNCLASSIFIED.

214.—Naval Stores (Air)—R.A.F. Vocabulary Section 26BU—Transfer of Stores to Section 27KF and Section 27Q.

(*A.F.O.* 3096/1959.)

The following spares used on Gannet Aircraft have been re-referenced under sections 27KF and 27Q. Stocks should be transferred accordingly.

Existing Ref. No.	*Part No.*	*Description.*	*New Ref. No.*
26BU/270	FS. 464/G	Nut	27KF/2198
26BU/328	FHS. 37/4	Seal	27KF/2052
26BU/838	D. 70603	Plate	27KF/819
26BU/1372	FHS. 36/B	Seal	27KF/2233
26BU/3279	FHS. 21/42	Seal	27KF/1982
26BU/7129	FS. 717/2	Circlip	27KF/2666
26BU/9188	HDS. 122/1/5	Seal	27KF/2070
26BU/9702	HDS. 122/5/2	Seal	27KF/2214
26BU/9718	HDS. 122/5/1	Seal	26KF/1498
26BU/9719	HDS. 122/1/6	Seal	27KF/2210
26BU/10342	FS. 766/5E	Bolt	27KF/1428
26BU/11034	SP. 837/4A	Seal	27Q/20795

2. Admiralty has advised that the relevant publications will be amended.

(D.N.A.S. 607/52/87.)

UNCLASSIFIED.

215.—Naval Stores (General) (Class E, Group 2E)—Perspex Sheets—Authorized Use.

The approved purposes for which perspex sheets may be demanded are included in relevant B.R.'s, A.P.N.'s, specifications, modification leaflets, &c.

2. Before demands are lodged with the appropriate (Suptg.) Naval Store Officer, any proposals for the use of perspex for services other than those referred to in paragraph 1 are to be forwarded to the appropriate administrative authority for approval, with a full explanation of the necessity for its use, and stating why other materials, e.g. plate glass and celluloid, are considered unsuitable.

3. A.B.R. 4 will be amended.

4. Navy Order 218 of 1958 is hereby cancelled.

(D.N.A.S. 4512/24/175.)

(*Navy Order* 218 *of* 1958.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

216.—B.R. 15/1958. Notes on Leadership, Morale and Discipline.

B.R. 15, notes on leadership, morale and discipline, 1958, has been distributed on the following scale—

Flag Officers-in-Charge	2
N.O.I.C.'s	1
F.N.D., ALBATROSS and CRESWELL	10
Remaining Shore Establishments	6
R.T.E.'s	4
H.M.A.S. MELBOURNE	10
Destroyers and Frigates	4
Surveying Ships and Training Ships	4

2. This B.R. contains two articles selected from a number of papers written by Field-Marshal the Right Honourable the Viscount Montgomery of Alamein, former Chief of the Imperial General Staff. Although these papers were written for the Army they are applicable to all three Services and it is the Naval Board's wish that they should be carefully studied by all officers in the Royal Australian Navy.

(D.T.S.R. 465/52/239.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

FOR OFFICIAL USE ONLY. C.N.O. 217/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
30th March, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

1914/60.

UNCLASSIFIED.

217.—Naval Health Benefits Society.

The Naval Health Benefits Society was established in 1956 to provide an organization which catered specially for naval personnel. The R.A.N. Central Canteens Board made a grant of £15,000 to establish the Society.

2. As naval personnel are provided with free medical and hospital care by the service, the Society makes a concession by way of smaller contributions for the family unit of such members. As contributions are paid by allotment or deductions from salary, no difficulties arise when a member's family move interstate and the fear of membership lapsing because of unpaid contributions is removed.

3. The objects of the Society are to assist members in meeting the cost of medical, surgical and therapeutic treatment by qualified medical practitioners, and hospitalization and home nursing of themselves (in the case of civilian members) and their dependants i.e. a member's wife, children under 16 years of age and such other persons as are approved by the Committee of Management of the Society as being wholly dependent on the Member.

4. The following may apply for membership—

(*a*) An officer or rating employed on full-time duty in the naval forces, who has one or more dependants; and

(*b*) A person employed on full-time duty as a civilian in the Department of the Navy.

5. Membership of the Society may be continued after the member has ceased to be employed on full-time duty as under—

(*a*) A member who has has 12 but less than 20 years' full-time service—for 5 years;

(*b*) A member who has had 20 or more years' full-time service—for such further period as he may desire;

(*c*) A member whose services are terminated on medical grounds—for such further period as he may desire; and

(*d*) In the event of the death of a member, the membership may be continued in respect of his dependants for such further periods as they desire, except that such membership shall cease on the re-marriage of his widow;

provided that the Committee of Management may terminate membership where the service of the member has been terminated for misconduct, discreditable service or inefficiency.

6. There is established at Navy Office a Committee of Management consisting of a chairman and four other members of the Society each of whom is appointed by the Naval Board. The Committee includes a naval medical officer nominated by the Medical Director General.

7. The Committee of Management administers the Society in accordance with its constitution which is attached as an appendix to this order.

8. As a result of amendments to the Commonwealth Health Act, which now provides for an additional Commonwealth hospital benefit of 12s. a day in cases where a member contributes for a certain minimum society benefit, the Society increased its scale of benefits and contributions as from the 1st January, 1958.

9. The weekly rates of contributions by members to the Society are contained in Clause 13 of the constitution and are as follows—

(*a*) *Naval Members*—

	s.	*d.*
With one dependant	2	2
With two or more dependants	3	4

(*b*) *Civilian Members*—

Without dependants	2	2
With one or more dependants	4	4

10. Contributions which are payable from the date of acceptance are, in the case of naval members, payable only by allotment, and in the case of civilian members, where practicable, deducted from the members' salary. Civilian members are to furnish an authority authorizing such deductions.

11. Benefits payable to a member will be rebates against actual costs incurred by him and will be the total of the Commonwealth benefit and society benefit as set out in the schedule to the constitution, provided that no medical benefit will exceed 90 per cent. of the costs incurred by the member. The schedule consists of two sections; the first (items 1 to 300 inclusive) contains those services for which, under the Commonwealth Health Scheme, the Society is required to pay from its own funds a benefit which at least matches the Commonwealth Benefit; the second (items 301 to 998 inclusive) contains service for which the Society is not required to pay any benefit from its own funds. It will be noted, however, that the Society will in every case pay a benefit from its own funds, where the member is qualified.

12. Examples of benefits payable are—

	Common-Wealth Benefit.			*Society Benefit.*			*Total.*		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
(*a*) Medical—									
(i) General Practitioner, each attendance	0	6	0	0	6	0	0	12	0
(ii) Specialist when referred by General Practitioner—first attendances ..	1	0	0	1	2	6	2	2	6
(iii) Operations (dependent on their nature) up to a maximum of	22	10	0	28	0	0	50	10	0
(*b*) Hospital—									
Per day	0	12	0	1	4	0	1	16	0

(The Commonwealth also pays subsidy of 8s. per day direct to the hospital).

Note:—The society benefit of 24s. per day (£8 8s. per week) is subject to a maximum period of fifteen weeks' hospitalization in any calendar year in respect of each member and each of his dependants. When the expenses incurred by a member are less than 36s. per day, the society will pay the expenses incurred.

13. In general, a member who joins the Society will be eligible for benefits upon the completion of a probationary period to be determined by the Committee of Management, not exceeding, in maternity cases nine calendar months, and in all other cases, excluding accidents, eight weeks. A probationary period will not be imposed on members who join within three months of becoming eligible for membership.

14. Claims accompanied by receipted accounts are to be submitted on the prescribed claim form to the Secretary, Naval Health Benefits Society, Department of the Navy, Victoria Barracks, Melbourne.

15. It is necessary for the efficient working of the Society that claim forms and applications for membership be accurately compiled and that all the necessary receipted accounts accompany a claim form. Commanding Officers are to ensure that every assistance is given to personnel in applying for membership or in rendering a claim.

16. The Naval Board are aware of the financial difficulties which arise for many personnel through medical and hospital expenses, and wish that the advantages of belonging to a Society be stressed to all personnel. The Royal Australian Naval Health Benefits Society with payments by allotment which can be commenced at the time of marriage has much to commend it, particularly as the working capital has been provided from canteen funds. The extent to which members may benefit is illustrated in the following two cases—

(*a*) Petty Officer X. Joined the Society in November, 1956 and remained a members until his discharge in January, 1958. His contributions amounted to £7 4s. 8d. and the benefits received by him totalled £115 9s. 6d.

(*b*) Able Seaman Y. Joined the Society in December, 1956, and is still a member. His contributions to 31st December, 1959, were £21 5s. 8d., and the benefits received totalled £126 19s. 6d. Many other members of the Society have received similar benefits.

17. Navy Order 555 of 1958 is hereby cancelled.

APPENDIX.

CONSTITUTION OF THE NAVAL HEALTH BENEFITS SOCIETY.

Interpretation.

1. In the Constitution, unless the contrary intention appears—

" benefit " means any benefit payable to a member in respect of himself or his dependants in accordance with the Constitution ;

" child " includes an adopted child and a stepchild;

" civilian member " means a member employed as a civilian in the Department;

" dependant " means—

(*a*) a member's wife;

(*b*) a member's child under sixteen years of age; and

(*c*) such other persons as are approved by the Committee as being wholly dependent upon a member;

" hospital " means a registered public or private hospital in which patients are received and lodged for hospital treatment;

" member " means a member of the Society;

" membership " means membership of the Society;

" Naval member " means a member serving in the Naval Forces;

" prescribed " means prescribed by rules made by the Committee in accordance with the Constitution;

" the Committee " means the Committee of Management of the Society appointed in accordance with the Constitution and holding office for the time being;

" the Constitution " means the Constitution of the Naval Health Benefits Society in force from time to time;

" the Department " means the Department of the Navy;

APPENDIX—*continued.*

" the Naval Forces " means the Permanent Naval Forces and the Naval Reserve Forces;

" the Society " means the Naval Health Benefits Society; and words importing the singular number or plural number include the plural number and singular number respectively and words importing the masculine gender include females.

Amendment of Constitution.

2. (1) Except as provided in the next succeeding sub-clause the Constitution shall not be amended without the approval of the Naval Board.

(2) The Committee may, without the approval of the Naval Board, make amendments to the Schedule hereto consequent upon the variation by the Commonwealth of the amount of any Commonwealth benefit specified in the Schedule.

Binding effect of Constitution.

3. The Constitution shall bind the Society and all members thereof and all persons claiming through them respectively to the same extent as if each member had subscribed his name and affixed his seal thereto and there were contained in the Constitution a covenant on the part of each member to observe the provisions thereof.

Name.

4. The name of the Society shall be the Naval Health Benefits Society.

Office.

5. The office of the Society shall be situated at Navy Office, St. Kilda Road, Melbourne, in the State of Victoria, or at such other place as the Committee shall decide.

Objects.

6. The objects of the Society are—

(*a*) to assist members in meeting the cost of—

(i) medical, surgical and therapeutic treatment of and attendance on members and their dependants by legally qualified medical practitioners, and the provision of comforts, appliances and requisites arising out of any such treatment; and

(ii) accommodation, maintenance and treatment of members and their dependants as hospital patients; and

(*b*) to do all such other things as may be considered by the Committee to be necessary or desirable in connection with all or any of the objects referred to in the last preceding paragraph.

Powers.

7. (1) The Committee shall have power to carry out the objects of the Society out of the funds, property and assets thereof in accordance with the Constitution.

(2) The Committee may accept conditional, limited or full membership or may refuse membership at its discretion.

(3) Where it is proved to the satisfaction of the Committee that a false statement has been made in any document submitted by a member when applying for membership or for benefits, the Committee may at its discretion terminate the membership of that member or refuse the payment of benefits which would otherwise be payable.

Contributory Membership.

8. (1) Any person employed on continuous full-time duty—

(*a*) in the Naval Forces, other than a person without dependants, or

(*b*) as a civilian in the Department, shall be eligible to become a member.

(2) A person eligible to become a member may apply for membership on, before, or within three calendar months after the date of commencement of the Society to be determined by the Committee by lodging with the Society an application for membership and statement of health.

APPENDIX—*continued.*

(3) A person who becomes eligible for membership after the date of commencement of the Society may apply for membership by lodging with the Society an application for membership and a statement of health within three calendar months after the date upon which he becomes eligible for membership or such longer period as the Committee may in a particular case approve.

(4) An applicant for membership under sub-clause (2) or sub-clause (3) of this clause shall, if required so to do by the Committee, at his own expense, lodge with the Society a medical certificate.

(5) A person eligible to become a member who does not apply for membership within the time specified in sub-clause (2) or sub-clause (3) of this clause, as the case may be, may thereafter apply to do so by lodging with the Society an application for membership and in such case the following conditions shall apply—

(*a*) the applicant shall furnish with his application for membership a statement of health or, if required by the Committee a medical certificate, at his own cost.

(*b*) At the discretion of the Committee the applicant may be admitted as a member, but such admission may be subject to completion by him of such probationary period as is determined by the Committee, not exceeding in maternity cases nine calendar months and in all other cases excluding accidents eight weeks;

(*c*) If an applicant be admitted as a member full contributions will be payable by him during the period of probation, but he shall not be eligible for any benefits, excluding accidents, until such probationary period is completed.

(6) A statement of health or a medical certificate shall be required by the Committee in respect of any person, other than a child born to himself and his wife, who becomes a dependant of a member subsequent to his joining the Society. No probationary period shall be required to be completed by any such child.

(7) For the purposes of this clause—

" application for membership " means an application to become a member in the form prescribed;

" statement of health " means a statement of the health of a member and his dependants in the form prescribed; and

" medical certificate " means a certificate of an approved legally qualified medical practitioner in respect of a member and his dependants in the form prescribed.

Continuation of Membership in certain cases.

9. (1) Where a member dies—

(*a*) his widow during her widowhood;

(*b*) his children under the age of sixteen years; or

(*c*) any other person approved by the Committee as being wholly dependent upon him at the date of his death,

may continue that membership subject to the Constitution by paying the contribution specified in clause 13 of the Constitution.

(2) A person who continues membership in pursuance of the last preceding sub-clause shall be deemed to be a civilian member.

APPENDIX—*continued.*

Benefits.

10. (1) There shall be established by the Committee—

(*a*) a medical benefit fund for the purpose of assisting members to meet the cost of medical, surgical and therapeutic treatment of and attendance on members and their dependants by legally qualified medical practitioners; and

(*b*) a hospital benefit fund for the purpose of assisting members to meet the cost of accommodation maintenance and treatment of members and their dependants as hospital patients.

(2) Medical and hospital benefits shall be paid by the Society of the respective funds to members entitled to those benefits in accordance with the Constitution.

(3) Benefits payable to members shall be in accordance with the scales shown in the Schedule hereto.

(4) Benefits payable shall be rebates against actual cost incurred by a member in respect of his dependants in the case of a Naval member, and in the respect of himself and his dependants in the case of a civilian member, and shall be payable only on production of such accounts and receipts as the Committee may require.

(5) No medical benefit, including the Commonwealth benefit, shall exceed 90 per centum of the medical charge incurred by the member and where, but for this provisions the total benefit would exceed that percentage, the benefit payable by the Society shall be abated to the extent necessary to bring the total benefit to an amount equal to 90 per centum of the medical charge.

(6) Claims which, in the opinion of the Committee have arisen wholly or partly from the misconduct of a member or his dependants may, at the discretion of the Committee, be wholly or partly rejected but no claim by or in respect of an unmarried female for maternity benefits shall be rejected in whole or part under this provision.

(7) Notwithstanding anything contained in the Constitution claims for payment of benefits in respect of a member or his dependants where—

(*a*) the symptoms or signs of the disease, injury, ailment or disability were evident at the time the member joined the Society;

(*b*) the disease, injury, ailment or disability was caused by intemperate indulgence in alcoholic liquor or the intemperate use of drugs or narcotics or due to venereal infection or deliberatly self-inflicted wounds;

(*c*) the claim is in respect of—

(i) tuberculosis after positive diagnosis has been established; or

(ii) accommodation at a sanatorium, convalescent home, hydro or similar institution; or

(iii) an examination for life assurance; or

(*d*) the member or his dependant—

(i) receives or is entitled to receive damages or compensation from a third party or any benefit under any Act of any State or Territory or of the Commonwealth of Australia; or

(ii) is entitled to receive treatment in respect of the disease, injury, ailment or disability concerned without charge under the *Repatriation Act* 1920–1952, the *Interim Forces Benefits Act* 1947–1950, the *Seamen's War Pensions and Allowances Act* 1940–1952, or the *Social Services Consolidation Act* 1947–1952, will be rejected unless circumstances exist which, in the opinion of the Committee, warrant special consideration. In any such case, the extent to which benefits, if any, shall be payable, shall be entirely at the discretion of the Committee.

APPENDIX—*continued.*

Commencement of Benefits.

11. (1) Subject to the Constitution—

(*a*) a member who joins the Society as at the date of commencement thereof or within three calendar months after that date, shall be eligible for benefits in respect of expenses incurred on or after that date of commencement or the date the member joined the Society, whichever is the latter;

(*b*) a member who joins the Society after the date of commencement thereof shall be eligible for benefits from the date as determined by the Committee in accordance with Clause 8 (5), (*b*) and (*c*), in respect of expenses incurred on and after that date.

(2) For the purpose of this clause, the date of joining the Society (excluding members who were members on the date of commencement thereof) shall be taken as the date on which the application for membership is lodged with the Society.

Continuation of Benefits in certain cases.

12. (1) Except as provided in the next succeeding sub-clause, a member who ceases to be employed on full-time duty in the Naval Forces or the Department shall cease to be a member on the date of cessation of that employment.

(2) Subject to the Constitution—

(*a*) a member who ceases to be employed on full-time duty in the Naval Forces or the Department after having been employed in those Forces and/or the Department for a period or periods of or exceeding twelve years in the aggregate may remain a member for a period of five years after ceasing to be so employed.

(*b*) a member who ceases to be employed on full-time duty in the Naval Forces or the Department after having been employed in those Forces and/or the Department for a period or periods of twenty years or more in the aggregate may remain a member for such further period as he shall desire.

(*c*) a member whose employment on full-time duty in the Naval Forces or the Department is terminated on medical grounds may remain a member for such further period as he shall desire.

(3) A person who continues to be a member in pursuance of the last preceding sub-clause shall be deemed to be a civilian member.

(4) Notwithstanding anything contained in sub-clause (2) of this clause, the Committee may terminate the membership of any member whose services in the Naval Forces or the Department have in the opinion of the Committee, been terminated for misconduct, discreditable service or inefficiency.

(5) For the purpose of computing the period of full-time duty in the Naval Forces under sub-clause (2) of this clause, " Naval Forces " means the Permanent Naval Forces and the Naval Reserves.

Contributions.

13. (1) Contributions to the Society will be payable by members in accordance with the following scale—

	Naval Members.	*Civilian Members.*
	s. d.	*s. d.*
Without Dependants	—	2 2 per week.
With one Dependant	2 2 per week	4 4 per week.
With two or more Dependants ..	3 4 per week	4 4 per week.
One Dependant of a deceased Member ..	—	2 2 per week.
Two or more Dependants of a deceased Member	—	4 4 per week.

APPENDIX—*continued.*

(2) The Committee may with the approval of the Naval Board increase or decrease the amount of contributions payable by a member or class of members from time to time.

(3) Contributions shall be payable from such dates and subject to this clause, in such manner as the Committee may from time to time determine.

(4) Contributions shall, in the case of a Naval member be paid by allotment, and in the case of a civilian member, be deducted from the member's salary and such member shall furnish an authority authorizing the deduction.

(5) Contributions by members who are deemed to be civilian members in pursuance of clauses 9 and 12 shall be paid quarterly in advance.

(6) For the purpose of sub-clause (4) of this clause " salary " means the amount payable to a member in respect of his services in the Naval Forces or the Department howsoever paid.

Arrear of Contributions.

14. (1) A member who owes contributions for a period of or exceeding eight weeks shall be unfinancial and shall not be entitled to any benefit until the expiration of four weeks after the date of payment of all contributions due.

(2) A member who owes contributions for a period of or exceeding thirteen weeks shall cease to be a member.

Claims.

15. (1) All claims upon the Society for benefits shall be submitted to the Committee on the form prescribed.

(2) A member shall furnish in addition to accounts and receipts such documents or evidence as the Committee may require in any particular case.

(3) Claim forms together with accounts and receipts shall be lodged with the Society as soon as possible after discharge from hospital or conclusion of medical treatment or services.

(4) A member failing to comply with the provisions of the last preceding sub-clause shall forfeit all claims to benefits unless he satisfies the Committee that there was reasonable cause for that non-compliance.

(5) A member who fails to lodge a claim form and accompanying accounts and receipts within six months after discharge from hospital or conclusion of medical treatment or services shall absolutely forfeit all claim to benefits.

Administration.

16. The administration of the Society shall be under the control of the Committee.

Power of Committee to delegate, make rules and alter Constitution.

17. Without limiting the generality of clause 7 of this Order and in addition to all other powers conferred by the Constitution, the Committee may, as it shall think fit—

(*a*) delegate to any person or persons any of its powers under the Constitution, except this power of delegation;

(*b*) appoint officers of the Society, except as is otherwise provided by the Constitution;

(*c*) make rules for the administration of the Society not inconsistent with the Constitution, which rules, when made, shall be read in conjunction with the Constitution.

(*d*) employ any person either in a professional, consultative or any other capacity whatsoever; and

(*e*) Subject to Clause 2 of the Constitution, amend the Constitution.

APPENDIX—*continued.*

Bank Accounts.

18. (1) All moneys of the Society shall be deposited with a bank to the credit of the Society.

(2) Cheques drawn on a banking account of the Society shall be respectively signed and countersigned by such persons as the Committee appoints for the purpose.

Restriction of use of funds.

19. The funds of the Society shall not be expended otherwise than in payment of—

(*a*) benefits to members; and
(*b*) expenses of management of the Society.

Constitution of the Committee of Management.

20. (1) There shall be a Committee consisting of a Chairman and four other members of the Society each of whom shall be appointed by and hold office during the pleasure of the Naval Board.

(2) In the absence of the Chairman members of the Committee present shall elect one of their number to act as Chairman.

(3) Three members of the Committee shall constitute a quorum.

(4) Each member of the Committee shall have one vote on each question. In the case of an equality of votes, the Chairman or Acting Chairman shall have a second or casting vote.

(5) All resolutions of the Committee shall be by a majority decision of the members present and voting.

Meetings of Committee.

21. (1) The Committee shall meet as and when necessary to carry out the efficient administration of the Society but in any case at least once in each calendar month.

(2) A special meeting of the Committee shall be called by the Secretary of the Society on the request of the Chairman or any two members of the Committee.

Officers of the Society.

22. (1) The officers of the Society shall consist of the members of the Committee, three Trustees and a Secretary.

(2) The Naval Board shall appoint three Trustees.

(3) The Secretary shall be appointed by the Committee with the approval of the Naval Board.

Funds Trustees.

23. (1) The property of the Society shall be vested in the Trustees.

(2) The Trustees may from time to time, with the approval of the Committee, invest the funds of the Society or any part thereof in any manner for the time being allowed by any Act for the investment of trust funds in Australia.

(3) In the event of a permanent vacancy occurring in the office of a Trustee the Naval Board shall appoint a new Trustee to fill the vacancy.

General Meetings of Members.

24. (1) The Committee may at any time and shall on the requisition in writing of 50 financial members call a general meeting of the Society, stating the objects for which the meeting is called. A general meeting called pursuant to a requisition of members shall be held within 28 days after the requisition is lodged with the Secretary.

(2) Notice in writing of every general meeting specifying the business to be transacted thereat shall at least fourteen days prior to the date of the meeting be—

(*a*) circulated to all ships and Naval establishments; and
(*b*) posted to each member not employed on full-time duty in the Naval Forces or the Department at his last known address,

but the accidental omission to circulate or post such a notice to any ship or Naval establishment or member shall not invalidate the meeting.

APPENDIX—*continued.*

(3) Fifty financial members personally present at a general meeting shall constitute a quorum.

(4) The Chairman shall take the chair at every general meeting but in his absence the members present shall choose some other member of the Committee to take the chair or if no such member is available or willing to take the chair they may choose one of their number to take the chair.

(5) Every financial member shall be entitled to a vote and may vote in person or by proxy. All questions arising at the meeting shall be determined by a majority of votes and in the event of an equality of votes the Chairman shall have a second or casting vote.

Accounts and Audit.

25. (1) The Committee shall keep or cause to be kept proper books of account of the Society.

(2) The accounts of the Society shall be audited by a duly qualified auditor as at the 30th June in each and every year.

Returns.

26. The Committee shall comply with, or cause to be complied with, the requirements of any law in force for the time being relating to the preparation and lodgment of any return in connection with the Society.

Inspection of the Books of the Society.

27. (1) Any member may inspect the books of the Society on giving to the Committee one week's notice in writing of his intention so to do.

(2) Where a member avails himself of the right of inspection conferred by this clause that inspection shall take place at the office of the Society during the hours which that office is normally open for business.

Copies of the Constitution.

28. The Committee shall within seven days of being requested so to do forward a copy of the Constitution as then in force to a member who has not previously been supplied with such a copy.

Disputes.

29. (1) Every dispute or difference between any member or any person claiming through a member and the Society or an officer of the Society shall be decided by the Committee whose decision shall, except as provided in the next succeeding sub-clause, be final and conclusive.

(2) Where a dispute relates to the withholding of a Commonwealth benefit in respect of medical expenses the member concerned may refer the matter to the Director-General of Health for decision.

(3) In the event of any question arising as to the interpretation of the Constitution that question may be decided by the Committee whose decision thereon shall be final and conclusive.

Dissolution.

30. (1) If the Committee resolves that the Society is no longer necessary or that it is no longer possible to carry on the Society and the Naval Board approves the Society shall be dissolved.

(2) In the event of a resolution for dissolution being passed by the Committee and approved by the Naval Board provisions as to the dissolution of the Society contained in any law or laws in force for the time being under which the Society may be registered shall apply.

(3) If the Society be dissolved, all its funds property and assets remaining after the payment of outstanding claims, debts and liabilities shall be applied as the Naval Board shall direct.

SCHEDULE.

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1.—Professional Attendance not covered by any other Item.	£ s. d.	£ s. d.	£ s. d.
	Note.—A Commonwealth benefit is not payable in respect of a professional attendance at which an examination of the patients eyes is made in consequence of which spectacle lenses are prescribed			
1	Professional attendance by a medical practitioner other than a specialist in the practice of his speciality—each attendance	0 6 0	0 6 0	0 12 0
2	Professional attendance by a specialist in the practice of his specialty when patient is referred by another medical practitioner—for the first attendance ..	1 0 0	1 2 6	2 2 6
3	Professional attendance by a specialist in the practice of his specialty when patient is referred by another medical practitioner—for each attendance subsequent to the first during a single course of treatment	0 10 0	0 12 0	1 2 0
4	Professional attendance by a specialist in the practice of his specialty when patient is not referred by another medical practitioner—each attendance ..	0 6 0	0 6 0	0 12 0
	Part 2.—Anaesthetics other than Gaseous Anaesthetics.			
	Note.—A reference to administration of an anaesthetic includes a reference to pre-medication and pre-operative examination of the patient in preparation for anaesthesia. The amount of Commonwealth benefit specified is the amount payable whether the anaesthetic is administered by one or more than one medical practitioner			
7	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £11 5s.	1 17 6	2 0 0	3 17 6
8	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable does not exceed £3	0 15 0	0 18 0	1 13 0
9	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £3 but does not exceed £7	1 2 6	1 5 0	2 7 6
10	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £7 but does not exceed £11 5s.	1 10 0	1 12 6	3 2 6
	Part 3.—Operations.			
	DIVISION 1.—GENERAL SURGICAL.			
11	Cholecystectomy	11 5 0	14 0 0	25 5 0
12	Cholecystostomy	9 7 6	11 13 6	21 [illegible]0 6
13	Perforated gastric ulcer, suture of	9 7 6	11 5 0	20 12 6
14	Appendicectomy	7 10 0	9 6 6	16 16 6
15	Drainage of appendiceal abscess, or for ruptured appendix or for peritonitis with or without appendicectomy	7 10 0	9 6 6	16 16 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwralth Benefit.	Society Benefit.	Total Benefit.
	Part 3—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
16	Splenectomy	11 5 0	14 0 0	25 5 0
17	Umbilical hernia, repair of, in person aged less than ten years	2 12 6	3 0 0	5 12 6
18	Umbilical hernia, repair of, in person ten years of age or over	7 10 0	9 6 6	16 16 6
19	Incisional or strangulated hernia, repair of ..	7 10 0	9 0 0	16 10 0
20	Femoral, inguinal, ventral or lumbar hernia (not being incisional or strangulated), repair of ..	7 10 0	9 6 6	16 16 6
21	Laparotomy (exploratory)	7 10 0	9 6 6	16 16 6
22	Laparotomy involving operation on abdominal viscera, not covered by any other item ..	9 7 6	11 5 0	20 12 6
23	Varicocoele, removal of	3 15 0	4 10 0	8 5 0
24	Gastrostomy	7 10 0	9 6 6	16 16 6
25	Enterostomy or colostomy	5 12 6	7 0 0	12 12 6
26	Emterostomy or colostomy, closure or plastic repair of	1 2 6	1 5 0	2 7 6
27	Intussusception, reduction of by fluid	3 15 0	4 10 0	8 5 0
28	Intussusception, laparatomy and reduction of ..	9 7 6	11 5 0	20 12 6
29	Intussusception, laparotomy and resection of ..	11 5 0	14 0 0	25 5 0
30	Volvulus, reduction of	9 7 6	11 5 0	20 12 6
31	Peritoneal adhesions, separation of	7 10 0	9 6 6	16 16 6
32	Paracentesis abdominis	0 15 0	0 18 0	1 13 0
33	Haemorrhoids, removal, ligation or cauterization of	4 10 0	5 10 0	10 0 0
34	Haemorrhoids, incision of	1 17 6	2 2 6	4 0 0
35	Haemorrhoids, injection into—each attendance at which an injection is given	0 7 6	0 8 0	0 15 6
36	Fistula in ano, excision of	5 12 6	7 0 0	12 12 6
37	Ischio-rectal abscess, incision of	1 17 6	2 2 6	4 0 0
38	Fissure in ano, excision of	1 17 6	2 2 6	4 0 0
39	Anus, dilation of	0 15 0	0 18 0	1 13 0
40	Rectal polyp, removal of	1 17 6	2 2 6	4 0 0
41	Hydrocoele, tapping of	0 15 0	0 18 0	1 13 0
42	Hydrocoele, removal of	3 15 0	4 10 0	8 5 0
43	Orchidectomy (simple)	4 10 0	5 10 0	10 0 0
44	Undescended testis, transplantation	7 10 0	9 6 6	16 16 6
45	Circumcision of person aged less than twelve months	0 15 0	0 18 0	1 13 0
46	Circumcision of person aged not less than one year but less than twelve years	1 2 6	1 5 0	2 7 6
47	Circumcision of person twelve years of age or over..	1 17 6	2 2 6	4 0 0
48	Paraphimosis, reduction of, under anaesthesia, with or without dorsal incision	0 15 0	0 18 0	1 13 0
49	Sinus excision of, involving superficial tissues only ..	1 2 6	1 5 0	2 7 6
50	Sinus, excision of, involving muscle and deep tissue..	2 12 6	3 0 0	5 12 6
51	Ganglion or small bursa, excision of	1 17 6	2 2 6	4 0 0
52	Bursa (large), including olecranon, calcanean or patellar, excision of	3 15 0	4 10 0	8 5 0
53	Bursa, incision of	0 15 0	0 18 0	1 13 0
54	Exostosis, excision of	1 17 6	2 2 6	4 0 0
55	Haematoma, aspiration of	0 7 6	0 8 0	0 15 6
56	Haematoma, furuncle, small abscess or similar lesion not requiring a general anaesthetic, incision with drainage of	0 7 6	0 8 0	0 15 6
57	Large haematoma, abscess, carbuncle cellulitis or similar lesion requiring a general anaesthetic, incision with drainage of	1 2 6	1 5 0	2 7 6
58	Abscess (intraobital), drainage of	1 17 6	2 2 6	4 0 0
59	Tendon sheath or subcutaneous fascia, incision of..	1 17 6	2 2 6	4 0 0
60	Stenosing tendovaginitis, open operation for ..	2 5 0	2 10 0	4 15 0
61	Middle plamar, thenar or hypothenar spaces, drainage of	1 17 6	2 2 6	4 0 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 3.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
62	Incision of pulp space, paronychia or other acute infection of hands or feet, not covered by any other item	0 15 0	0 18 0	1 13 0
63	Digital nail, removal of	0 15 0	0 18 0	1 13 0
64	Biopsy (including aspiration biopsy, excision of lymph gland or glands, biopsy of cervix or section breast) not covered by any other item	1 2 6	1 5 0	2 7 6
65	Biopsy (burr-hole), sternal	1 17 6	2 2 6	4 0 0
66	Cyst, tumour or scar, removal of cutaneous or subcutaneous, not covered by any other item	0 15 0	0 18 0	1 13 0
67	Cyst, tumour or scar, removal of, involving deeper tissue, mucous membrane or breast tissue, not covered by any other item	1 17 6	2 2 6	4 0 0
68	Deep cyst or tumour (malignant or non-malignant), removal of, requiring wide excision, not covered by any other item	7 10 0	9 0 0	16 10 0
69	Scars, abrasive therapy of (derm-abrasion)—each treatment	2 12 6	3 0 0	5 12 6
70	Thoracic cavity, aspiration or paracentesis of, or both	0 15 0	0 18 0	1 13 0
71	Empyema, intercostal drainage of, not involving resection of rib	1 17 6	2 2 6	4 0 0
72	Empyema, radical operation for, involving resection of rib	3 15 0	4 10 0	8 5 0
73	Breast, simple amputation of	5 12 6	7 0 0	12 12 6
74	Depressed fracture or fractures of skull, operation for	9 7 6	11 13 6	21 1 0
76	Lumbar puncture	0 15 0	0 18 0	1 13 0
77	Superficial foreign body, removal of, not covered by any other item	0 6 0	0 6 0	0 12 0
78	Subcutaneous foreign body, removal of	1 2 6	1 5 0	2 7 6
79	Deep foreign body or plates and similar articles used in treating fractures, removal of	2 12 6	3 0 0	5 12 6
80	Joint, aspiration of	1 2 6	1 5 0	2 7 6
81	Joint, intra-articular injection into	0 15 0	0 18 0	1 13 0
	Nerves and Tendons.			
90	Local infiltration around nerve or in muscle with alcohol, novocaine or similar preparation—each attendance at which an injection is given	0 7 6	0 8 0	0 15 6
91	Nerve trunk, primary suture of	2 12 6	3 0 0	5 12 6
92	Tendo achillis or other large tendon, suture of	3 15 0	4 10 0	8 5 0
93	Flexor tendon of hand, primary suture of	2 12 6	3 0 0	5 12 6
94	Flexor tendon of hand, secondary suture of	3 15 0	4 10 0	8 5 0
95	Extensor tendon of hand, primary suture of	1 17 6	2 2 6	4 0 0
96	Extensor tendon of hand, secondary suture of	2 12 6	3 0 0	5 12 6
97	Tendon of foot, primary suture of	1 17 6	2 2 6	4 0 0
98	Tendon of foot, secondary suture of	2 12 6	3 0 0	5 12 6
	Blood Vessels.			
99	Vein or small artery, ligation of	0 15 0	0 18 0	1 13 0
100	Medium artery, ligation of	1 17 6	2 2 5	4 0 0
101	Saphenous vein, high ligation of	3 15 0	4 10 0	8 5 0
102	Great vessel (including carotid, jugular, subclavian, axillary, iliac or femoral vessel), ligation of	5 12 6	7 0 0	12 12 6
103	Varicose veins, excision or ligation of, not covered by any other item	2 12 6	3 0 0	5 12 6
104	Varicose veins, excision of, with high ligation of saphenous vein	6 7 6	7 18 6	14 6 0
105	Varicose veins, injection into—each attendance at which an injection is given	0 7 6	0 8 0	0 15 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Soeicty Benefit.	Total Benefit.
	Part 3—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	Operations for Acute Osteomyelitis.			
110	Operation on phalanx, metacarpus or metatarsus—one bone	1 17 6	2 2 6	4 0 0
111	Operation on sternum, clavicle rib ulna, radius, carpus, tibia, fibula, tarsus, mandible or maxilla (other than alveolar margins)—one bone	3 0 0	3 5 0	6 5 0
112	Operation on humerus or femur—one bone	3 15 0	4 10 0	8 5 0
	DIVISION 2.—EAR, NOSE AND THROAT.			
118	Tonsils or tonsils and adenoids, removal of, in a person aged less than twelve years	1 17 6	2 2 6	4 0 0
119	Tonsils or tonsils and adenoids, removal of, in a person twelve years of age or over	3 0 0	3 5 0	6 5 0
120	Tonsil, removal of calculus from	0 15 0	0 18 0	1 13 0
121	Adenoids, removal of	0 15 0	0 18 0	1 13 0
122	Lingual tonsil or lateral pharyngeal bands, removal of	0 15 0	0 18 0	1 13 0
123	Peritonsillar abscess (quinsy), incision of	0 15 0	0 18 0	1 13 0
124	Uvulotomy	0 15 0	0 18 0	1 13 0
125	Abscess or inflamation of middle ear, operation for	1 2 6	1 5 0	2 7 6
126	Maxillary antrum—proof puncture and lavage of	0 15 0	0 18 0	1 13 0
127	Maxillary antrum, lavage of—each attendance	0 7 6	0 8 0	0 15 6
128	Mastoidectomy (cortical)	9 7 6	11 13 6	21 1 0
129	Larynx, intubation of	1 17 6	2 2 6	4 0 0
130	Tracheotomy	3 15 0	4 10 0	8 5 0
131	Tongue tie, repair of	0 15 0	0 18 0	1 13 0
	DIVISION 3.—UROLOGICAL.			
138	Urethral sounds, passage of	1 2 6	1 5 0	2 7 6
139	Urethral stricture, dilation of	1 2 6	1 5 0	2 7 6
140	Urethral fistula, closure of	3 15 0	4 10 0	8 5 0
141	Urethra, repair of rupture of	11 5 0	13 4 0	24 9 0
142	Bladder, catheterization of	0 15 0	0 18 0	1 13 0
143	Bladder, repair of rupture of	11 5 0	13 4 0	24 9 0
144	Cystostomy or cystotomy, suprapubic	2 12 6	3 0 0	5 12 6
145	Nephrectomy (complete or partial)	11 5 0	14 0 0	25 5 0
146	Perinephric abscess, drainage of	5 12 6	7 0 0	12 12 6
	DIVISION 4.—GYNAECOLOGICAL.			
150	Hysterectomy (other than vaginal)—subtotal	7 10 0	9 0 0	16 10 0
151	Hysterectomy (other than vaginal)—total or with plastic repair operation	11 5 0	14 0 0	25 5 0
152	Oophorectomy, salpingectomy, salpingo-oophorectomy or ligation of Fallopian tubes	7 10 0	9 6 6	16 16 6
153	Ovarian, parovarian, fimbrial or broad ligament cyst, incision or excision of, not covered by any other item	5 12 6	7 0 0	12 12 6
154	Ectopic gestation, removal of	7 10 0	9 0 0	16 10 0
155	Uterus, suspension or fixation of	5 12 6	7 0 0	12 12 6
156	Round ligaments, shortening of	5 12 6	7 0 0	12 12 6
157	Myomectomy	7 10 0	9 6 6	16 16 6
158	Cystocoele or rectocoele, repair of, not covered by item 160	7 10 0	9 6 6	16 16 6
159	Cystocoele and rectocoele, repair of, not covered by item 160	9 7 6	11 5 0	20 12 6
160	Colpoplasty, Donald-Fothergill or Manchester operation (operation for genital prolapse)	11 5 0	13 4 0	25 9 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 3.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	Division 4.—Gynaecological—*continued.*			
161	Colpoperineorrhaphy	9 7 6	11 5 0	20 12 6
162	Cervix, amputation or repair of, not covered by item 160	3 15 0	4 10 0	8 5 0
163	Cervix, cauterization, ionization or diathermy of	1 17 6	2 12 6	4 10 0
164	Cervix, removal of polyp from	1 17 6	2 12 6	4 10 0
165	Cervix, dilatation of, not covered by item 166	1 10 0	1 12 6	3 2 6
166	Uterus, curettage of, with or without dilatation	1 17 6	2 2 6	4 0 0
167	Colpotomy	1 17 6	2 2 6	4 0 0
168	Colporrhaphy not covered by items 158, 159 or 160	2 12 6	3 0 0	5 12 6
169	Vagina, dilatation of—each attendance	0 7 6	0 8 0	0 15 6
170	Pelvic abscess, suprapubic drainage of	5 12 6	7 0 0	12 12 6
171	Gynaecological examination under anaesthesia not performed in association with any other item	0 15 0	0 18 0	1 13 0
172	Simple tumour of vagina, vulva or perineum, removal of	1 17 6	2 2 6	4 0 0
173	Bartholin's cyst, excision of	1 17 6	2 2 6	4 0 0
174	Bartholin's abscess, incision of	1 2 6	1 5 0	2 7 6
175	Skene's duct, removal of calculus from	1 17 6	2 2 6	4 0 0
176	Urethral caruncle, excision of, or cautery to	1 17 6	2 2 6	4 0 0
	DIVISION 5.—OPHTHALMOLOGICAL.			
180	Tarsal cyst, extirpation of	0 15 0	0 18 0	1 13 0
181	Cornea or sclera, removal of foreign body from	0 7 6	0 8 0	0 15 6
182	Eye, enucleation of	5 12 6	7 0 0	12 12 6
	DIVISION 6.—AMPUTATION OR DISARTICULATION OF LIMB.			
185	One finger or thumb	1 17 6	2 2 6	4 0 0
186	Additional finger or thumb—each	0 7 6	0 8 0	0 15 6
187	Through metacarpals	5 12 6	6 15 0	12 7 6
188	Hand, forearm or through arm	5 12 6	7 0 0	12 12 6
189	At shoulder	11 5 0	13 4 0	24 9 0
190	One toe or great toe	1 10 0	1 12 6	3 2 6
191	Additional toe or great toe—each	0 7 6	0 8 0	0 15 6
192	Foot	7 10 0	9 6 6	16 16 6
193	Through leg or at knee	9 7 6	11 5 0	20 12 6
194	Through thigh	11 5 0	13 4 0	24 9 0
195	At hip	15 0 0	18 13 6	33 13 6
196	Interscapulothoracic	18 15 0	22 10 0	41 5 0
197	Hindquarter	22 10 0	27 0 0	49 10 0
	DIVISION 7.—TRANSFUSIONS AND OTHER SERVICES IN RELATION TO BLOOD.			
200	Blood specimen for pathological test, intravenous collection of	0 6 0	0 6 0	0 12 0
201	Saline and glucose, intravenous injection of	0 15 0	0 18 0	1 13 0
202	Blood transfusion, including collection from donor	2 5 0	2 12 6	4 17 6
203	Blood transfusion, using pooled blood or blood already collected	1 10 0	1 12 6	3 2 6
204	Blood transfusion with venesection and complete replacement of blood, including collection from donor	3 0 0	3 5 0	6 5 0
205	Blood transfusion with venesection and complete replacement of blood, using pooled blood or blood already collected	2 5 0	2 12 6	4 17 6
206	Blood for purposes of transfusion, collection of	1 2 6	1 5 0	2 7 6
207	Venesection, not covered by items 204 or 205—each attendance at which venesection is performed	0 7 6	0 8 0	0 15 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 4.—Assistance at Operations.	£ s. d.	£ s. d.	£ s. d.
	Note.—Commonwealth benefit in respect of assistance at an operation is not payable unless the assistance is rendered by a medical practitioner other than the anaesthetist. The amount specified is the amount payable whether the assistance is rendered by one or more than one medical practitioner			
210	Assistance at any operation or series or combination of operations for which the Commonwealth benefit payable does not exceed £3	0 7 6	0 8 0	0 15 6
211	Assistance at any operation or series or combination of operations for which the Commonwealth benefit payable exceeds £3, but does not exceed £7	0 15 0	0 18 0	1 13 0
212	Assistance at any operation or series or combination of operations for which the Commonwealth benefit payable exceeds £7 but does not exceed £11 5s.	1 2 6	1 5 0	2 7 6
213	Assistance at any operation or series or combination of operations for which the Commonwealth benefit payable exceeds £11 5s.	1 10 0	1 13 6	3 3 6
	Part 5.—Midwifery.			
	DIVISION 1.—GENERAL.			
215	Antenatal care (excluding any service or services covered by items 222, 224 or 225), where attendances do not exceed seven—each attendance	0 6 0	0 6 0	0 12 0
216	Antenatal care (excluding any service or services covered by items 222, 224 or 225), where attendances exceed seven	2 2 0	2 10 0	4 12 0
217	Confinement and postnatal care for nine days (excluding any service or services covered by item 223, 224, 226, 227 or 228), where the medical practitioner has not given the antenatal care	3 0 0	4 0 0	7 0 0
218	Antenatal care, confinement and postnatal care for nine days (excluding any service or services covered by Division 2 of this Part	4 10 0	5 8 0	9 18 0
219	Caesarean section and postnatal care for nine days	7 10 0	9 0 0	16 10 0
	DIVISION 2.—SPECIAL SERVICES.			
222	Toxaemia of pregnancy, eclampsia or antepartum harmorrhage—each attendance	0 6 0	0 6 0	12 0
223	Postpartum haemorrhage requiring special procedures such as packing	1 2 6	1 5 0	2 7 6
224	Surgical induction of labour	1 2 6	1 5 0	2 7 6
225	Version, external or internal, under anaesthesia	1 2 6	1 5 0	2 7 6
226	Third degree tear, repair of	1 2 6	1 5 0	2 7 6
227	Evacuation by manual removal of the products of conception such as retained Foetus, placenta, membranes or mole	1 2 6	1 5 0	2 7 6
228	Decapitation, craniotomy, cleidotomy or evisceration of foetus or any two or more of those services	5 12 6	7 0 0	12 12 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 6.—Treatment of Dislocations.	£ s. d.	£ s. d.	£ s. d.
	DIVISION 1.—TREATMENT OF DISLOCATION NOT REQUIRING OPEN OPERATION.			
232	Mandible—first or second dislocation	0 15 0	0 18 0	1 13 0
233	Mandible—third or subsequent dislocation	0 7 6	0 8 0	0 15 6
234	Clavicle	2 5 0	2 10 0	4 15 0
235	Shoulder—first or second dislocation	1 17 6	2 2 6	4 0 0
236	Shoulder—third or subsequent dislocation—requiring anaesthesia	1 17 6	2 2 6	4 0 0
237	Shoulder—third or subsequent dislocation—not requiring anaesthesia	0 15 0	0 18 0	1 13 0
238	Elbow	2 5 0	2 10 0	4 15 0
239	Carpal bone	1 10 0	1 12 6	3 2 6
240	Carpus on radius and ulna	3 15 0	4 10 0	8 5 0
241	Finger	0 15 0	0 18 0	1 13 0
242	Metacarpo-phalangeal joint of thumb	1 17 6	2 2 6	4 0 0
243	Hip	6 7 6	7 18 6	14 6 0
244	Knee	4 10 0	5 10 0	10 0 0
245	Patella	1 10 0	1 12 6	3 2 6
246	Ankle	2 12 6	3 0 0	5 12 6
247	Toe	0 15 0	0 18 0	1 13 0
248	Tarsus or tarsal bone	1 17 6	2 2 6	4 0 0
249	Spine (cervical), without fracture	2 12 6	3 0 0	5 12 6
250	Spine (lumbar), without fracture	3 15 0	4 10 0	8 5 0
251	Spine, associated with fracture of transverse process or bone other than vertebral body, not requiring immobilization in plaster	1 17 6	2 2 6	4 0 0
252	Spine, associated with fracture of transverse process or bone other than vertebral body, requiring immobilization in plaster	4 10 0	5 10 0	10 0 0
253	Spine, associated with fracture of vertebral body, without involvement of cord	9 7 6	11 5 0	20 12 6
254	Spine, associated with fracture of vertebral body, with involvement of cord	18 15 0	23 6 6	42 1 6
	DIVISION 2.—TREATMENT OF DISLOCATION REQUIRING OPEN OPERATION.			
256	Treatment of a dislocation referred to in Division 1 of this Part which requires an open operation—the amount specified in the relevant item for the treatment of that dislocation if the dislocation had not required an open operation, plus one-half of that amount; or an amount of twenty-two pounds ten shillings, whichever is the less			
	Part 7.—Treatment of Fractures.			
	DIVISION 1.—TREATMENT OF SIMPLE AND UNCOMPLICATED FRACTURE NOT REQUIRING OPEN OPERATION.			
257	Terminal phalanx of finger or thumb	0 15 0	0 18 0	1 13 0
256	Proximal phalanx of finger or thumb	1 17 6	2 2 6	4 0 0
259	Middle phalanx of finger	1 2 6	1 5 0	2 7 6
260	One or more metacarpals, not involving base of first carpometacarpal joint	1 17 6	2 2 6	4 0 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 7.—Treatment of Fractures—*continued.*	£ s. d.	£ s. d.	£ s. d.
261	One or more metacarpals, involving the first carpometacarpal joint (Bennett's fracture)	2 12 6	3 0 0	5 12 6
262	Carpal bone (excluding navicular)	1 10 0	1 12 6	3 2 6
263	Navicular or carpal scaphoid	3 15 0	4 10 0	8 5 0
264	Radius	2 5 0	2 10 0	4 15 0
265	Ulna	1 17 6	2 2 6	4 0 0
266	Both shafts of forearm	4 10 0	5 10 0	10 0 0
267	Colles' fracture of wrist	2 12 6	3 0 0	5 12 6
268	Distal end of radius or ulna, involving wrist	2 12 6	3 0 0	5 12 6
269	Humerus	4 10 0	5 10 0	10 0 0
270	Clavicle or sternum	1 17 6	2 2 6	4 0 0
271	Scapula	2 12 6	3 0 0	5 12 6
272	One or more ribs	1 10 0	1 12 6	3 2 6
273	Maxilla	3 15 0	4 10 0	8 5 0
274	Mandible	4 10 0	5 10 0	10 0 0
275	Zygoma	1 17 6	2 2 6	4 0 0
276	Pelvis (exclusing symphysis pubis) or sacrum	4 10 0	5 10 0	10 0 0
277	Symphysis pubis	3 15 0	4 10 0	8 5 0
278	Femur	9 7 6	11 5 0	20 12 6
279	Patella, fibula or tarsal bone (excepting os calcis or os talus)	1 17 6	2 2 6	4 0 0
280	Tibia	3 15 0	4 10 0	8 5 0
281	Both shafts of leg	7 10 0	9 6 6	16 16 6
282	Ankle (Pott's fracture), with or without dislocation of ankle	7 10 0	9 6 6	16 16 6
283	Os calcis (calcaneus) or os talus	3 15 0	4 10 0	8 5 0
284	Metatarsals—one or more	1 17 6	2 2 6	4 0 0
285	Phalanx of toe (other than great toe)	0 15 0	0 18 0	1 13 0
286	More than one phalanx of toe (other than great toe)	1 2 6	1 5 0	2 7 6
287	Distal phalanx of great toe	1 2 6	1 5 0	2 7 6
288	Proximal phalanx of great toe	1 10 0	1 12 6	3 2 6
289	Skull	3 15 0	4 10 0	8 5 0
290	Nasal bones, not requiring reduction	0 15 0	0 18 0	1 13 0
291	Nasal bones, requiring reduction	1 17 6	2 2 6	4 0 0
292	Spine (excluding sacrum), transverse process or bone other than vertebral body, not requiring immobilization in plaster	1 17 6	2 2 6	4 0 0
293	Spine (excluding sacrum), transverse process or bone other than vertebral body, requiring immobilization in plaster	4 10 0	5 10 0	10 0 0
294	Spine (excluding sacrum), vertebral body, without involvement of cord	9 7 6	11 5 0	20 12 6
295	Spine (excluding sacrum), vertebral body, with involvement of cord	18 15 0	23 6 6	42 1 6
	DIVISION 2.—TREATMENT OF SIMPLE AND UNCOMPLICATED FRACTURE REQUIRING OPEN OPERATION.			
297	Treatment of simple and uncomplicated fracture of a part referred to in Division 1 of this Part requiring an open operation—the amount specified for the treatment of that fracture if the fracture had not required an open operation, plus one-third of that amount; or an amount of Twenty-two pounds ten shillings, whichever is the less			

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 7.—Treatment of Fractures—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 3.—TREATMENT OF COMPOUND FRACTURE REQUIRING OPEN OPERATION.			
298	Treatment of a compound fracture of a part referred to in Division 1 of this Part requiring an open operation—the amount specified for the treatment of that fracture if the fracture had been simple and uncomplicated and had not required an open operation, plus one-half of that amount; or an amount of Twenty-two pounds ten shillings, whichever is the less			
	DIVISION 4.—TREATMENT OF COMPLICATED FRACTURE INVOLVING VISCERA, BLOOD VESSELS OR NERVES AND REQUIRING OPEN OPERATION.			
299	Treatment of a complicated fracture of a part referred to in Division 1 of this Part involving viscera, blood vessels or nerves and requiring an open operation—the amount specified for the treatment of that fracture if the fracture had been simple and uncomplicated and had not required an open operation, plus three-quarters of that amount; or an amount of Twenty-two pounds ten shillings, whichever is the less			
	DIVISION 5.—REDUCTION OF FRACTURE IN EXCESS OF ONE REDUCTION			
300	Reduction, in excess of one reduction of a fracture of a part referred to in Division 1 of this Part—one-half of the amount which would have yeen payable under this Part if the reduction had been a first reduction			

SCHEDULE—*continued.*

SECOND SCHEDULE

ADDITIONAL PROFESSIONAL SERVICES.

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1.—Pathological Services.	£ s. d.	£ s. d.	£ s. d.
	DIVISION 1.—PATHOLOGICAL SERVICES IN RELATION TO BLOOD.			
301	Examination of blood film or red cell count ..	0 6 0	0 6 0	0 12 0
302	Red cell count and estimation of haemoglobin ..	0 7 6	0 7 6	0 15 0
303	White cell count	0 6 0	0 6 0	0 12 0
304	White cell count and differential leucocyte count ..	0 7 6	0 7 6	0 15 0
305	Red cell count, white cell count, estimation of haemoglobin examination of blood film	0 15 0	0 15 0	1 10 0
306	Platelet or reticulocyte count	0 6 0	0 6 0	0 12 0
307	Haemoglobin estimation (when patient referred by another medical practitioner)	0 6 0	0 6 0	0 12 0
308	Estimation of coagulation time or bleeding time ..	0 6 0	0 6 0	0 12 0
309	Any one of the following services namely— estimation of prothrombin time .. .. prothrombin consumption test .. .. thrombin generation test .. .. .. thrombo-plastin generation test (full) or two stage prothrombin estimation	0 15 0	0 15 0	1 10 0
310	Estimation of blood sedimentation rate	0 6 0	0 6 0	0 12 0
311	Any one of the following services, namely— determination of fragility of red blood cells .. clot retraction test (quantitative) .. .. recalcified plasma clotting time .. .. blood volume estimation .. .. .. wet eosinophil count or .. .. .. thrombo-plastin generation screening test ..	0 7 6	0 7 6	0 15 0
312	Haematocrit estimation	0 7 6	0 7 6	0 15 0
313	Any one of the following services, namely— estimation of mean diameter of red blood cells cytological sex determination from blood film Coombs' tritation test or estimation of red cell survival or life	0 15 0	0 15 0	1 10 0
314	Blood grouping A.B.O.	0 6 0	0 6 0	0 12 0
315	Compatability testing	0 7 6	0 7 6	0 15 0
316	M.N. or Rh typing	0 7 6	0 7 6	0 15 0
317	Examination of blood serum for Anti-Rh or other blood group antibodies	0 15 0	0 15 0	1 10 0
318	Coombs' test	0 7 6	0 7 6	0 15 0
319	Determination and titration of cold agglutinins in blood	0 7 6	0 7 6	0 15 0
320	Determination of anti-streptolysin titre	0 7 6	0 7 6	0 15 0
321	Examination of blood for malarial, filarial or other parasites	0 7 6	0 7 6	0 15 0
322	Examination of blood for lupus erythematosus cells	0 15 0	0 15 0	1 10 0
323	Determination of Paul-Bunnell reaction	0 7 6	0 7 6	0 15 0
324	Determination of Paul-Bunnell reaction with white cell count and differential white cell count ..	0 15 0	0 15 0	1 10 0
325	Blood culture	0 15 0	0 15 0	1 10 0
326	Blood sugar estimation—initial or repeated ..	0 7 6	0 7 6	0 15 0
327	Glucose tolerance test	1 10 0	1 10 0	3 0 0
328	Estimation of alcohol, urea chloride creatinine, cholesterol, phosphatase and similar blood chemistry—one substance	0 15 0	0 15 0	1 10 0
329	Estimation of any two substances mentioned in item 328	1 10 0	1 10 0	3 0 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1—Pathological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
330	Estimation of any three or more substances mentioned in item 328	2 5 0	2 5 0	4 10 0
331	Estimation of total protein (by gravimetric methods)	0 6 0	0 6 0	0 12 0
332	Estimation of lead	0 15 0	0 15 0	1 10 0
333	Examination of specimen obtained by sternal puncture or biopsy	0 15 0	0 15 0	1 10 0
334	Van den Bergh reaction—qualitative test	0 7 6	0 7 6	0 15 0
335	Van den Bergh reaction—quantitative test	0 15 0	0 15 0	1 10 0
336	Spectroscopic tests for blood and blood derivatives	0 15 0	0 15 0	1 10 0
337	Estimation of carbon dioxide combining power	0 15 0	0 15 0	1 10 0
338	Radio-iodine uptake test or radio-active Vitamin B12 absorption test	0 15 0	0 15 0	1 10 0
339	Estimation by electrophoresis of serum protein, haemoglobin or similar substances	1 10 0	1 10 0	3 0 0
340	Estimation of Vitamin B12 in serum or plasma	1 2 6	1 2 6	2 5 0
341	Protein bond iodine test	1 2 6	1 2 6	2 5 0
	DIVISION 2.—PATHOLOGICAL SERVICES IN RELATION TO URINE.			
343	Protamine sulphate titration	0 7 6	0 7 6	0 15 0
344	Pressor amine test	1 10 0	1 10 0	3 0 0
345	Microscopical and cultural examination for micro-organisms	0 7 6	0 7 6	0 15 0
346	Microscopial and cultural examination for micro-organisms, with animal inoculation	0 15 0	0 15 0	1 10 0
347	Microscopical examination of centrifugalized deposit (when patient referred by another medical practitioner)	0 6 0	0 6 0	0 12 0
348	Quantitative chemical estimation of sugar, albumin, urea, phosphates and similar urine chemistry—one substance	0 15 0	0 15 0	1 10 0
349	Quantitative chemical estimation of any two substances specified in the last preceding item	1 10 0	1 10 0	3 0 0
350	Quantitative chemical estimation of any three or more substances specified in item 348	2 5 0	2 5 0	4 10 0
351	Estimation of lead, hippuric acid or 17 keto-steroids	0 15 0	0 15 0	1 10 0
352	General examination for reaction, specific gravity, blood, albumin and sugar, with microscopical examination of centrifugalized deposit with or without qualitative tests for urobilin, acetone, indican or bile pigment (when patient referred by another medical practitioner)	0 7 6	0 7 6	0 15 0
353	Urea concentration or clearance test	0 15 0	0 15 0	1 10 0
354	Assay of ascorbic acid excretion	0 15 0	0 15 0	1 10 0
355	Water elimination or Mosenthal kidney function or Diagnox Blue test	0 15 0	0 15 0	1 10 0
	DIVISION 3.—PATHOLOGICAL SERVICES IN RELATION TO PUS, EXUDATIONS AND OTHER MORBID FLUIDS.			
356	Microscopical examination of smear for cellular content and micro-organisms	0 6 0	0 6 0	0 12 0
357	Cultural examination for, and identification of, aerobic micro-organisms	0 7 6	0 7 6	0 15 0
358	Cultural examination for, and identification of C.L. tetani and other anaerobes, aerobic micro-organisms	0 15 0	0 15 0	1 10 0
359	Microscopical examination of vaginal and cervical discharge	0 6 0	0 6 0	0 12 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1—Pathological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
360	Microscopical and cultural examination of vaginal discharge	0 7 6	0 7 6	0 15 0
361	Examination of vaginal discharge for T vaginalis	0 6 0	0 6 0	0 12 0
362	Serological typing of streptococci including Str. pneumonide	0 15 0	0 15 0	1 10 0
363	Serological grouping (Lancefield) of streptococci	0 15 0	0 15 0	1 10 0
364	Microscopical and cultural examination and animal inoculation in connection with the pathological examination of pus, exudations and other morbid fluids	0 15 0	0 15 0	1 10 0
	DIVISION 4.—SEROLOGICAL TESTS.			
366	Agglutination test, including agglutination test for enteric fever or Brucella infection	0 7 6	0 7 6	0 15 0
367	Complement fixation test for syphilis (qualitative or quantitative)	0 15 0	0 15 0	1 10 0
368	Complement fixation test for gonorrhoea or hydatid	0 7 6	0 7 6	0 15 0
369	Flocculation tests for syphilis, including Kline, Kahn, Eagle and similar tests—each test	0 6 0	0 6 0	0 12 0
370	Complement fixation test for texoplasmosis	0 15 0	0 15 0	1 10 0
371	Methylene blue dye test for toxoplasmosis	0 15 0	0 15 0	1 10 0
372	Complement fixation test to detect antibodies to other bacterial, viral or fungal infections or parasitic infestations not covered by any other item	0 15 0	0 15 0	1 10 0
373	Haemagglutination or haemagglutination-inhibition test for the diagnosis of virus infection	0 15 0	0 15 0	1 10 0
	DIVISION 5.—PATHOLOGICAL SERVICES IN RELATION TO FAECES.			
375	Cultural examination for S. typhi, dysentery bacilli or other intestinal pathogens, without full fermentation reaction, serological or other investigation for purposes of identification	0 7 6	0 7 6	0 15 0
376	Cultural examination for S. typhi, dysentery bacilli or other intestinal pathogens, with full fermentation reaction, serological or other investigation for purposes of identification	0 15 0	0 15 0	1 10 0
377	General microscopical examination for M. tuberculosis including microscopical and cultural examination	0 7 6	0 7 6	0 15 0
378	General microscopical examination for M. tuberculosis including microscopical and cultural examination with animal inoculation	0 15 0	0 15 0	1 10 0
379	Microscopical examination for pus cells	0 6 0	0 6 0	0 12 0
380	Microscopical examination for helminthic infestation, worms and ova (all or any of them)	0 7 6	0 7 6	0 15 0
381	Microscopical examination for amoebae flagellates, vegetative forms and cysts (all or any of them)	0 7 6	0 7 6	0 15 0
382	Chemical examination, including chemical examination for occult blood or urobilin	0 6 0	0 6 0	0 12 0
383	Estimation of lead or fat	0 15 0	0 15 0	1 10 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1—Pathological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 6.—SKIN SENSITIVITY TESTS.			
386	Skin sensitivity tests for allergens including skin sensitivity tests for hay fever, asthma and other allergic conditions—less than four reagents or injections	0 6 0	0 6 0	0 12 0
387	Skin sensitivity tests for allergens including skin sensitivity tests for hay fever, asthma and other allergic conditions—four or more reagents or injections	0 15 0	0 15 0	1 10 0
388	Determination of Casoni reaction for hydatid infestation	0 6 0	0 6 0	0 12 0
389	Determination of Von Pirquet, Mantoux or Vollmer patch reaction	0 6 0	0 6 0	0 12 0
390	Determination of Schick or Frei antigen reaction ..	0 6 0	0 6 0	0 12 0
	DIVISION 7.—AUTOGENOUS VACCINES.			
391	Preparation of autogenous vaccines	0 15 0	0 15 0	1 10 0
	DIVISION 8.—EXAMINATION FOR SPECIAL PATHOGENS.			
393	Dark ground examination for T. pallidum ..	0 6 0	0 6 0	0 12 0
	Examination for actinomyces.			
396	Microscopical examination	0 6 0	0 6 0	0 12 0
397	Microscopical examination with culture aerobic and anaerobic	0 15 0	0 15 0	1 10 0
398	Microscopical examination with culture aerobic and anaerobic, with animal inoculation	1 2 6	1 2 6	2 5 0
	Examination for anthrax bacilli.			
400	Microscopical examination	0 6 0	0 6 0	0 12 0
401	Microscopical examination with cultural examination	0 15 0	0 15 0	1 10 0
402	Microscopical examination with cultural examination and animal inoculation	1 2 6	1 2 6	2 5 0
	Examination for diphtheria bacilli.			
403	Microscopical examination of smear	0 6 0	0 6 0	0 12 0
404	Microscopical examination, cultural examination and bio-chemical reaction	0 7 6	0 7 6	0 15 0
405	Microscopical examination, cultural examination, bio-chemical reaction and virulence test ..	0 15 0	0 15 0	1 10 0
406	Microscopical examination, cultural examination, bio-chemical reaction, virulence test and typing of strains	1 2 6	1 2 6	2 5 0
	DIVISION 9.—CALCULI, FAECAL CONCRETIONS AND GALLSTONES.			
408	Qualitative examination of calculi, faecal concretions or gallstones	0 6 0	0 6 0	0 12 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1.—Pathological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 10.—PATHOLOGICAL SERVICES IN RELATION TO GASTRIC CONTENTS AND VOMITUS.			
410	General chemical and microscopical examination ..	0 7 6	0 7 6	0 15 0
411	Fractional meal test with analysis	1 2 6	1 2 6	2 5 0
412	Microscopical and cultural examination for M. tuberculosis	0 7 6	0 7 6	0 15 0
413	Microscopical and cultural examination for M. tuberculosis, with animal inoculation	0 15 0	0 15 0	1 10 0
414	Chemical examination for metallic poisons—qualitative	0 7 6	0 7 6	0 15 0
415	Chemical examination for metallic poisons—quantitative	0 15 0	0 15 0	1 10 0
	DIVISION 11.—PATHOLOGICAL SERVICES IN RELATION TO HAIR AND SKIN.			
416	Microscopical examination, including examination for fungi	0 6 0	0 6 0	0 12 0
417	Microscopical examination with culture	0 7 6	0 7 6	0 15 0
418	Microscopical examination with culture and animal inoculation	0 15 0	0 15 0	1 10 0
	DIVISION 12.—PATHOLOGICAL SERVICES IN RELATION TO CEREBRO-SPINAL FLUID.			
420	Cytological examination	0 6 0	0 6 0	0 12 0
421	Chemical examination	0 7 6	0 7 6	0 15 0
422	Cytological and chemical examination	0 15 0	0 15 0	1 10 0
423	Cytological examination, chemical examination and bacteriological examination, including culture ..	1 2 6	1 2 6	2 5 0
424	Cytological examination, chemical examination and bacteriological examination, including culture with animal inoculation	1 10 0	1 10 0	3 0 0
425	Lange colloidal gold reaction	0 15 0	0 15 0	1 10 0
426	Wassermann reaction	0 7 6	0 7 6	0 15 0
427	Flocculation tests for syphilis, including Kline, Kahn, Eagle and similar tests—each test	0 6 0	0 6 0	0 12 0
	DIVISION 13.—PATHOLOGICAL SERVICES IN RELATION TO SPUTUM.			
430	General microscopical examination	0 6 0	0 6 0	0 12 0
431	General microscopical examination with cultural examination	0 7 6	0 7 6	0 15 0
432	General microscopical examination with cultural examination and animal inoculation	0 15 0	0 15 0	1 10 0
	DIVISION 14.—PATHOLOGICAL SERVICES IN RELATION TO MORBID ANATOMY.			
433	Histo-pathological examination of biopsy specimens—each specimen or section	1 2 6	1 2 6	2 5 0
434	Cytological examination, including examination for cancer cells, of pleural fluid, peritoneal fluid, bronchial or cervical exudates or urine	0 15 0	0 15 0	1 10 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 1.—Pathological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 15.—MISCELLANEOUS TESTS.			
435	Chemical estimation of body fluids not covered by any other item	0 15 0	0 15 0	1 10 0
436	Estimation of basal metabolic rate	0 15 0	0 15 0	1 10 0
437	Pregnancy tests, or tests for chorionic cancer, using rabbits, mice or rats	0 15 0	0 15 0	1 10 0
438	Pregnancy tests, or tests for chorionic cancer, using toads	0 7 6	0 7 6	0 15 0
439	Appraisal of semen or Huhner's test	0 7 6	0 7 6	0 15 0
440	Chemical analysis of human milk	0 15 0	0 15 0	1 10 0
441	Liver function test	0 15 0	0 15 0	1 10 0
	DIVISION 16.—INVESTIGATION OF ANTIBIOTICS AND CHEMOTHERAPEUTIC AGENTS.			
442	Chromatographic examination of serum urine, or other body fluids	0 15 0	0 15 0	1 10 0
443	Sensitivity tests of micro-organisms to antibiotics and chemotherapeutic agents	0 15 0	0 15 0	1 10 0
444	Assay of concentration of antibiotics and chemotherapeutic agents in body fluids	0 15 0	0 15 0	1 10 0
	Part 2.—Radiological Services.			
	DIVISION 1.—RADIOGRAPHIC EXAMINATION OF EXTREMITIES AND REPORT.			
445	Digits or phalanges—all or any of either hand or either foot	0 7 6	0 7 6	0 15 0
446	Hand, wrist, forearm, elbow or arm (elbow to shoulder)	0 15 0	0 15 0	1 10 0
447	Hand, wrist and lower forearm; upper forearm and elbow; or elbow and arm (elbow to shoulder)	0 15 0	0 15 0	1 10 0
448	Foot, ankle, lower leg, upper leg, knee or thigh	0 15 0	0 15 0	1 10 0
449	Foot, ankle and lower leg; or upper leg and knee	0 15 0	0 15 0	1 10 0
	DIVISION 1.—RADIOGRAPHIC EXAMINATION OF SHOULDER OR HIP JOINT AND REPORT.			
453	Shoulder region including clavicle and scapula	0 15 0	0 15 0	1 10 0
454	Hip joint	0 15 0	0 15 0	1 10 0
455	Pelvic girdle	1 2 6	1 2 6	2 5 0
456	Smith-Petersen nail—insertion or similar procedure	2 5 0	2 5 0	4 10 0
	DIVISION 3.—RADIOGRAPHIC EXAMINATION OF HEAD AND REPORT.			
457	Skull, sinuses or mastoids	1 2 6	1 2 6	2 5 0
458	Maxilla or orbit, or both	1 2 6	1 2 6	2 5 0
459	Mandible, malar bones or salivary calculus	1 2 6	1 2 6	2 5 0
460	Nose or Eye	0 15 0	0 15 0	1 10 0
461	Larynx	0 15 0	0 15 0	1 10 0
	DIVISION 4.—RADIOGRAPHIC EXAMINATION OF SPINE AND REPORT.			
466	Spine—any one region	1 2 6	1 2 6	2 5 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 2.—Radiological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 5.—RADIOGRAPHIC EXAMINATION OF THORACIC REGION AND REPORT.			
470	Chest (lung fields) by direct radiography	0 15 0	0 15 0	1 10 0
471	Chest (lung fields) by direct radiography with fluoroscopic screening	1 2 6	1 2 6	2 5 0
472	Chest, by miniature radiography	0 6 0	0 6 0	0 12 0
473	Pleura	0 15 0	0 15 0	1 10 0
474	Orthodiagraphy	0 15 0	0 15 0	1 10 0
475	Teleoroentgenography with cardiac measurements	0 15 0	0 15 0	1 10 0
476	Cardiac examination (including barium swallow)	1 2 6	1 2 6	2 5 0
477	Cardiac measurements and kymography	1 10 0	1 10 0	3 0 0
478	Sternum or one or more ribs	0 15 0	0 15 0	1 10 0
	DIVISION 6.—RADIOGRAPHIC EXAMINATION OF URINARY TRACT AND REPORT.			
480	Plain renal	0 15 0	0 15 0	1 10 0
481	Intravenous pyelography	2 5 0	2 5 0	4 10 0
482	Retrograde pyelography	1 2 6	1 2 6	2 5 0
483	Cystography, urethrography or vesiculography	1 17 6	1 17 6	3 15 0
484	Perirenal insufflation	1 2 6	1 2 6	2 5 0
	DIVISION 7.—RADIOGRAPHIC EXAMINATION OF ALIMENTARY TRACT AND BILIARY SYSTEM (WITH OR WITHOUT FLUOROSCOPY AND REPORT).			
487	Oesophagus, with or without examination for foreign body or barium swallow	1 2 6	1 2 6	2 5 0
488	Barium or other opaque meal of oesophagus, stomach and duodenum, with or without screening of chest	1 10 0	1 10 0	3 0 0
489	Plain abdominal	1 2 6	1 2 6	2 5 0
490	Barium or other opaque meal of oesophagus, stomach duodenum and follow through to colon, with or without screening of chest	1 17 6	1 17 6	3 15 0
491	Opaque enema	1 10 0	1 10 0	3 0 0
492	Graham's test (cholecystography)	1 10 0	1 10 0	3 0 0
493	Cholangiography	1 17 6	1 17 6	3 15 0
	DIVISION 8.—RADIOGRAPHIC EXAMINATION FOR LOCALIZATION OF FORFIGN BODIES AND REPORT.			
495	Foreign body in eye (special method, Sweet's or other)	1 2 6	1 2 6	2 5 0
496	Foreign body elsewhere than in eye—the amount of Commonwealth benefit payable for the radiographic examination of the area, plus	0 7 6	0 7 6	0 15 0
	DIVISION 9.—RADIOGRAPHIC EXAMINATION OF BREASTS.			
498	Radiographic examination of breast or breasts and report	1 2 6	1 2 6	2 5 0
	DIVISION 10.—RADIOGRAPHIC EXAMINATION IN CONNEXION WITH PREGNANCY AND REPORT			
500	Pregnant uterus	1 2 6	1 2 6	2 5 0
501	Pelvimetry	1 17 6	1 17 6	3 15 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 2.—Radiological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 11.—OPAQUE OR CONTRAST MEDIA.			
	Radiographic examination, with opaque or contrast media, and report (not including any service covered by items 529 to 537 (inclusive) or item 748)			
502	Myelography, encephalography, cerebral angiography or ventriculography	2 5 0	2 5 0	4 10 0
503	Uterine lipiodol (hystero-salpingography) ..	1 2 6	1 2 6	2 5 0
504	Bronchography, arterography, phlebography, aortography or splenography	1 2 6	1 2 6	2 5 0
505	Sialography or vasoepididymyography	1 2 6	1 2 6	2 5 0
506	Sinuses and fistulae—the amount of Commonwealth benefit payable for the radiographic examination of the area plus	0 7 6	0 7 6	0 15 0
507	Pneumarthrography—the amount of Commonwealth benefit payable for the radiographic examination of the area, plus	0 7 6	0 7 6	0 15 0
508	Pneumoperitoneum	1 2 6	1 2 6	2 5 0
	DIVISION 12.—TOMOGRAPHY.			
510	Tomography of any part and report	1 10 0	1 10 0	3 0
	DIVISION 13.—STEREOSCOPIC EXAMINATIONS.			
511	Stereoscopic examination and report—the amount of Commonwealth benefit payable for the radiographic examination and report of the area, plus..	0 7 6	0 7 6	0 15 0
	DIVISION 14.—FLUOROSCOPIC EXAMINATIONS.			
	Fluoroscopic examination and report not covered by any other item (where radiograph is not taken)			
512	Examination with general anaesthesia	0 15 0	0 15 0	1 10 0
513	Examination without general anaesthesia ..	0 7 6	0 7 6	0 15 0
	DIVISION 15.—RADIOTHERAPY.			
514	Radiotherapy (including treatment by means of X-rays, radium rays or other radio-active substances) not covered by any other item—each attendance at which treatment is given.. ..	0 15 0	0 15 0	1 10 0
	Implantation of Radio-active Substances for Tumour.			
515	Lip	2 5 0	2 5 0	4 10 0
516	Mouth or tongue or both	4 10 0	4 10 0	9 0 0
517	Bladder	4 10 0	4 10 0	9 0 0
518	Prostate	4 10 0	4 10 0	9 0 0
519	Cervix or corpus uteri	4 10 0	4 10 0	9 0 0
520	Intrathoracic viscera	4 10 0	4 10 0	9 0 0
521	Retina	7 10 0	7 10 0	15 0 0
522	Region not specified in any other item, requiring a major anaesthetic	4 10 0	4 10 0	9 0 0
523	Region not specified in any other item, not requiring a major anaesthetic	2 5 0	2 5 0	4 10 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 2.—Radiological Services—*continued.*	£ s. d.	£ s. d.	£ s. d.
	Moulds of Radio-active Substances.			
525	Alveolus, palate or antrum	4 10 0	4 10 0	9 0 0
526	Scar following radical mastectomy	2 5 0	2 5 0	4 10 0
527	Hand or other skin area	2 5 0	2 5 0	4 10 0
	Injection of Radio-active Substances.			
528	Intracavitary administration of radio-active substances	1 17 6	1 17 6	3 15 0
	DIVISION 16.—PREPARATION FOR RADIOLOGICAL PROCEDURE.			
	Preparation (including injection of opaque or contrast media or the removal of fluid and its replacement by air, oxygen or other contrast media)			
529	Myelography	1 10 0	1 10 0	3 0 0
530	Encephalography	2 5 0	2 5 0	4 10 0
531	Cerebral angiography or ventriculography ..	3 15 0	3 15 0	7 10 0
532	Bronchography (but not including bronchoscopy) ..	1 2 6	1 2 6	2 5 0
533	Aortography	2 5 0	2 5 0	4 10 0
534	Arteriography-peripheral, phlebography or splenography	1 2 6	1 2 6	2 5 0
535	Sinus or fistula, injection into	0 7 6	0 7 6	0 15 0
536	Perirenal insufflation	0 15 0	0 15 0	1 10 0
537	Pneumarthrography or pneumoperitoneum ..	0 15 0	0 15 0	1 10 0
	Part 3.—Miscellaneous Procedures.			
540	Electrocardiography, phonocardiography or ballistocardiography	0 15 0	0 15 0	1 10 0
541	Electroencephalography	1 2 6	1 2 6	2 5 0
542	Electroconvulsive therapy—each attendance at which treatment is given without intravenous anaesthesia	0 15 0	0 15 0	1 10 0
543	Electroconvulsive therapy—each attendance at which treatment is given with intravenous anaesthesia ..	1 10 0	1 10 0	3 0 0
544	Electromyography	0 15 0	0 15 0	1 10 0
546	Audiography	0 15 0	0 15 0	1 10 0
547	Test of ear, or tests of ears on the same occasion, for integrity of static labyrinth	1 2 6	1 2 6	2 5 0
	Part 4.—Anaesthetics.			
	Note.—A reference to administration of an anaesthetic includes a reference to pre-medication and pre-operative examination of the patient in preparation for anaesthesia. The amount of Commonwealth benefit specified is the amount payable whether the anaesthetic is administered by one or more than one medical practitioner			

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 4.—Anaesthetics—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 1.—GASEOUS ANAESTHETICS.			
549	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £11 5s. and where an anaesthetic referred to in Part 2 of the First Schedule is not given	2 5 0	2 10 0	4 15 0
550	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable does not exceed £3 and where an anaesthetic referred to in Part 2 of the First Schedule is not given	1 2 6	1 5 0	2 7 6
551	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £3 but does not exceed £7 and where an anaesthetic referred to in Part 2 of the First Schedule is not given	1 10 0	1 12 6	3 2 6
552	Administration of an anaesthetic in connection with a professional service or a series or combination of professional services for which the Commonwealth benefit payable exceeds £7 but does not exceed £11 5s. and where an anaesthetic referred to in Part 2 of the First Schedule is not given	1 17 6	2 2 6	4 0 0
553	Administration of an anaesthetic in association with an anaesthetic referred to in Part 2 of the First Schedule	0 7 6	0 8 0	0 15 6
	DIVISION 2.—DENTAL ANAESTHETICS.			
554	Administration by medical practitioner of an anaesthetic in connection with a dental operation	0 15 0	0 18 0	1 13 0
	Part 5.—Operations.			
	DIVISION 1.—GENERAL SURGICAL.			
555	Gastrectomy, partial or complete	18 15 0	23 6 6	42 1 6
556	Partial gastrectomy and gastro-jejunostomy	18 15 0	23 6 6	42 1 6
557	Perforated duodenal ulcer, operation for	9 7 6	11 0 0	20 7 6
558	Caecostomy	5 12 6	7 0 0	12 12 6
559	Bowel, anastomosis of	15 0 0	18 13 6	33 13 6
560	Meckel's diverticulum, removal of	9 7 6	11 0 0	20 7 6
561	Choledochotomy (with or without cholecystectomy)	15 0 0	18 13 6	33 13 6
562	Reconstruction of bile duct including choledochoduodenostomy, cholicystoduodenostomy, choledochoenterostomy, choledochogastrostomy, cholecystogastrostomy or cholecystenterostomy	18 15 0	23 6 6	42 1 6
563	Bowel or viscera, resection of	15 0 0	18 13 6	33 13 6
564	Ruptured viscus (including liver, spleen, bowel), repair or removal of	11 5 0	14 0 0	25 5 0
565	Hydatid of liver, peritoneum or viscus, operation for	11 5 0	14 0 0	25 5 0
566	Adbomino-perineal resection	22 10 0	28 0 0	50 10 0
567	Gastro-enterostomy or entero-colostomy	11 5 0	14 0 0	25 5 0
568	Entero-enterostomy	11 5 0	14 0 0	25 5 0
569	Faecal fistula, repair of	7 10 0	9 0 0	16 10 0
570	Recto-vesical fistula, repair of	11 5 0	13 4 0	24 9 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
571	Breast, radical amputation of	15 0 0	18 13 6	33 13 6
572	Tuberculous or neoplastic glands of neck, groin or axilla, limited excision of	7 10 0	9 0 0	16 10 0
573	Tuberculous or neoplastic glands of neck, groin or axilla, radical excision of	11 5 0	14 0 0	25 5 0
574	Thyroidectomy or removal of parathyroid tumour	11 5 0	14 0 0	25 5 0
575	Thyroid, excision of localized tumour of	7 10 0	9 8 6	16 18 6
576	Rectum, radical operation for prolapse of, in an adult	9 7 6	11 5 0	20 12 6
577	Anal prolapse-circum-anal suture	0 15 0	0 18 0	1 13 0
578	Anal strictue, repair of	5 12 6	7 0 0	12 12 6
579	Sigmoidoscopic examination	1 2 6	1 5 0	2 7 6
580	Hypertrophic pyloric stenosis, operation for	9 7 6	11 15 6	21 3 0
581	Vagotomy	11 5 0	14 2 6	25 7 6
582	Gastroscopy	3 15 0	4 10 0	8 5 0
583	Liver tumour, removal of	11 5 0	14 0 0	25 5 0
584	Liver abscess, abdominal drainage of	7 10 0	9 3 6	16 13 6
585	Liver abscess, transpleural drainage of	11 5 0	14 2 6	25 7 6
586	Pancreas, partial excision of	22 10 0	28 0 0	50 10 0
587	Pancreas, drainage of	7 10 0	9 6 6	16 16 6
588	Diaphragmatic hernia, repair of	11 5 0	14 0 0	25 5 0
589	Subphrenic abscess, drainage of	6 7 6	7 18 6	14 6 0
590	Retroperitoneal tumour, removal of	15 0 0	18 13 6	33 13 6
591	Retroperitoneal abscess, drainage of	5 12 6	7 0 0	12 12 6
592	Peritoneoscopy	2 5 0	2 10 0	4 15 0
593	Branchial cyst or branchial fistula removal of	7 10 0	9 8 6	16 18 6
594	Cystic hygroma, removal of	6 7 6	8 0 0	14 7 6
595	Ranula, removal of	3 15 0	4 10 0	8 5 0
596	Innocent bone tumour, excision of	7 10 0	9 8 6	16 18 6
597	Upper jaw, lower jaw or both jaws, resection of	15 0 0	18 13 6	33 13 6
598	Tongue, excision of	15 0 0	18 13 6	33 13 6
599	Parotid gland, total extirpation of	15 0 0	18 13 6	33 13 6
600	Sublingual or submandibular gland, extirpation of	5 12 6	7 0 0	12 12 6
601	Salivary gland, incision of	2 5 0	2 10 0	4 15 0
602	Salivary gland, removal of calcilus from	4 10 0	5 10 0	10 0 0
603	Salivary gland, dilation or diathermy of duct	1 2 6	1 5 0	2 7 6
604	Salivary gland, removal of calculus from duct	1 10 0	1 12 6	3 2 6
605	Salivary gland, repair of cutaneous fistula of	2 5 0	2 10 0	4 15 0
606	Styloid process of temporal bone, removal of	7 10 0	9 0 0	16 10 0
607	Diverticulum of pharynx or larynx, excision of	11 5 0	13 4 0	24 9 0
608	Thyroglossal cyst or fistula, removal of	7 10 0	9 8 6	16 18 6
609	Cut throat, repair of, involving skin and muscle	3 15 0	4 5 0	8 0 0
610	Cut throar, repair of, involving vessels or nerves, or both	5 12 6	6 15 0	12 7 6
611	Cut throat, repair of, involving vessels and nerves and oesophagus or trachea	11 5 0	13 10 0	24 15 0
612	Maglignant tumour of neck, removal of	15 0 0	18 13 6	33 13 6
613	Thymectomy	22 10 0	26 8 0	48 18 0
614	Coccyx, excision of	4 10 0	5 10 0	10 0 0
615	Pilonidal cyst or sinus, excision of	4 10 0	5 10 0	10 0 0
616	Embolus, removal of, from artery	11 5 0	13 4 0	24 9 0
617	Arterial graft	22 10 0	28 0 0	50 0 0
618	Operation for malignant tumours requiring wide excision and dissection of glands or involving muscle, bone or viscera not covered by any other item	15 0 0	18 13 6	33 13 6
619	Arterial anastomosis	22 10 0	28 0 0	50 10 0
621	Operation on skull	5 12 6	7 0 0	12 12 6
622	Operation on spine or pelvic bones—one bone	7 10 0	9 0 0	16 10 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	Operations for Chronic Osteomyelitis.			
623	Operation on nasal bones	2 5 0	2 10 0	4 15 0
624	Operation on scapula, sternum, clavicle, rib, ulna, radius, metacarpus, carpus, phalanx, tibia, fibula, metatarsus, tarsus, mandible or maxilla (other than alveolar margins)—one bone	5 12 6	7 0 0	12 12 6
625	Operation on humerus or femur—one bone	7 10 0	9 0 0	16 10 0
626	Operation on spine, pelvic bones or skull	11 5 0	14 0 0	25 5 0
627	Operation on any combination of bones specified in item 624	7 10 0	9 0 0	16 10 0
628	Operation on any combination of bones not covered by the last preceding item	11 5 0	14 0 0	25 5 0
	DIVISION 2.—EAR, NOSE AND THROAT.			
631	Aural polyp, removal of	1 17 6	2 2 6	4 0 0
632	Nasal polyp or polypi (simple), removal of	1 2 6	1 5 0	2 7 6
633	Nasal polyp or polypi (requiring admission to hospital), removal of	2 5 0	2 10 0	4 15 0
634	Antrostomy (radical)	7 10 0	9 0 0	16 10 0
635	Antrostomy (radical) with transantral ethmoidectomy	11 5 0	13 4 0	24 9 0
636	Antrum, intranasal operation on, or removal of foreign body from	4 10 0	5 10 0	10 0 0
637	Antrum, drainage of, through tooth socket	2 5 0	2 10 0	4 15 0
638	Oro-antraol fistula, plastic closure of	4 10 0	5 10 0	10 0 0
639	Arytenoid cartilages, fixation of	11 5 0	14 0 0	25 5 0
640	Arytenoid cartilage, removal of	9 7 6	11 0 0	20 7 6
641	Frontal sinus or ethmoid sinuses, external operation on	11 5 0	14 0 0	25 5 0
642	Frontal sinus or ethmoid sinuses, intranasal, operation on	4 10 0	5 10 0	10 0 0
643	Sphenoid sinus, proof puncture of	1 2 6	1 5 0	2 7 6
644	Sphenoid sinus, intranasal operation on	4 10 0	5 10 0	10 0 0
645	Mastoidectomy (radical or modified radical)	11 5 0	14 0 0	25 5 0
646	Nasal septum, resection of	4 10 0	5 10 0	10 0 0
647	Cauterization or diathermy of septum or turbinates or pharynx—any one or more—each attendance	0 15 0	0 18 0	1 13 0
648	Turbinectomy or dislocation of turbinate	1 2 6	1 5 0	2 7 6
649	Turbinates, submucous resection of	4 10 0	5 10 0	10 0 0
650	Nose, rib graft to	7 10 0	9 0 0	16 10 0
651	Nose—soft tissue operation, with or without cosmetic restoration	7 10 0	9 0 0	16 10 0
652	Laryngectomy (total)	11 5 0	14 0 0	25 5 0
653	Larynx, direction examination of	1 2 6	1 5 0	2 7 6
654	Larynx, direct examination of, with biopsy	2 5 0	2 10 0	4 15 0
655	Larynx, direct examination of, with removal of tumour	3 15 0	4 10 0	8 5 0
656	Larynx, operation for fractured	4 10 0	5 10 0	10 0 0
657	Larynx, external operation on, or laryngo-fissure	9 7 6	11 0 0	20 7 6
658	Pharyngeal pouch, removal of	11 5 0	14 0 0	25 5 0
659	Pharyngotomy (lateral)	9 7 6	11 9 0	20 16 6
660	Eustachian tube, catheterization of	0 15 0	0 18 0	1 13 0
661	Labyrinthotomy or destruction of labyrinth	11 5 0	14 0 0	25 5 0
662	Bronchoscopy	4 10 0	5 10 0	10 0 0
663	Bronchoscopy, with biopsy	6 7 6	8 0 0	14 7 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
664	Bronchis, removal of foreign body in	7 10 0	9 0 0	16 10 0
665	Nose, removal of foreign body in, otherwise than by simple probing	1 17 6	2 2 6	4 0 0
666	Ear, removal of foreign body in, otherwise than by simple syringing	1 17 6	2 2 6	4 0 0
667	Trachea, removal of foreign body in	2 5 0	2 10 0	4 15 0
668	Oesophagoscopy	3 15 0	4 10 0	8 5 0
669	Oesophagoscopy, with biopsy	5 12 6	7 0 0	12 12 6
670	Oesophagus, removal of foreign body in	7 10 0	9 0 0	16 10 0
671	Insertion of Souttar's tubes or dilatation of oesophagus—first dilatation	3 15 0	4 10 0	8 5 0
672	Insertion of Souttar's tubes or dilatation of oesophagus—subsequent dilatation	1 17 6	2 2 6	4 0 0
673	Fenestration operation—each year	22 10 0	28 0 0	50 10 0
674	Stapes mobilzation	11 5 0	14 0 0	25 5 0
675	Tympanoplasty	11 5 0	14 0 0	25 5 0
676	External auditory meatus, removal of exostoses in	15 0 0	18 0 0	33 0 0
677	Vallecular or pharyngeal cysts, removal of	6 7 6	8 0 0	14 7 6
678	Middle ear, exploration of	7 10 0	9 0 0	16 10 0
	DIVISION 3.—UROLOGICAL.			
680	Adrenal gland, biopsy or removal of	11 5 0	14 0 0	25 5 0
681	Nephrolithotomy, pyelolithotomy or ureterolithotomy	11 5 0	13 4 0	24 9 0
682	Nephrostomy or nephropexy	7 10 0	9 0 0	16 10 0
683	Pelvi-ureteric junction, plastic procedures to	11 5 0	14 0 0	25 5 0
684	Divided ureter, repair of	11 5 0	14 0 0	25 5 0
685	Ureter, transplantation of (skin, bowel or bladder)	11 5 0	14 0 0	25 5 0
686	Pyonephrosis, drainage of	7 10 0	9 0 0	16 10 0
	Operations on the Prostrate.			
687	Prostatectomy (suprapubic, perineal or retropubic)	18 15 0	23 6 6	42 1 6
688	Prostatectomy (transurethral)	11 5 0	13 10 0	24 15 0
689	Median bar, transurethral resection of	9 7 6	11 15 6	21 3 0
690	Prostate, total excision of	18 15 0	23 6 6	42 1 6
691	Prostate, biopsy of (perineal or transurethral)	4 10 0	5 10 0	10 0 0
692	Prostatic abscess, retropubic drainage of	4 10 0	5 10 0	10 0 0
	Operations on the Bladder (closed).			
695	Cystoscopy	2 12 6	3 0 0	5 12 6
696	Cystoscopy, with ureteric catheterization	3 15 0	4 10 0	8 5 0
697	Cystoscopy, with retrograde pyelography	3 15 0	4 10 0	8 5 0
698	Cystometrography	1 10 0	1 12 6	3 2 6
699	Cystoscopic removal of foreign body	4 10 0	5 10 0	10 0 0
700	Cystoscopy, with biopsy of bladder tumours	5 12 6	7 0 0	12 12 6
701	Cystoscopy, with diathermy or resection of bladder tumours	5 12 6	7 0 0	12 12 6
702	Cystoscopy, with ureteric meatotomy	5 12 6	7 0 0	12 12 6
703	Cystoscopy, with diathermy of ureteric orifices	5 12 6	7 0 0	12 12 6
704	Cystoscopy, with endoscopic bladder neck resection	7 10 0	9 6 6	16 16 6
705	Cystoscopy, with endoscopic removal of ureteric calculus	5 12 6	7 0 0	12 12 6
706	Litholapaxy, with or without cystoscopy	6 7 6	8 0 0	14 7 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	Operations on the Bladder (open).			
707	Bladder, partial excision or plastic repair of ..	15 0 0	18 13 6	33 13 6
708	Bladder, excision of, with ureteric transplantation ..	22 10 0	28 0 0	50 10 0
709	Bladder neck contracture, operation for	11 5 0	13 10 0	24 15 0
710	Bladder tumours, suprapubic diathermy of ..	5 12 6	7 0 0	12 12 6
711	Diverticulum of bladder, excision or obliteration of..	11 5 0	13 4 0	24 9 0
712	Vesical fistula, operation for	7 10 0	9 0 0	16 10 0
	Operations on Testes, Vasa or Seminal Vesicles.			
715	Orchidectomy, with excision of glands vas or seminal vesicle	11 5 0	14 0 0	25 5 0
716	Orchidoplasty	7 10 0	9 10 0	17 0 0
717	Epididymectomy	6 7 6	8 0 0	14 7 6
718	Vasoepididymostomy	7 10 0	9 0 0	16 10 0
719	Vasectomy (simple)	3 15 0	4 10 0	8 5 0
720	Vasectomy (radical)	9 7 6	11 0 0	20 7 6
721	Vasotomy (bilateral)	3 15 0	4 10 0	8 5 0
722	Testicular biopsy	2 12 6	3 0 0	5 12 6
723	Speratocoele, excision of	2 12 6	3 0 0	5 12 6
	Operations on Penis, Urethra or Scrotum.			
725	Urinary meatus-meatomtomy	2 12 6	3 0 0	5 12 6
726	Urethrotomy (external) or excision of stricture ..	11 5 0	13 4 0	24 9 0
727	Urethrotomy (internal)	6 7 6	8 0 0	14 7 6
728	Urethroplasty	7 10 0	9 0 0	16 10 0
729	Urethra, diathermy of	4 10 0	5 10 0	10 0 0
730	Penis, amputation of (partial or complete) ..	7 10 0	9 6 6	16 16 6
731	Penis, amputation of, with excision of glands ..	18 15 0	23 6 6	42 1 6
732	Scrotum, partial excision of	5 12 6	7 0 0	12 12 6
	DIVISION 4.—GYNAECOLGICAL.			
736	Hysterectomy and dissection of pelvic glands ..	18 15 0	23 6 6	42 1 6
737	Vaginal hysterectomy (with or without plastic repair operation)	11 5 0	14 0 0	25 5 0
738	Salpingostomy or salpingolysis, or both	7 10 0	9 3 6	16 13 6
739	Fallopian tubes, implantation of, into uterus ..	7 10 0	9 0 0	16 10 0
740	Pelvic lymph glands, excision of..	11 5 0	14 0 0	25 5 0
741	Vulvectomy (simple)	7 10 0	9 0 0	16 10 0
742	Vulvectomy (radical)	18 15 0	23 6 6	42 1 6
743	Clitoris, amputation of	3 15 0	4 10 0	8 5 0
744	Fistula between genital and urinary or alimentary tracts repair of	11 5 0	13 4 0	24 9 0
745	Stress incontinence, sling operation for	11 5 0	14 0 0	25 5 0
746	Vaginal reconstruction in congenital absence or gynaetresia	11 5 0	14 0 0	25 5 0
747	Urethrocoele, operation for	3 15 0	4 10 0	8 5 0
748	Rubin test for patency or injection of opaque media for hystero-salpingography	1 10 0	1 12 6	3 2 6
749	Examination of the uterine cervix by a magnifying colposcope of the Hinselmann type or similar instrument	1 10 0	1 12 6	3 2 6
750	Cervix purse string ligation of, for threatened miscarriage	1 17 6	2 2 6	4 0 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 5.—OPHTHALMOLOGICAL.			
751	Lens extraction (including initial and subsequent needlings)	11 5 0	14 0 0	25 5 0
752	Cataract, needling of, and subsequent linear extraction not covered by any other item—each stage ..	2 12 6	3 0 0	5 12 6
753	Secondary cataract, needling of, not covered by any other item—each stage	2 12 6	3 0 0	5 12 6
754	Paracentesis in relation to eye	2 12 6	3 0 0	5 12 6
755	Glaucoma, filtering and allied operations for ..	11 5 0	14 0 0	25 5 0
756	Iridectomy or iridotomy	11 5 0	13 4 0	24 9 0
759	Pterygium, removal of	2 12 6	3 0 0	5 12 6
760	Cornea, tattooing of	2 5 0	2 10 0	4 15 0
761	Tarsal cartilage, excision of	4 10 0	5 10 0	10 0 0
762	Trachoma, crushing operation for	2 12 6	3 0 0	5 12 6
763	Detached retina, operation for	11 5 0	14 0 0	25 5 0
764	Keratoplasty, superficial	15 0 0	18 13 6	33 13 6
765	Lachrymal sac, excision of, or operation on ..	4 10 0	5 10 0	10 0 0
766	Canthoplasty, suturing lid or similar operation ..	3 15 0	4 10 0	8 5 0
767	Intraocular foreign body, removal of	11 5 0	14 0 0	25 5 0
768	Orbit, exenteration of	11 5 0	14 0 0	25 5 0
769	Globe, evisceration of	7 10 0	9 0 0	16 10 0
770	Eye, enucleation of, and insertion of ball ..	7 10 0	9 0 0	16 10 0
771	Squint, operation for	7 10 0	9 0 0	16 10 0
772	Cyclodiathermy	4 10 0	5 10 0	10 0 0
773	Trichiasis, operation for	4 10 0	5 10 0	10 0 0
774	Entropion or ectropion, operation for	5 12 6	6 8 6	12 1 0
775	Perforating wound of globe, repair of	7 10 0	9 0 0	16 10 0
776	Obstruction, lachrymal passages, probing or dilation	1 2 6	1 5 0	2 7 6
777	Cornea, transplantation of	22 10 0	28 0 0	50 10 0
	DIVISION 6.—THORACIC.			
779	Thoracotomy without pneumolysis	9 7 6	11 13 6	22 1 0
780	Thoracotomy with pneumolysis	11 5 0	13 10 0	24 15 0
781	Thoracotomy with pulmonary decortication ..	15 0 0	18 13 6	33 13 6
782	Thoracoplasty (complete)	15 0 0	18 13 6	33 13 6
783	Thoracoplasty (in stages)—each stage	7 10 0	9 0 0	16 10 0
784	Thoracoscopy	2 5 0	2 10 0	5 15 0
785	Phrenic avulsion or crush	2 12 6	3 0 0	5 12 6
786	Hydatid cysts of lungs, removal of	11 5 0	14 0 0	25 5 0
787	Pericardium, drainage of	11 5 0	13 4 0	24 9 0
788	Pneumonectomy or lobectomy	22 10 0	28 0 0	50 10 0
789	Oesophagectomy or operation for atresia of oesophagus	22 10 0	28 0 0	50 10 0
790	Artificial pneumothorax—induction	1 2 6	1 5 0	2 7 6
791	Artificial pneumothorax—each filling subsequent to induction	0 7 6	0 8 0	0 15 6
792	Intrathoracic operation on heart, lungs, great vessels, bronchial tree, oesophagis or mediastinum, or on more than one of those organs, not covered by any other item	22 10 0	28 0 0	50 10 0
793	Introcardiac pressure recording at operation ..	3 15 0	4 10 0	8 5 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 7.—NEURO-SURGICAL.			
795	Chemopallidctomy	18 15 0	22 0 0	40 15 0
796	Cutaneous nerve, primary suture of	1 2 6	1 5 0	2 7 6
797	Nerve, transposition of	4 10 0	5 10 0	10 0 0
798	Neurectomy, neurotomy, or removal of tumour from peripheral nerve	3 15 0	4 10 0	8 5 0
799	Neurectomy, periarterial	11 5 0	14 0 0	25 5 0
800	Neurectomy, intracranial or radical as in tic douloureux	15 0 0	18 13 6	33 13 6
801	Nerve, graft or anastomosis of	11 5 0	14 0 0	25 5 0
802	Nerve trunk, secondary suture of	4 10 0	5 10 0	10 0 0
803	Injection of intracranial ganglion, or primary branch of trigeminal nerve, with alcohol or similar substance	5 12 6	7 0 0	12 12 6
804	Sympathectomy (cervical, lumbar, thoracic, sacral or presacral)	11 5 0	14 0 0	25 5 0
805	Sympathetic trunk, injection into	2 5 0	3 0 0	5 5 0
806	Neurolysis by open operation	3 15 0	4 10 0	8 5 0
807	Scalp, plastic repairs to—each stage	2 5 0	3 0 0	5 5 0
808	Complicated fracture or fractures of skull, operation for	15 0 0	18 13 6	33 13 6
809	Chronic subdural haematoma, operation for	11 5 0	14 0 0	25 5 0
810	Craniotomy, involving osteoplastic flap	15 0 0	18 13 6	33 13 6
811	Intracranial haemorrhage, burr-hole craniotomy for	3 15 0	4 10 0	8 5 0
812	Aneurysm, intracranial, operation for	22 10 0	28 0 0	50 10 0
813	Craniotomy (explatory)	11 5 0	14 0 0	25 5 0
814	Craniotomy and tumour removal	22 10 0	28 0 0	50 10 0
815	Intracranial cyst, needling and drainage of	3 15 0	4 10 0	8 5 0
816	Craniotomy, burr-hole	2 5 0	3 0 0	5 5 0
817	Transfrontal orbitotomy for tumours or other lesions	18 15 0	23 6 6	42 1 6
818	Intracranial infection, drainage of	11 5 0	14 0 0	25 5 0
819	Intracranial abscess, excision of	18 15 0	23 6 6	42 1 6
820	Leucotomy or lobotomy for psychiatric causes	11 5 0	14 0 0	25 5 0
821	Laminectomy for cordotomy, removal of tumour or of intervertebral disc	15 0 0	18 13 6	33 13 6
822	Cisternal puncture	1 10 0	1 12 6	3 2 6
823	Ventricular puncture	2 12 6	3 0 0	5 12 6
	DIVISION 8.—ORTHOPAEDIC.			
824	Osteosynthesis by Smith-Petersen nail	11 5 0	14 0 0	25 5 0
825	Spine, manipulation of—each attendance at which manipulation is carried out	0 15 0	0 18 0	1 13 0
826	Spine, manipulation of, with application of plaster jacket	2 5 0	2 10 0	4 15 0
827	Joint (other than spine), manipulation of—each attendance at which manipulation is carried out	0 7 6	0 8 0	0 15 6
828	Joint (other than spine), manipulation of, with application of plaster cast	1 2 6	1 5 0	2 7 6
829	Osteotomy or osteectomy of phalanx, metacarpal or metatarsal	3 15 0	4 10 0	8 5 0
830	Osteotomy or osteectomy of fibula, radius, ulna, clavicle, scapula (except acromion), rib, tarsus or carpus	6 7 6	8 0 0	14 7 6
831	Osteotomy or osteectomy of spine, tibia, humerus or femur	7 10 0	9 0 0	16 10 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
832	Scalenotomy	4 10 0	5 10 0	10 0 0
833	Acromion or coraco-acromion ligament, removal of	5 12 6	7 0 0	12 12 6
834	Cervical rib, removal of	9 7 6	11 0 0	20 7 6
835	Talipes, radical operation for	9 7 6	11 0 0	20 7 6
836	Hallux valgus, correction of	6 7 6	8 0 0	14 7 6
837	Hallux rigidus, correction of	6 7 6	8 0 0	14 7 6
838	Hammer toe, correction of	3 15 0	4 10 0	8 5 0
839	Trigger finger, correction of	2 12 6	3 0 0	5 12 6
840	Bone graft to spine	11 5 0	13 4 0	24 9 0
841	Bone graft not covered by any other item	7 10 0	9 0 0	16 10 0
842	Tenotomy (orthopaedic) or tendon lengthening	2 5 0	2 10 0	4 15 0
843	Tendon transplantation (orthopaedic)	6 7 6	8 0 0	14 7 6
844	Tendon graft	4 10 0	5 10 0	10 0 0
845	Tendon splitting	3 15 0	4 10 0	8 5 0
846	Plantar, wart, removal of	1 2 6	1 5 0	2 7 6
847	Calcanean spur, removal of	4 10 0	5 10 0	10 0 0
848	ingrowing toenail, operation for	1 17 6	2 2 6	4 0 0
849	Dupuytren's contracture, operation for	7 10 0	9 0 0	16 10 0
850	Volmann's contracture, operation for	4 10 0	5 10 0	10 0 0
851	Epicondylitis, open operation for	2 12 6	3 0 0	5 12 6
852	Accessory or sesamoid bone, removal of	3 15 0	4 10 0	8 5 0
853	Insertion of orthopaedic pin or wire	2 5 0	2 10 0	4 15 0
	Operation on Joints.			
856	Hip—arthrodesis, arthrectomy or arthroplasty	11 5 0	14 0 0	25 5 0
857	Hip—arthrotomy	9 7 6	11 15 6	21 3 0
858	Knee—arthrectomy or arthroplasty	11 5 0	13 4 0	24 9 0
859	Knee—arthrotomy	4 10 0	5 10 0	10 0 0
860	Knee—operation for internal derangement	7 10 0	9 0 0	16 10 0
861	Knee—reconstruction of cruciate ligaments	11 5 0	14 0 0	25 5 0
862	Knee—reconstruction of capsular ligaments	9 7 6	11 5 0	20 12 6
863	Knee—eccision of patella	7 10 0	9 0 0	16 10 0
864	Knee—operation for recurrent dislocation of patella	9 7 6	11 0 0	20 7 6
865	Shoulder—removal of calcium deposit from cuff	3 15 0	4 10 0	8 5 0
866	Shoulder—arthrotomy	4 10 0	5 10 0	10 0 0
867	Shoulder—arthroplasty or plastic reconstruction	9 7 6	11 0 0	20 7 6
868	Shoulder—arthrectomy	9 7 6	11 5 0	20 12 6
869	Spine, arthrodesis of	11 5 0	14 0 0	25 5 0
870	Sacro-iliac joint, arthrodesis of	11 5 0	14 0 0	25 5 0
871	Other large joint, arthrodesis of	9 7 6	11 0 0	20 7 6
872	Finger or other small joint, arthrodesis of	3 15 0	4 10 0	8 5 0
873	Other joint—arthrotomy	3 0 0	3 10 0	6 10 0
874	Other joint—arthrectomy	4 10 0	5 10 0	10 0 0
	DIVISION 9.—PAEDIATRIC.			
	Manipulations and plaster work for correction of congenital abnormalities.			
876	Congenital dislocation of the hip—manipulation and plaster (one hip)	1 17 6	2 2 6	4 0 0
877	Talipes equinovarus—manipulation	0 15 0	0 18 0	1 13 0
878	Talipes equinovarus—manipulation and plaster	1 2 6	1 5 0	2 7 6
879	Calcaneus valgus—manipulation	0 15 0	0 18 0	1 13 0
880	Calcaneus valgus—manipulation and plaster	1 2 6	1 5 0	2 7 6
881	Pes planus—manipulation	0 15 0	0 18 0	1 13 0
882	Pes planus—manipulation and plaster	1 2 6	1 5 0	2 7 6
883	Genu varum or genu valgum—manipulation	0 15 0	0 18 0	1 13 0

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
884	Genu varum or genu valgum—manipulation and plaster	1 10 0	1 12 6	3 2 6
885	Genu varum or genu valgum—manipulation and plaster with osteoclasis	4 10 0	5 10 0	10 0 0
886	Contractures not covered by any other item—manipulation	0 15 0	0 18 0	1 13 0
887	Contractures not covered by any other item—manipulation and plaster	1 2 6	1 5 0	2 7 6
888	Spastic paralysis—manipulation	0 15 0	0 18 0	1 13 0
889	Spastic paralysis—manipulation and plaster (one limb)	1 10 0	1 12 6	3 2 6
890	Erb's birth palsy—plaster for	1 2 6	1 5 0	2 7 6
891	Klumpke's and similar congenital abnormalities—plaster for	1 2 6	1 5 0	2 7 6
	Operations for correction of congenital abnormalities.			
893	Imperforate anus, abdomino-perineal correction of	15 0 0	18 13 6	33 13 6
894	Imperforate anus, correction of (other than abdomino-perineal)	5 12 6	7 0 0	12 12 6
895	Intestinal atresia or stenosis—excision or anastomosis (or both)	15 0 0	18 13 6	33 13 6
896	Duodenal obstruction (congenital)—anastomosis or resection of	15 0 0	18 13 6	33 13 6
897	Congenital volvulus of the small intestine, reduction of	7 10 0	9 0 0	16 10 0
898	Hirchsprung's disease, rectosigmoidectomy for	18 15 0	23 6 6	42 1 6
899	Exomphalos, operation for	9 7 6	11 0 0	20 7 6
900	Oesophagus, correction of short or hiatus hernia of	11 5 0	14 0 0	25 5 0
901	Oesophagus, radical correction of congenital stenosis of	11 5 0	14 0 0	25 5 0
902	Tracheo-oesophageal fistula, correction of	11 5 0	14 0 0	25 5 0
903	Contracted bladder neck (congenital) wedge excision or perurethral resection of	11 5 0	13 10 0	24 15 0
904	Contracted bladder neck (congenital)—lumbar sympathectomy	11 5 0	14 0 0	25 5 0
905	Contracted lower end of ureters (congenital)—cystotomy and dilatation	4 10 0	5 10 0	10 0 0
906	Contracted lower end of ureters (congenital)—lumbar sympathectomy	11 5 0	14 0 0	25 5 0
907	Urachal fistula	6 7 6	8 0 0	14 7 6
908	Ectopic bladder—" turning-in " operation	15 0 0	18 0 0	33 0 0
909	Ectopic bladder—transplantation of ureters	11 5 0	14 0 0	25 5 0
910	Pinhole urinary meatus, dilatation of	0 15 0	0 18 0	1 13 0
911	Pinhole urinary meatus—meatotomy	1 2 6	1 5 0	2 7 6
912	Urethral valves, removal of	7 10 0	9 0 0	16 10 0
913	Incontinence of urine (congenital)—plastic operation to sphincter	7 10 0	9 0 0	16 10 0
914	Incontinence of urine (congenital)—transplantation of ureters	11 5 0	14 0 0	25 5 0
915	Myelomeningocoele—excision of sac	11 5 0	13 4 0	24 9 0
916	Hydrocephalus—suboccipital decompression, third ventriculostomy or Torkildsen's operation	18 15 0	23 6 6	42 1 6
917	Hydrocephalus, spino-ureteral, spino-peritoneal or spino-pleural anastomosis of	15 0 0	18 13 6	33 13 6
918	Craniostenosis, operation for	11 5 0	14 0 0	25 5 0
919	Arachnoidal cyst, operation for	11 5 0	14 0 0	25 5 0
920	Subdural haemorrhage, tap for	1 2 6	1 5 0	2 7 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
921	Subdural haemorrhage, flap and excision of	11 5 0	14 0 0	25 5 0
922	Abnormal limb, amputation of	5 12 6	7 0 0	12 12 6
923	Extra digit, amputation of	1 17 6	2 2 6	4 0 0
924	Tetralogy of Fallot or patent ductus arteriosus, operation for	22 10 0	28 0 0	50 10 0
925	Cardiac operation not covered by any other item	22 10 0	28 0 0	50 10 0
926	Cardiac catheterization, with or without fluoroscopy	3 15 0	4 10 0	8 5 0
927	Congenital choanal atresia or occlustion, repair of	9 7 6	11 5 0	20 12 6
	Operations for excision of congenital abnormalities.			
929	Dermoid of the eye (extraocular), excision of	2 5 0	2 10 0	4 15 0
930	Dermoid of the eye (intraocular), excision of	9 7 6	11 0 0	20 7 6
931	Dermoid of the nose (extranasal), excision of	2 5 0	2 10 0	4 15 0
932	Dermoid of the nose (intranasal), excision of	7 10 0	9 0 0	16 10 0
933	Sacrococcygeal demoid or teratome other than pilonidal sinus, excision of	7 10 0	9 0 0	16 10 0
	Plastic operations for congenital abnormalities.			
935	Hare-lip (unilateral), repair of	7 10 0	9 0 0	16 10 0
936	Hare-lip, secondary correction of	2 5 0	2 10 0	4 15 0
937	Cleft palate (soft palate only), repair of	11 5 0	13 10 0	24 15 0
938	Cleft palate, complete repair of	15 0 0	18 13 6	33 13 6
939	Cleft palate, secondary correction of	7 10 0	9 0 0	16 10 0
940	Hypospadias or epispadias—plastic operation—each stage	4 10 0	5 10 0	10 0 0
941	Hypospadias or epispadias, urethral reconstruction for	9 7 6	11 0 0	20 7 6
942	Syndactyly, repair of—each stage	4 10 0	5 10 0	10 0 0
943	Lymphangiectasis of limb (Milroy's disease), injection of	0 7 6	0 8 0	0 15 6
944	Lymphangiectasis of limb (Milroy's disease)—excision	9 7 6	11 5 0	20 12 6
945	Macrocheilia, macroglossia or macrostomia, operation for	9 7 6	11 0 0	20 7 6
946	Angioma, injection of	0 7 6	0 8 0	0 15 6
947	Angioma, cautery of	0 15 0	0 18 0	1 13 0
948	Angioma (simple), excision of	2 5 0	2 10 0	4 15 0
949	Angioma (complicated or large—localized), excision of	4 10 0	5 10 0	10 0 0
950	Angioma (complicated or large—diffused), operation for	7 10 0	9 0 0	16 10 0
951	Torticollis, operation for	7 10 0	9 6 6	16 16 6
952	Bat ears, operation for	9 7 6	11 0 0	20 7 6
	Operations for acquired conditions.			
953	Portal hypertension, lienorenal anastomosis for	22 10 0	28 0 0	50 10 0
954	Portal vein anastomosis	22 10 0	28 0 0	50 10 0
955	Prolapsed rectum, injection of	0 15 0	0 18 0	1 13 0
956	Prolapsed rectum, plastic operation for	7 10 0	9 6 6	16 16 6
957	Megacolon, colectomy	18 15 0	23 6 6	42 1 6
958	Epiphysitis (Perthes or Calve's), plaster for	1 17 6	2 2 6	4 0 0
959	Epiphysitis (Server's, Kohler's, Kienboch's or Schlatter's), plaster for	1 2 6	1 5 0	2 7 6
960	Epiphysitis (Scheuermann's), plaster for	2 12 6	3 0 0	5 12 6

SCHEDULE—*continued.*

Item No.	Professional Service.	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	Part 5.—Operations—*continued.*	£ s. d.	£ s. d.	£ s. d.
	DIVISION 10.—PLASTIC AND RECONSTRUCTIVE.			
962	Free graft on granulating surface (limited) ..	2 5 0	2 10 0	4 15 0
963	Free graft on granulating surface (extensive) ..	11 5 0	14 0 0	25 5 0
964	Free graft after elective dissection (limited) ..	3 15 0	4 10 0	8 5 0
965	Free graft after elective dissection (extensive) ..	11 5 0	13 10 0	24 15 0
966	Indirect flap or padicle repair—each stage ..	2 12 6	3 0 0	5 12 6
967	Cross leg, adbominal or other direct flap repair—each stage	2 12 6	3 0 0	5 12 6
968	Local flap repair—transposition or rotation ..	3 0 0	3 10 0	6 10 0
969	Local flap repair—pedicle or " Z " plastic ..	3 15 0	4 10 0	8 5 0
970	Eye lid or socket, total reconstruction of	7 10 0	9 0 0	16 10 0
971	Eye lid or socket, reconstruction in stages—each stage	2 12 6	3 0 0	5 12 6
972	Eyebrow, reconstruction of	4 10 0	5 10 0	10 0 0
973	Symblepharon, grafting for	7 10 0	9 0 0	16 10 0
974	Ptosis, correction of	7 10 0	9 0 0	16 10 0
975	Deformity of nose, correction of	9 7 6	11 5 0	20 12 6
976	Nose, reconstruction of—each stage	2 12 6	3 0 0	5 12 6
977	Nose, plastic reconstruction for fracture of ..	7 10 0	9 0 0	16 10 0
978	Local nasal reconstruction not covered by any other item	7 10 0	9 0 0	16 10 0
979	Rhinophyma, removal of	7 10 0	9 0 0	16 10 0
980	Ear reconstruction (total or partial)—each stage ..	2 12 6	3 0 0	5 12 6
981	Total lip and mouth reconstruction—each stage ..	2 12 6	3 0 0	5 12 6
982	Cosmetic meloplasty or slings for facial paralysis ..	7 10 0	9 0 0	16 10 0
983	Excision of mole and melanoma, and repair, not covered by any other item	3 15 0	4 10 0	8 5 0
984	Excision of carcinoma, and repair, not covered by any other item	3 15 0	4 10 0	8 5 0
985	Prognathism or retrognathism, correction of ..	11 5 0	14 0 0	25 5 0
986	Mandible or maxilla, plastic reconstruction for fracture of	11 5 0	13 10 0	24 15 0
987	Malar-maxillary fracture, plastic reconstruction for	11 5 0	13 10 0	24 15 0
988	Condylectomy	4 10 0	5 10 0	10 0 0
989	Finger reconstruction	3 15 0	4 10 0	8 5 0
990	Epicanthus, correction of	1 17 6	2 2 6	4 0 0
991	Neck contracture, repair of—each stage	2 12 6	3 0 0	5 12 6
992	Cicatricial flexion contracture of joint, correction of, involving skin and subcutaneous tissue only ..	4 10 0	5 10 0	10 0 0
993	Cicatricial flexion contracture of joint, correction of, involving tissues deeper than skin and subcutaneous tissue	7 10 0	9 0 0	16 10 0
994	Mammaplasty	4 10 0	5 10 0	10 0 0
995	Major grafting of hand—each stage	2 12 6	3 0 0	5 12 6
996	Penile reconstruction—each stage	2 12 6	3 0 0	5 12 6
	DIVISION 11.—MISCELLANEOUS.			
997	Hormone or living tissue implantation—by incision	1 2 6	1 5 0	2 7 6
998	Hormone or living tissue implantation—by cannula	0 15 0	0 18 0	1 13 0

Hospital Benefits.

The following scale of maximum benefits includes home nursing by a duly registered nurse, when such home nursing is certified as essential by a duly qualified medical practitioner—

	Commonwealth Benefit.	Society Benefit.	Total Benefit.
	s. d.	s. d.	s. d.
(*a*) Per day	12 0	24 0	36 0

(Commonwealth Benefit is not payable for home nursing).

The Society benefit of 24s. per day (£8 8s. per week) is subject to a maximum period of fifteen weeks hospitalization in any calendar year in respect of each member and each of his dependants. Where the expenses incurred by the member are less than 36s. per day the Society will pay the expenses incurred.

Note.—In addition to the hospital benefits detailed above the Commonwealth pays an additional subsidy of 8s. per day direct to the hospital.

(*b*) Hospital benefits shall be in addition to any financial assistance given or subsidy paid by any State Government, or any further assistance or subsidy given by the Commonwealth Government but such assistance or subsidy shall be taken into consideration when calculating the amount of benefit payable in respect of hospitalization expenses.

(*c*) Hospital benefits, other than benefits for home nursing will be payable only against expenses incurred in any licenced hospital.

(D.G.S. 271/51/10.)

(*Navy Order* 555 *of* 1958.)

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C.N.O.'s 218-247/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
31st March, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

1915/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

218.—" Hull Life "—Discontinuance of Use of Term.

(*A.F.O.* 292/1960.)

It has been decided that the use of the term " Hull Life ", to describe the length of useful service to be expected from a ship, is liable to be misleading and should be discontinued.

2. In future the term " Effective Operational Life " should be used instead to indicate the period over which a ship can be effectively and economically maintained in an operational state.

(D.T.S.R. 1211/2/4.)

UNCLASSIFIED.

219.—Laboratories and Test-Houses Registered by the National Association of Testing Authorities (N.A.T.A.)—Use by Inspection Services of Department of Navy.

The N.A.T.A. is a voluntary association of governmental and private authorities operating laboratories and testing houses (hereinafter referred to by the single term " laboratories ") which was brought into being at the beginning of 1947 to meet the urgent needs of commerce, industry and the services. It has the full recognition and support of the Commonwealth and State Governments.

Approval of the Use of N.A.T.A. Laboratories.

2. The Defence Standards Laboratories (D.S.L.) alone cannot meet even the peace-time demands of the Services for all routine testing, and the Naval Board has approved in principle of laboratories holding current registration by the N.A.T.A. being used by its inspection and overseeing organization for tests within the fields and classes of test for which they hold registration. Further, as far as practicable (but subject to the provisions of this order), routine testing should in future be carried out at N.A.T.A. registered laboratories other than the D.S.L. so that the latter may be correspondingly freed to perform its higher functions for all Departments in the Defence Group.

Special Role of Inspecting and Overseeing Officers Regarding Efficiency of N.A.T.A. Laboratories.

3. As described later, the N.A.T.A. plays a most important part in ensuring the necessary standards of its laboratories and it may confidently be expected that test reports issued by these laboratories will, in general, be of a high order of reliability The N.A.T.A., however, is not in a position to guarantee that the staffs of its laboratories are without human frailties and it is inevitable that errors will be made. It has been decided, therefore, as a matter of policy, that inspecting officers of this Department are to maintain a system of safeguards such that the incidence of errors will be reduced to a minimum and, in particular, that a significant drift in the efficiency of any individual laboratory will be detected, and appropriate action taken, at the earliest possible moment. In this connection it must be borne in mind that many of the industrial and commercial users of N.A.T.A. laboratories are likely to accept all reports at their face value. The Service Departments' Inspection Services however, have the standing, the knowledge and the means to keep laboratories on their mettle and in exercising this function they will not only be safeguarding themselves but performing an important service for the N.A.T.A. organization. The later clauses of this order are promulgated for the information and guidance of all officers concerned regarding the more important aspects of N.A.T.A.

Control of N.A.T.A.

4. The association is controlled by a Council through an Executive Committee, State Committees and a small permanent staff headed by the Registrar of N.A.T.A., located in Sydney, and the Deputy Registrar located in Melbourne. The Departments of Navy, Army, and Air each have permanent representation on the council. Details of the N.A.T.A. organization are contained in two booklets, the Constitution of N.A.T.A. and the Regulations of N.A.T.A. and the more important activities of the Association are included in their Annual Report.

Scope of Testing by N.A.T.A. Laboratories.

5. Laboratories may be registered by the N.A.T.A. for the performance of a wide variety of tests in the following fields—

(*a*) Metrology
(*b*) Mechanical testing
(*c*) Electrical testing
(*d*) Photometry
(*e*) Heat and temperature measurement
(*f*) Industrial radiography and crack detection
(*g*) Chemical testing
(*h*) Biological testing.

6. Each of these fields of testing is subdivided into a number of classes of test, e.g., mechanical testing embraces upwards of 15 classes including metals, concrete, textiles, timber, plastics and so on. Full details regarding each field of testing are given in separate booklets issued by the N.A.T.A. and entitled " Classes of test, and requirements for registration of laboratories ".

Standards of Laboratories for Registration.

7. On application for registration by the N.A.T.A., the laboratory concerned is examined by officially appointed specialists in the field of testing concerned, and must comply with a high standard with regard to qualifications of staff, accuracy and sensitivity of testing equipment and laboratory practices in general. Registration is notified in a N.A.T.A. publication known as the " Register of Laboratories ". This register gives the name and address of each laboratory concerned together with details of the fields and classes of testing for which registered and the names of persons approved for the signing of test reports.

Supervision by N.A.T.A. of Standards of Laboratories Subsequent to Registration.

8. The N.A.T.A. has a fully established and comprehensive system for the periodical re-examination of each laboratory and for the periodical recalibration of all laboratory equipment covered by its registrations. It issues amendments to all holders of the Register of Laboratories to cover any change in particulars of registration including changes in personnel authorized to sign test reports. Registration of any laboratory is withdrawn by N.A.T.A. whenever in any respect its standard is found to have fallen below that required for its initial registration.

Relationship of the Naval User to N.A.T.A.

9. In the normal course of his testing work, the inspecting or overseeing officer should deal directly with the staff of the N.A.T.A. laboratory concerned. He should need to contact officials of the Association only when requiring information and advice. Policy matters should be dealt with through the Co-ordinator (*see* paragraph 11). To assist in maintaining good relations with N.A.T.A., it is desirable when making arrangements for testing, that officers should bear the following points in mind.

(*a*) N.A.T.A. laboratories are under no compulsion whatever by the N.A.T.A. to carry out any tests required by a Service Department but under normal circumstances, it is unlikely that they would refuse to do such work.

(*b*) The N.A.T.A. has no control over its registered laboratories with regard to the following points—

(i) The prices charged for testing.
(ii) Priorities of testing work.
(iii) Arrangements for the witnessing of tests.
(iv) The number of copies of reports issued.
(v) The final disposal of test pieces and the unexpended portions of test samples (after a certain period of retention required by N.A.T.A.).

All the foregoing points are matters for arrangement between the naval user and the laboratory.

(*c*) The testing of the products of one firm at the laboratory of a rival firm would be a possible source of friction and embarrassment and should be avoided if possible.

Safeguards in the Use of N.A.T.A. Laboratories.

10. The principal safeguards available to the naval user of N.A.T.A. laboratories are as follows—

Choice of N.A.T.A. laboratory.

(*a*) In principle the choice of N.A.T.A. laboratory to be used for any testing work rests solely with the Service user and this point is appreciated both by the Council and the officials of N.A.T.A. But, bearing in mind that good relations must be maintained wherever possible, the naval user should be sure of his ground before deciding against the testing of the products of a firm in that firm's own laboratory (when it is registered for the classes of test concerned).

Special tests.

(*b*) Where the reliability of test results of a particular product may be of exceptional importance (e.g. in the case of most explosives) naval users may use their discretion in having all such tests carried out at a laboratory (preferably D.S.L.) other than that of the producing firm. Such procedure should be decided before the first test of the product is made.

N.A.T.A. laboratories suspected of unsatisfactory testing.

(*c*) If at any time there are reasons for suspecting the test reports issued by a laboratory, immediate action should be taken as follows—

(i) Arrange for the witnessing of tests, if practicable.
(ii) Heavily increase the % of check testing. (*See* (*d*)).
(iii) Inform the Naval Co-ordinator (*see* paragraph 11) of the circumstances.

If the risk of continuing to test at the laboratory concerned is however considered to be too great, testing may be transferred to a Government laboratory without notice and without explanation to the former laboratory. Such action would almost certainly have repercussions at higher levels and a full report should be made immediately to the Naval Co-ordinator.

Check tests.

(*d*) A percentage of all samples selected for testing should be taken in duplicate so that the relevant properties of both samples in the pair are as nearly as possible identical. One of the samples is to be sent to the firm's laboratory and the other to a Defence Standards Laboratory. The occasions on which these check tests are selected should be on a random basis and the greatest care should be taken to prevent firms from knowing when it is done. Significant differences between results obtained by D.S.L. and another N.A.T.A. laboratory on check tests will usually be discussed by the Naval Co-ordinator with N.A.T.A. officials (*see* paragraph 11 (*e*)) and it is therefore important that the D.S.L. results should be of the highest practicable order of accuracy. For this reason and to provide inspecting officers with expert advice on the significance of differences between test results, the following procedure has been arranged with D.S.L. regarding check testing.

(i) Each check sample (and its accompanying documents) sent to D.S.L. should be clearly marked " CHECK TEST " and be identifiable with the corresponding test being carried out at the N.A.T.A. laboratory concerned.
(ii) A copy of the relevant N.A.T.A. laboratory test report should be sent to D.S.L. as early as practicable for comparison.
(iii) D.S.L. will compare their own results with those of the N.A.T.A. laboratory concerned and will forward to the inspecting officer a copy (or copies) of the D.S.L. report with an endorsement as to which (if any) of the results are significantly different from those of the N.A.T.A. laboratory.

Any significant difference shown by D.S.L. on check tests should be immediately reported in detail to the appropriate authority in the naval branch concerned, and a copy sent directly to the Co-ordinating Officer. Complete records should be kept of all check-testing results on each N.A.T.A. laboratory. These records should also show the numbers of check tests and the numbers of normal tests carried out over the whole period in which each laboratory is used.

Witnessing of tests.

(*e*) It is left to the discretion of individual naval branches to decide on the extent to which the witnessing of tests may be necessary. If witnessing is regarded as necessary, the man selected should be fully competent for the purpose intended.

Scrutiny of N.A.T.A. test reports.

(*f*) Officers responsible for the sentencing of materials or products on the results of N.A.T.A. test reports are, inter alia, to check all reports as follows—

(i) The report should bear the N.A.T.A. emblem and an endorsement to the effect that " this laboratory is registered by the N.A.T.A. Australia and the test(s) reported herein have been performed in accordance with its terms of registration ".

(ii) An up-to-date Register of Laboratories should be checked to verify that the laboratory is in fact registered for the field and class of test reported and that the person signing the report is an approved signatory.

(iii) The report should be fully identifiable with the sample and batch concerned.

(iv) Where specification limits are expressed quantitatively the report should give quantitive results. The use of such terms as "O.K.", "Satisfactory" or "Conforms" is unacceptable in such cases since they undermine the whole purpose of check-testing and may cause difficulty if specification limits are subsequently raised.

Co-ordination within Department of Navy on N.A.T.A. Matters.

11. Experience has shown that there are several directions in which co-ordination is required on N.A.T.A. matters within the Department of Navy, and that this work is closely allied to representation on the Council of N.A.T.A. Both functions are carried out by—

The Chief Inspector of Naval Ordnance,
D.W. Branch,
Department of the Navy,
Victoria Barracks,
Melbourne.

On all aspects of co-ordination, senior officers of local inspecting and overseeing organizations and Directors at Navy Office may communicate directly with him. In each branch which uses N.A.T.A. laboratories, one officer is to be deputed for co-ordination purposes within his branch and his name (and any subsequent change of such officers) is to be furnished to the C.I.N.O. to facilitate overall co-ordination within the Department of Navy. As co-ordinator, the C.I.N.O. will be responsible for such matters as the following—

(*a*) To arrange with N.A.T.A. for the issue of the Register of Laboratories (and all subsequent amendments) to officers as required to meet the needs of the Department.

(*b*) To handle matters of policy between Department of Navy and N.A.T.A.

(*c*) When N.A.T.A. facilities may be inadequate (concerning either the shortage of laboratories in certain areas, the fields or classes of test covered or the volume of testing required and so on) he is to co-ordinate naval requirements and initiate action with N.A.T.A. to try and meet the situation.

(*d*) To call for such reports from naval users of N.A.T.A. laboratories as to enable him to maintain a check that the important safeguard of check-testing is consistently and effectively operated. In this connection and having in mind the past history of laboratories, he may call on any branch to increase its percentage of checktesting in any or all of the laboratories it is using. On the other hand he may only advise any branch when a reduction in percentage checktesting seems appropriate

(*e*) To initiate with N.A.T.A. such action as he may consider necessary when it has been brought to his notice that there are significant discrepancies in check tests or suspicions that any laboratory may have fallen below the required standards.

(*f*) To warn other naval users as may be necessary when circumstances as at (*e*) above are brought to his notice. The C.I.N.O. may not direct the discontinuance of testing at any N.A.T.A. laboratory. This is a matter for the responsible officer in the branch concerned. Nevertheless, because of C.I.N.O.'s overall knowledge of the N.A.T.A. situation, his advice should generally be sought and considered.

(*g*) To maintain liaison with the N.A.T.A. organization to reasonably assure himself that it is maintaining effective control (by re-calibration, &c.) of the standards of laboratory staffs, equipment and practice.

Use of Laboratories not Registered by N.A.T.A.

12. The only safe criterion that any laboratory is of the standard required for naval testing is that it has N.A.T.A. registration. Laboratories which are not registered by N.A.T.A. are not to be used for naval testing except where it is impracticable to make other arrangements. However, the General Overseer, East Australia Area, may allow or disallow certification of tests at such contractors' premises as he may consider to be satisfactorily staffed and equipped. These tests are also to be witnessed by a representative of the Dockyard Scientific Laboratory where required. In such exceptional cases, the precaution should be taken to select a higher proportion of check-tests than is normally taken at registered laboratories. At the same time a Senior Officer should discuss the position with the firm and encourage them to seek registration. The fact that a non-registered laboratory is being used is to be reported to the C.I.N.O. for his general information on the overall laboratory situation in Australia. If possible the C.I.N.O. should be furnished with the reasons given by the firm for not seeking registration. Firms sometimes have misconceptions of N.A.T.A. which can be cleared up by a visit from a N.A.T.A. officer.

13. Navy Order 392 of 1958 is hereby cancelled.

(D.W. 178/51/5.)

(*Navy Order* 392 *of* 1958.)

UNCLASSIFIED.

220.—Saluting Stations—British and Foreign Ports.

(*A.F.O.* 11/1960.)

Navy Order 877 of 1959 is to be amended as follows—

Appendix—New Zealand, Auckland.

Column 3: *delete* "North Head".

insert "(*a*) North Head (National Salutes).

(*b*) H.M.N.Z.S. PHILOMEL (Naval Salutes)".

(D.O.D. 12/3/2.)

(*Navy Order* 877 *of* 1959.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

221.—Educational Tests, July–December, 1959—Summary of Results.

Higher Educational Test.—The following table shows the results of the Higher Educational Test held in October, 1959—

Subject.	*Number of Papers Taken.*	*Number Passed.*	
		First Class.	*Second Class.*
General Knowledge ..	112	9	43
History	15	1	6
Geography	47	14	17
Navigation	53	10	27
Practical Mathematics ..	74	13	26
Mechanics	14	5	5
Magnetism and Electricity	17	2	3
English Expression ..	137	19	63
	469	73	190

Total number of candidates	231
Number of W.R.A.N.S. candidates	Nil
Number of candidates awarded First Class Certificates (75 per cent. in each of four subjects)	1
Number of candidates awarded Second Class Certificates (55 per cent. in each of four subjects)	30
Number of C.W. candidates who qualified educationally ..	1
Number of candidates who qualified educationally for commissioned rank on the Special Duties List in the various branches are as follows—	
Seamen	4
Communications	4
Engineering	1
Shipwright	0
Ordnance	0
Electrical	2
Air Engineering	0
Naval Airmen	8
Medical	0
Dental	1
Supply and Secretariat	4
Regulating	0
Band	0
Naval Dockyard Police	2

2. *Educational Test* 1.—Results of E.T. 1 held in July, September, and November, 1959, are as follows—

Total number of candidates	731
Number of successful candidates	478

3. This order will be reprinted for posting on notice boards.

(D.N.E.S. 325/1/10.)

UNCLASSIFIED.

222.—Khaki Dustcoats—Loan Issue for Naval Instructors.

Khaki dustcoats are provided for wear by Naval ratings employed as instructors in mechanical and electrical training establishments and air stations.

2. Two dustcoats are to be supplied on personal loan to ratings continuously employed as instructors in these establishments.

3. Requirements are to be obtained from the nearest Victualling Yard.

(D.V. 4533/35/53.)

UNCLASSIFIED.

223.—Loan Clothing for Naval Personnel Employed as Drivers of Vehicles.

The following is the scale of loan clothing authorized for issue to personnel employed as drivers of Naval vehicles—

(*a*) *White Gauntlets*—
- (i) Driver of car of Minister for the Navy.
- (ii) Drivers of cars for members of the Naval Board.
- (iii) Driver of car of Flag Officer-in-Charge, East Australia Area.
- (iv) Driver of car of Flag Officer Commanding H.M. Australian Fleet.

(*b*) *Brown Gauntlets*—
- Motor cyclists and service car drivers.

(*c*) *White, Sleeve Cover with "Scotchlite" tape*—
- (i) Service car drivers, other than those referred to at (*a*) above.
- (ii) Drivers required to drive Naval vehicles, other than cars at night.

2. In addition motor cyclists may receive—

Jackets, waterproof	1 No.
Trousers, waterproof	1 pr.
Helmets, Crash	1 No.
Goggles	1 pr.

3. Stocks of these items are not normally held in Victualling Yards and adequate notice of requirements is to be given to the Suptg. Victualling Store Officer or the Victualling Store Officer concerned to permit supplies to be obtained.

(D.V. 4533/31/87.)

UNCLASSIFIED.

224.—Medical Treatment of Naval Personnel at Repatriation Institutions.

The Department of Repatriation has recently reviewed its policy regarding the treatment at Repatriation Institutions of serving members of the forces and has decided that treatment may be provided to the personnel referred to hereunder, subject to the written authority of the Service Department concerned—

(*a*) a serving member of the Permanent Forces;

(*b*) a member of the Citizen Forces; or

(*c*) a Sea Cadet.

2. Officers authorizing admission of Naval personnel to Repatriation Institutions are to bear in mind the limitations imposed by the following—

(*a*) R.A.N.R. Regulations and Instructions, article 174 provides for medical attendance on members of the R.A.N.R. *during periods of training or service* only.

Note: When serving under proclamation members of the R.A.N.R. are entitled to medical treatment on the same basis as members of the Permanent Naval Forces, *vide* R.A.N.R. Regulations and Instructions article 184.

(*b*) Naval College Regulation 56 provides that the expenses of medical attendance incurred while a Cadet Midshipman is on leave or absent from the Royal Australian Naval College, shall not be borne by the Department.

(*c*) Instructions for the Australian Sea Cadet Corps, article 146 provides that medical attendance may be given to a member who suffers an injury or illness during periods of continuous training or courses undertaken in H.M.A. ships or establishments.

3. Free medical treatment of members of the R.A.N.R. who sustain injury whilst proceeding to or from place of parade would be dependent upon admission of a claim under the Commonwealth Employees' Compensation Act; and liability in respect of such injuries sustained by members of the Australian Sea Cadet Corps may be accepted on an ex-gratia basis. In such cases final determination of liability can not be established until a compensation claim has been processed, and treatment in Repatriation Hospitals should not therefore be arranged until such action has been completed.

(M.D.G. 327/51/5.)

UNCLASSIFIED.

225.—Ratings—Seaman Branch—Clearance Divers.

It has been decided that, from 1st February, 1960, when assessing the service qualification for Clearance Divers being recommended for advancement to a higher rating, service ashore in a C.D. complement billet will count as sea service.

2. It has further been decided that it will no longer be necessary for Clearance Divers to be recommended for the next higher specialist qualification before being eligible to be recommended for advancement. However, Clearance Divers are not to be confirmed in the higher substantive rating until they have been recommended for the next higher specialist qualification.

3. A.B.R. 10, Chapter 11 will be amended in due course.

(H.P.B. 303/40/1.)

UNCLASSIFIED.

226.—Travel Warrants—Issue.

One rail warrant only should be issued to cover all fares and charges for complete journeys, single or return to any destination commencing in Victoria, New South Wales, South Australia and Western Australia.

2. When warrants are being prepared, it is essential that full details of travel, as applicable in each case, be distinctly indicated, e.g., date of forward journey, class of travel, change of class where involved (I.P.I. 182/2 refers), seat or berth reservations.

3. It is necessary that warrants should be presented to railways booking offices in ample time prior to train departure in order that issue of tickets and travel vouchers may be facilitated.

4. Attention is drawn to the fact that rail tickets for intra-state travel are available for one calendar month (excepting New South Wales only—two months) from the date of issue stamped on the ticket and the return journey must be completed within that period. Personnel proceeding on leave, intra-state, in excess of these periods, should therefore be issued with rail warrants covering the single journey in each direction.

5. Necessary amendment of N.A.R. and I., article 320, will be included in Navy Accounts Manual in course of publication.

(D.N.A. 187/51/5.)

UNCLASSIFIED.

227.—Uniform—Naval Officers—Gaiters.

Patent leather gaiters are to be worn by officers on the following occasions only—

(*a*) by officers of the guard of all royal and cermonial guards;

(*b*) by officer instructors at H.M.A. Gunnery School and when engaged on Parade Training Instruction at any training establishment;

(*c*) by officers of field gun crews;

(*d*) by officers of patrol ; and

(*e*) by officers in charge of armed parties.

2. One pair of gaiters is to be issued gratuitously to all General List and Special Duties List officers, who have not previously received them, prior to departure from Australia to undertake qualifying courses in Gunnery or Ordnance Engineering sub-specializations in the United Kingdom.

3. Other officers requiring gaiters for the purposes specified in paragraph 1 above are to be provided with a pair on temporary loan. The allowances for this purpose are as follows—

Aircraft Carriers	5 pr.
Destroyers and Frigates	2 pr.
Gunnery School, Flinders Naval Depot	10 pr.
Air Stations	5 pr.
H.M.A.S. CRESWELL	40 pr.
Other Establishments	2 pr.

(D.V. 4716/1/399.)

UNCLASSIFIED.

228.—Uniform—Ratings—Schooner Rig for Wear in Hot Weather.

The wearing of No. 2A dress on board, or as an optional dress for libertymen in hot weather on the Australia Station is authorized as an alternative to other dresses.

2. This dress consists of No. 1 or No. 2 trousers with white tropical shirt for ratings in class I. or III. uniform and with white cotton flannel for men in class II. uniform. Rating badges are to be worn by Petty Officers and Leading Rates. Belts are not to be worn with this uniform.

3. Libertymen must be warned that, although No. 2A dress is an authorized uniform, it is of an informal nature. If they elect to land in this dress they must not attend functions or enter places where exception might be taken to their attire.

(D.V. 4716/1/363.)

UNCLASSIFIED.

229.—Uniform—Reserve Ratings—Cap Ribbons.

Reserve ratings performing continuous service or training for periods of not less than three months may be allowed to take up, on repayment, and wear the cap ribbon of the ship or establishment in which they are serving.

2. Reserve ratings who do not wish to buy the cap ribbon of the ship or establishment will continue to wear the special cap ribbon described in the relevant Reserve Regulations.

3. Navy Order 375 of 1958 is hereby cancelled.

(D.N.R. 917/73/15.)

(*Navy Order* 375 *of* 1958.)

Section 3.

HULL, MACHINERY EQUIPMENT AND STORES.

RESTRICTED.

230.—Radar—Types 262M/P/Q—A.P. 55146 and 61016 Transformers —Failure due to Short-Circuiting of Connections.

(*A.F.O.* 246/1959.)

Transformer TR2 in the modulator unit of radar types 262M/P/Q is liable to burn out due to accidental short-circuiting of unused flexible connections remaining attached to the tags of the buck and boost windings.

2. Transformers TR2 are to be examined and any unused leads removed.

3. Transformer TR2 is being superseded in due course by a new pattern.

4. Admiralty has advised that BR. 2047A(9A) will be amended.

(D.E.E. 518/51/198.)

RESTRICTED.

231.—Shore Stations, R.A.N. Air Station—Restrictions on Power, Telephone and Remote Control Cables in Vicinity of Ground Radio Installations.

Attention is drawn to the need for safeguarding the performance of ground radio installations of all types against interference with their operation due to power telephone and remote control lines or from structures in the vicinity of the radio equipments or their associated aerial systems.

2. When any new installations are proposed, details of possible intereference either to or from other installations in the sense of paragraph 1 above are to be forwarded to the Naval Board for information and direction on action which may be considered necessary.

3. If it is suspected that the performance of any existing radio installation is being adversely effected by the presence of any power, telephone, remote control line or structure in the vicinity the details of the installation are to be forwarded to the Naval Board for consideration.

4. An Australian Joint Services publication, giving details of the recommended code of practice in respect to the siting and installation of radio equipments, power, telephone and remote control lines in land based establishments, is expected to be issued during 1960. Pending promulgation of this Joint Services publication matters relevant to paragraphs 2 and 3 above are to be referred to the Naval Board for direction.

(D.E.E. 1424/51/8.)

UNCLASSIFIED.

232.—Wireless—Types 692/693 Series—Modifications.

(*A.F.O.* 248/1960.)

The modifications listed in B.R. 1492A, part 1, addendum 1 (A.L. 29) will be issued as amendments to B.R. 1917 " Minor Modifications to Radio Equipment " in due course.

2. As an interim measure, because of the increased protection given by the embodiment of modifications Nos. 4946, 4951 and 4952, ships' staffs are authorized to carry out these modifications to the extent of replacing the fuses indicated. Stores are to be demanded from (S.N.S.O.'s) quoting this order.

3. The removal of the neutral fuse link in modifications Nos. 4946 and 4951 is not to be carried out until authorized in detail by B.R. 1917.

(D.E.E. 518/51/200.)

UNCLASSIFIED.

233.—Cables—Corrosion of, due to Defects in Running and Fixing.

(*A.F.O.* 201/1959.)

The following are extracts of clauses included in Admiralty Standard Electrical Specifications—

(*a*) S.E.S. No. 1 Installation of Electrical Equipment on board H.M. ships—

(i) Cable runs on masts are to be protected from funnel heat and gases. Where the cable runs are very close to the funnel casing (e.g., funnels enclosed in lattice masts), or are particularly liable to be subjected to funnel gases (e.g., on the mainmast immediately abaft a funnel), the cables are to be clipped to a carrier plate supported in a metal trunk open to top and bottom to allow air circulation.

(ii) Care shall be taken that brass, copper or other materials likely to cause corrosion when in contact with aluminium do not come in contact with aluminium plating, glands or deck tubes.

(iii) Mineral insulated copper sheathed cables shall not be run on aluminium carrier plating or supported direct on aluminium decks, bulkheads or structures or taken through aluminium bulkhead glands or deck tubes. Where these cables are used they shall be supported on galvanized steel plating and taken through bulkheads and decks in steel glands and deck tubes.

(*b*) *S.E.S. No.* 4 *Quality of Materials.*—To prevent electrolytic action in positions exposed to sea water or moisture, aluminium alloys shall be insulated from bare steel or from other non-ferrous metals except zinc or cadmium by impervious fibre washers impregnated with water repellant substances or suitable plastic or rubber washers or a layer of jointing compound (barium chromate paste) Admiralty Pattern 4945. Copper and copper alloys are not to be employed in direct contact with aluminium and aluminium alloys.

2. Recent reports from ships have stated that corrosion of cables (necessitating their replacement) has occurred in instances where the shipbuilder or refitting authority had not adhered strictly to these specified requirements. The instances reported included the following—(*a*) copper sheathed cables had been run and brass clips and screws used on aluminium plating, (*b*) brass clips had been used for securing aluminium sheathed cables and (*c*) cable runs had been wrapped with asbestos cloth as protection from funnel heat. In the latter case the impurities in the asbestos had caused corrosion of the aluminium sheathed cable when it touched the cable.

3. Ships officers should arrange for runs of electric cables, including those up the mast to be examined and where instances are observed where the instructions included in paragraph 1 above have not been met, corrective action should be taken by ship's defect list procedure.

(D.E.E. 519/73/58.)

UNCLASSIFIED.

234.—Pyrotechnics—Cartridges, Signal 1½-in. G.R. Type 29, Mark 2T—Lot 14—Withdrawal.

(*A.F.O.* 2619/1959.)

As a result of prematures during annual proof in the United Kingdom, it has been decided to withdraw from service all KF 378 cartridges, signal 1½-in. G.R. type 29, mark 2T, of lot 14 filled in S.W.N. 2/55.

2. Any cartridges of this lot held on H.M.A.S. MELBOURNE or at Air Station, Nowra, should be returned to the Armament Depot, Sydney, replacements being demanded as necessary. These stores are classified category (*dd*).

3. R.A.N. Armament Depots only—Stocks and future receipts of these cartridges are to be dealt with in accordance with N.O.C.M. 91.

(D.W. 727/56/27.)

UNCLASSIFIED.

235.—Naval Stores (Technical) (Class F, Group 1B)—Range Table Box, Pattern F1B-10605—Disposal.

Pattern F1B/10605 Range Table Box is now obsolete in the R.A.N. Any stocks held by H.M.A. ships and establishments are to be returned to the nearest (Superintending) Naval Store Officer who is to dispose of them in accordance with existing instructions.

(D.N.A.S. 518/53/15.)

UNCLASSIFIED.

236.—Gun Mountings—40-mm., Mark 7 Mountings—Fire Control Cable Assemblies.

(*A.F.O.* 254/1959.)

Fire Control Cable Assembly (B.R. 226B(68), section F, index No. 1), at present classified as a " Consumable " item of gunnery equipment spare gear, is to be reclassified as " Returnable ". When replacements for this item are demanded in future, the defective assembly is to be landed for survey and repair in accordance with normal form S.331 procedure.

2. Repair of this assembly can be effected with the use of existing fittings, and A.P. 9137—Bowden cable outer covering, 3-ft. 6-ins. long, and A.P. 9138—Bowden cable inner wire of the same length.

3. Admiralty has advised B.R. 226B will be amended in due course.

(D.W. 737/52/9.)

UNCLASSIFIED.

237.—Naval Stores (Technical) Type 6 Gyro Gunsight Mark 3 and Associated Aim Recording Equipment—Withdrawal of Allowances.

The type 6 Gyro Gunsight mark 3 and associated aim recording equipment has been supplied to Flinders Naval Depot Gunnery School but will not be supplied to H.M.A. ships.

2. Navy Order 600 of 1959 is hereby cancelled.

(D.N.A.S. 737/74/1.)

(*Navy Order* 600 *of* 1959.)

UNCLASSIFIED.

238.—A/S Mortar, Mark 10—Barrel Trunnion Bearings.

(*A.F.O.* 257/1960.)

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted, Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	A/S mortar, mark 10.
(*c*) *Part of equipment effected*..	Barrel trunnion bearings.
(*d*) *Modification Number* ..	To be known as mounting modification No. 14.
(*e*) *Purpose of modification* ..	To facilitate removal of the barrel trunnion bearings from the barrel trunnion caps, in the event of seizure.
(*f*) *Nature of modification* ..	To drill and tap 3-in No. ⅜-in. B.S.W. holes in each barrel trunnion bearing, in accordance with amendment No. 2 to drawing A.M.E. 4002/138 and amendment No. 14 to drawing A.M.E. 6280 sheet 1.
(*g*) *By whom to be done* ..	Dockyards.
(*h*) *When to be done*.. ..	(i) *Items in store*—before issue. (ii) *Items in service*—at next normal refit, or, earlier if opportunity arises.
(*j*) *How to be treated* ..	As a defect.

(D.W. 707/51/26.)

UNCLASSIFIED.

239.—Naval Stores—Accounting—Returns to H.M. Dockyards and R.N. Naval Store Depots.

The procedure for return of Naval Stores in the Royal Navy has been revised, *vide* A.F.O. 2791/1959. In future, only one receipt for Naval Stores returned will be given and this will be given, on copy No. 3 of form S.331, at the time of return of the stores. The " temporary receipt " at present given on copy No. 4, will be abolished. Any differences between pattern nos., quantities, &c., of stores shown on the return note, which are disclosed by Dockyard Officers after the receipt has been given will be notified to the ship concerned by means of form S.331X.

2. The question of introduction of this procedure into the Royal Australian Navy is receiving consideration, but, in the meantime, the procedure introduced, *vide* Navy Order 741 of 1959 in regard to forwarding copies No. 4 of forms A.S. 331 in respect of returns to Admiralty Yards to Navy Office is to be revised.

3. In future, copies No. 4 of forms A.S. 331 should be retained on board when stores are returned to Admiralty Yards, and held for forwarding to Navy Office with the quarterly return (forms A.S. 558). Any amendments effected by Yard Officers to copy No. 3 or advised by means of form S.331X should also be effected on copy No. 4 before transmission to Navy Office.

4. A.B.R. 4, Naval Storekeeping Manual, will be amended.

(D.N.A.S. 400/51/7.)

(*Navy Order* 741 *of* 1959.)

Section 4

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

240.—Extra Issues of Provisions—Surveying Vessels—Survey Party Allowance.

It has been decided to discontinue the present system of issuing, in accordance with scale, additional quantities of provisions to personnel employed on surveying duties necessitating absence from the ship during meal hours. In its stead, a credit will be allowed to the Wardroom or General Mess to cover the cost of extra issues.

2. This credit, which is to be two thirds of the appropriate victualling allowance for the ship, will be known as the Survey Party Allowance. All items of provisions normally available may be drawn for Survey Parties, including the additional canned meat packs recently introduced for issue in the R.A.N.

3. As it is envisaged that officers in surveying parties absent from the ship will be victualled with the ratings, the following is the accounting procedure to be observed in regard to issues made—

(*a*) Total requirements of provisions, including issues covered by the Survey Party Allowance, are to be recorded on separate forms A.S. 77 and/or A.S. 77a and charged to the Wardroom or General Mess.

(*b*) Apportionment, of the quantities issued for posting on forms A.S. 71 and, for entry of the values in forms A.S. 462 and A.S. 72 is to be on a simple per capita basis.

(*c*) A record is to be maintained listing the daily absentees included in the surveying parties and at the close of the month a credit is to be claimed on forms A.S. 462 and/or A.S. 72 calculated as in 3(D) below.

(*d*) The amount per head per day to be credited is to be half the Survey Party Allowance if the party is absent from the ship for more than half a day, or are engaged in boat or shore work which makes return to the ship for the midday meal impossible. If the party is absent from the ship for the midday meal and supper, or for any longer period less than 24 hours, then the full Survey Party Allowance is to be claimed, i.e. two-thirds of the Victualling Allowance.

4. If a Survey Party is absent from the ship for a period in excess of 24 hours, the party is to be considered as a detached vessel on a trip of limited duration and the issue and accounting for provisions is to be carried out in accordance with paragraph 16 (*c*) of Commonwealth Navy Order 526 of 1959.

(D.V. 903/51/15.)

(*Navy Order* 526 *of* 1959.)

UNCLASSIFIED.

241.—Fresh and Frozen Provisions—Meat—Use of Veal Cutlets.

Veal cutlets may in future be obtained from contractors by all H.M.A. ships and establishments and issued to General Mess or repayment messes, regardless of whether a butcher rating is borne.

2. The Fixed Issuing Price List for provisions, operative from 1st January, 1960, is to be amended accordingly.

(D.V. 912/93/41.)

UNCLASSIFIED.

242.—Issue of Aiguillettes and Royal Cyphers.

Stocks of aiguillettes, complete with plaited shoulder cord or blue cloth shoulder strap, are maintained for loan issue to officers appointed to any of the following positions—

(*a*) Naval Aide-de-Camp to Her Majesty the Queen.
Honorary Physician to Her Majesty the Queen.
Honorary Surgeon to Her Majesty the Queen.
Honorary Dental Surgeon to Her Majesty the Queen.
Naval Aide-de-Camp to His Excellency the Governor-General.
Honorary Physician to His Excellency the Governor-General.
Honorary Surgeon to His Excellency the Governor-General.
Honorary Dental Surgeon to His Excellency the Governor-General.
Naval Aide-de-Camp to a State Governor.

(*b*) Australian Naval Attache.
Flag Lieutenant-Commander to the Naval Board.
Flag Lieutenant-Commander or Flag Lieutenant on the staff of a Flag Officer or Commodore.
Secretary to a Flag Officer or Commodore.

2. Immediately on receiving notification of his appointment to one of the positions referred to, an officer is to make application for loan issue of an aiguillette. This application is to be forwarded through the usual channels to the Naval Board by the ship or establishment in which the officer is serving. When received, the aiguillette is to be taken on charge in the ship's Clothing Account and issued on loan to the officer concerned.

3. It is emphasized that an aiguillette is issued only for the period of an officer's appointment to one of the positions named in paragraph 1, and that, on expiry of such appointment the aiguillette is to be recovered by the ship or establishment in which he is serving.

4. In the case of an officer relinquishing one of the appointments listed at (*a*) of paragraph 1, the aiguillette is to be returned to the nearest Victualling Yard. An aiguillette on issue in respect of an appointment listed at (*b*) of paragraph 1 may be retained in the ship or establishment concerned for issue to the officer succeeding to this appointment.

5. When an officer is appointed to another ship or establishment while holding any of the appointments listed in paragraph 1, the aiguillette on issue to him is to be transferred to the charge of the ship or establishment to which he is appointed.

6. An officer holding any one of the appointments detailed in paragraph 1 who has obtained an aiguillette at his own expense, may, if he so desires, make application to the Naval Board for transfer of the aiguillette to loan charge and for refund of its value. Purchase receipt should be forwarded, if possible, in support of the claim for refund, or, if this be not available, detailed particulars of the item in question date and place of purchase, and the purchase price.

7. Royal Cyphers are issued on loan, under the same conditions as aiguillettes, to officers holding appointments to Her Majesty the Queen.

8. Navy Order 119 of 1958 is hereby cancelled.

(D.V. 4533/24/120.)

(*Navy Order* 119 *of* 1958.)

UNCLASSIFIED.

243.—Medical and Dental Stores—X-ray Units and X-ray Utensils—Adjustments.

The adjustment of X-ray units is a specialized task, which should be carried out only by the makers or their accredited representative, otherwise serious damage can be done to a set. Interference by ship's staff may result in rendering void a guarantee given by the makers.

2. Ship's staff are not to repair or make mechanical or electrical adjustments to X-ray units apart from connections to the ship's supply of current. For minor defects the advice of the local representative of the apparatus concerned is to be obtained. Defective units are to be returned to medical store for attention by the appropriate authorities.

3. In view of the possibility of damage occurring to X-ray tubes consequent upon improper installation, senior medical officers are to instruct radiologists and radiographers that when replacement X-ray tubes are required for medical units fitted with milliampere pre-selectors, i.e. units where a range of fixed milliamperages is provided by a selector, it is essential that the manufacturer's representative attend to install the new tube and adjust the settings to suit.

Intensifying Screens.

4. The normal life of these items is eighteen months to two years according to the amount of use they get and the care taken in their handling. Many are made unserviceable due to splashes of solution in the darkroom and faulty darkroom technique, e.g. unnecessary handling, unnecessary exposure to light, or lack of dusting to remove such foreign matter as dust and shreds of film or paper.

5. Separate screens will not be issued for local replacement purposes. Screens considered unserviceable are to be returned to the Medical and Dental Store Officer, still mounted in their cassettes, for technical investigation and replacement.

6. In order to ensure maximum efficiency and economy, senior Medical Officers are to investigate the darkroom technique employed in the respective ship or establishment and periodically examine all X-ray apparatus and allied utensils, particularly before the X-ray technician is relieved when drafted elsewhere.

7. Navy Order 237 of 1958 is hereby cancelled.

(M.D.G. 1001/70/3.)

(*Navy Order* 237 *of* 1958.)

UNCLASSIFIED.

244.—Supply of Provisions to H.M.A. Ships at Hong Kong.

Arrangements for payment for bread supplied to H.M.A. ships at Hong Kong have been varied.

2. Navy Order 225 of 1959 is therefore to be amended as follows—

Paragraph 2—*delete:* sub-paragraph (*c*), clause (iv) and *insert* in its stead:—

" (iv). Bread. As the contract is only for bread-baking from ingredients supplied by the R.A.S.C., supplies are to be demanded from the contractor, and the contractor's claim passed to the Base Supply Officer, H.M.S. TAMAR for settlement. Base Supply Officer will render to the H.M.A. ship concerned, a full account for the bread supplied and payment is to be made to Base Supply Officer prior to the ship's departure from Hong Kong ".

(D.V. 912/54/2.)

(*Navy Order* 225 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

245.—Abolition of Established Forms.

The following established forms have been abolished—

O.33—Half-yearly Return of Guns in Store.
O.33c—Returns of Guns below 2 pdr. and Machine Guns.
O.33d—Return of Aircraft Gun Wharf App. A. Equipment.
O.33e—Small Arms, stock and requirement form.
O.33f—Anti-gas Respirator, Stock and Requirement form.
O.411 (parts 1–4)—Annual Demands for Outfits and Miscellaneous Torpedo Stores.
O.483—History Sheet for Mark 30 Torpedoes.
O.483a—History Sheet for Mark 30 Torpedoes—Nose Unit.
O.483b—History Sheet for Mark 30 Torpedoes—Components.
O.483c—History Sheet for Mark 30 Torpedoes—Secondary Batteries.
(Forms O.483a, b and c have been superseded by forms S.2024(57)a—S.2024(57)f.)

S.2024(58)—Depth Charge Pistol History Sheet.
S.304A(IV)—Sheet—Electrical Log and Progress Book.
S.304A(V)—Sheet—Electrical Log and Progress Book.
S.304A(IX)—Sheet—Electrical Log and Progress Book.
S.1275D(69)—Performance Record Sheet—Type 281/B/BQ.
S.1275P(64)—Performance Record Sheet—Type 253P.
S.1275Q(1)—Performance Record Sheet—Type 60EQR.
S.1205b—Appendix B—Medical Category.

(D.N.A.S. 464/51/2.)

UNCLASSIFIED.

246.—Form A.S. 1093—Bin Tally Card—Discontinuance of Use and Form A.S. 1093W—Identification Card—Introduction.

With reference to A.B.R. 4, article 1704, it has been decided that the running tally of stock at present maintained on bin tally cards, forms A.S. 1093 and A.S. 1093Z need no longer be maintained and kept up to date in H.M.A. ships and establishments. A new card, form A.S. 1093W will be introduced for use as an identification card. The small identification card used with Naval Store cabinets will also be retained and will be numbered A.S. 1093Y on next reprint.

2. Pending availability of forms A.S. 1093W, forms A.S. 1093 are to be used as identification cards only, and the " Tally " sections of these forms may be cut off if desired.

3. A.B.R. 4 will be amended.

(D.N.A.S. 464/54/59.)

UNCLASSIFIED.

247.—Handbook of Naval Eyesight and Colour Perception Standards.

The Handbook of Naval Eyesight and Colour Perception Standards has been distributed.

2. This handbook also contains the instructions for determining colour perception by Ishihara plates and the Edridge Green Lantern.

(M.D.G. 327/54/4.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 248-250/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
15th April, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

1996/60.

CONTENTS.

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

248.—Gunnery Equipment—Bench Marks, Alignment and Alignment Tests—Instructions.

(*A.F.O.* 2878/1959.)

As a result of many reports on the value of Bench Marks, the whole problem of alignment has been re-examined. Revised instructions for the alignment of Gunnery Equipment in H.M.A. ships are given in the appendices to this order as follows—

Appendix 1	Explanation of Alignment Terms
Appendix 2	Initial Installation and Alignment.
Appendix 3	Routine Alignment Tests by Ship's Staff.
Appendix 4	Principles of Alignment Procedures.

2. The purpose of this alignment is to install all units of all systems parallel to " common datums " so that every unit of a system will be in line with every other unit and similarly, every system as a whole will be in line with every other system. This is necessary to ensure maintenance of alignment when marrying or crosslinking mountings, directors, radar aerials or controlling systems and for maintaining common alignment between gun direction, weapon and director systems. Having installed a system in correct alignment it is necessary to be able to check that this alignment is being maintained and for this purpose, Bench Marks are to be provided.

3. These instructions are applicable to all Gunnery Systems except certain future systems for which separate instructions will be issued. All new Bench Marks are to be installed in accordance with these instructions. Existing Bench Marks need not be altered except where they have to be moved because they are suspect or for any other reason.

4. Evidence from tilt tests of armament and experience with Bench Marks shows that normally except in ships which have been damaged, ships afloat do not distort more than ± one minute under average loading conditions. This figure may however be exceeded in a seaway due to hogging and sagging, but will be restored in calm water.

5. If Bench Marks have been accurately installed and their positions and readings confirmed, they are valid as a means of repeating or restoring alignment of the Master Sights to within close limits of the original installation.

6. Reference is made in appendix 4 to various detailed instructions in the use of clinometers and theodolites contained in B.R. 2034. Certain of these instructions are not in the current edition of this book but are included in the new edition which is about to be reissued. In the meantime, additional instructions will be found in the maker's pamphlet supplied with each new theodolite.

7. Revised instructions on the sizes of Bench Marks and battens are issued in Navy Order 249 of 1960. (*Gunnery Equipment—Datum and Bench Marks—Manufacture and Fitting Instructions.*)

8. Admiralty has advised that B.R. 292 will be amended.

Appendix 1.

Explanation of Alignment Terms.

Master Sights.

1. Each director or G.D. Sight (including A.L.O. Sights which can transmit direct to Weapon systems) will have a particular telescope, or particular eye-piece of a binocular sight nominated as the " Master " Sight, and similarly in each gun-mounting, a particular gun will be nominated.

2. All references to gun bores and director sight lines will refer to these nominated references. For instructions regarding the alignment to the " Master Sight " of other sights or guns within a director or mounting, reference should be made to the Sight or Director Manual or appropriate equipment hand book.

3. It should be noted that telescopes used at very short distance may have a parallax error. This must be reduced before tests are carried out, and the fitting of a $\frac{1}{32}$-inch diameter stop over the eye lens is recommended for this purpose. In the case of binocular sights the interocular distance is always to be set at 65-mm.

Master Training Datum.

4. Master Datum Marks to indicate the " Fore and Aft " line of the ship are to be provided in pairs as follows—

(*a*) On the forecastle deck or fore end of the flight deck.

(*b*) On the quarterdeck or after end of the flight deck.

(*c*) On the deck of every enclosed compartment where equipment, including gyro or transmitting magnetic compasses, requiring alignment will be fitted.

Notes.

(i) Previously, Training Datum Marks were fitted in threes to provide a vertical plane in the Master Training Datum (except in Aircraft Carriers where only a line has been provided). In future, the Marks will be provided in pairs to indicate a line. It will normally be necessary to set up the theodolite in the ship's datum level for the alignment of gun mountings and other equipment but in the particular case of directors, it is necessary to use the plane of the roller path of the director being aligned as the datum plane. (Appendix 4, paragraph 1.)

(ii) The marks are to be sited in pairs on, or parallel, or at right angles to the centre line of the ship, and are to provide the longest available sight lines such that a theodolite plumbing either mark can align on the other.

(iii) The marks on decks are to be on raised pads welded to the deck so that the tops are clear of the deck coverings.

(iv) They are to be positioned so as to cause the minimum interference with normal traffic and in aircraft carriers are to be clear of the flying area.

(v) Master Datum Marks are to be placed on structure sufficiently rigid to resist distortion.

(vi) In coastal and other light craft affected, a datum line is to be marked as can best be arranged for the equipment. Where craft are in hand by contract, dockyard assistance will not be provided.

Appendix 1—*continued.*

Common Datums.

5. The following are to be used as common datums.

Training .. .. The Master Training Datum.

Elevation .. .. The plane of the lower roller path of the individual unit.

Note.—Correction for residual lack of parallelism between roller paths is made by " tilt-correctors ".

Installation Scribe Lines.

6. Every trainable equipment is to have scribed on its seating by the Shipbuilder, a line to indicate the true fore and aft line of the ship. In addition, the seating of a " sided " equipment is to be scribed with a line to indicate the line at right angles to the fore and aft line, both lines passing through the centre of rotation of the equipment.

7. At the makers' works, scribe-lines are put on their base-rings to indicate the centre-lines of all such equipments. The " fore " end of this line is defined as that closest to the mid-training position.

8. Equipment position indicators are to be adjusted at the works to read zero when the equipment is pointing " forward " (i.e. mid-training) for training and when aligned parallel to the roller-path for elevation. In these positions magslips or synchros are to be in the pegged position except in certain specified cases where some other position has been specifically approved.

Final Mechanical Alignment.

9. When equipments have been installed and initially aligned comparatively early in the building programme, a final mechanical alignment is necessary as late in the programme as possible. This is required to correct any change in alignment which may have been caused by the various building processes. This alignment should where possible be confirmed by an Installation Distant Object Alignment Test (paragraph 11).

10. The purpose is to set accurately to zero by instrument the position indicators when the master sights are parallel to the common datums (paragraph 5).

Note.—Where " tilt liners " as opposed to tilt correctors are fitted, a tilt test must always be carried out and the liners adjusted before the final mechanical alignment. This is necessary (*a*) to avoid an alignment error that would result from any movement of the equipment in training whilst setting the tilt liners, and (*b*) because an alteration in the tilt liner setting will alter the position in which the Bench Marks will be fitted.

Installation Distant Object Alignment Test.

11. Whenever possible during or on completion of the mechanical alignment by instrument, the alignment should be confirmed by an " Installation Distant Object Alignment Test ".

12. Having set the G.P.I.s of the two directors to be aligned, or the director and mountings it controls, in the zero positions, these equipments should separately but concurrently be laid on a distant object at an accurately known range.

13. The angles trained or elevated from the zero positions should be noted, and should differ by the calculated dip, lateral, and vertical convergence for the separations and range in use. In the case of elevation, allowance must also be made for the relative tilt along the respective lines of sight.

14. Any discrepancy between this test and the alignment by instrument should be fully investigated, the cause found and the alignment corrected.

APPENDIX 1—*continued.*

Notes.

(i) This test is not required on Gun Direction Systems on which the tolerance (± 15 minutes) for alignment is relatively large, nor is it required between separate directors unless both can control a common mounting.

(ii) This test is not a test of overall alignment but of mechanical alignment (zero positions) which controls the positioning of the Bench Marks to which the system will be electrically aligned to produce overall alignment.

(iii) For this test the ship should preferably be in the tilt test condition or afloat and shored to prevent movement, but with care it can be carried out in still water on a calm day.

Datum Bench Marks.

15. These are required to enable the mechanical and electrical (pegged magslip or synchro) zero positions of the director or mounting to be re-established at any time, and are required.

(*a*) One mark at zero bearing but at any convenient elevation.

(*b*) One mark at zero elevation (parallel to the equipment's roller path) but at any convenient bearing.

Notes.

(i) If more convenient these marks can be sited at an *exact* number of fine magslip sector values away from the zero position.

(ii) When convenient these marks (*a*) and (*b*), or as displaced by Note (i) can be combined into a single mark.

System Bench Marks.

16. These are required to enable an overall director test to be carried out on fixed marks to check that the equipment is correctly aligned to the Common Datums when tested in Auto.

A mark is required for each director at a known elevation and bearing (not being zero or a sector value displaced therefrom) and a similar mark at the same elevation and bearing for each mounting that can be controlled by the director.

Notes.

(i) Where an elevation and bearing common to the director and all associated mountings cannot be obtained, that common to the director and the majority of the mountings should be chosen. If necessary a second set for the director and the remainder of the associated mountings should be provided.

(ii) Two Bench Marks are not required for Gun Direction Systems. One Bench Mark per equipment, or shared by two or more equipments, at any convenient but known elevation or bearing from the equipment is sufficient, and is required only to check the position indicator readings. Re-establishment of zero positions and further alignment checking can then be carried out to the accuracy required of Gun Direction Systems (± 15 minutes) by reference to the position indicators. Where it is impossible to fit a Bench Mark for lookout sights which transmit bearing and/or elevation, then after the sights have been aligned, the values transmitted when the sights rest against their training and depression stops should be recorded. The rubber stop of the depression stop must be removed when taking depression readings (L.O. sight type T.274A).

APPENDIX 1—*continued.*

(iii) Where it is not practicable to depress or elevate equipment on the Bench Marks themselves, provision is to be made for securing special battens over the marks. They are to be provided by the shipbuilder or dockyard concerned. The battens may be vertical or horizontal. The cone tip is to be used as the alignment mark across the axis of the batten, and an engraved line across the batten as the mark along the axis.

(iv) When System Bench Marks, with battens if necessary, cannot be sited in accordance with these instructions, they must be fitted as close thereto as possible and the method of director testing will be as given in appendix 3, paragraph 8. The number and length of battens should be kept to a minimum.

(v) It is an over-riding requirement that Bench Marks be fitted on rigid structures and clear of expansion joints. The advice of the General Overseer, or in Dockyards, the General Manager, is invariably to be sought when selecting positions for these marks.

(vi) In order to achieve a standard arrangement of marks for each class of ship which meets the User requirement, the advice of C.S.T.F.N.D. is to be sought when selecting the approximate positions, unless a drawing showing the standard arrangement has been issued. Any difficulty in implementing a standard arrangement should be resolved with C.S.T.F.N.D., and reported to Navy Office if alterations to the standard arrangements are required.

(vii) The marks should be placed as far from the mounting/director as possible in order to reduce sighting errors. A minimum distance of 50 feet is desirable (although not always practicable) for sights which cannot be focused to a close distance. To avoid significant parallax errors a minimum distance of 100 feet is required from D.A.B. Sights.

(viii) Bench Marks are not required for gun mountings which are not controlled by a director and not linked directly to a weapon direction system.

(ix) When not in use, bench marks which can accommodate battens are to be kept covered by the plates provided and carefully preserved with grease XG–310.

(x) Battens are to be clearly marked to indicate the Bench Mark over which they are to be fitted.

(xi) Bench Marks on decks are to be fitted in accordance with Notes (iii) and (iv) of paragraph 4, and are to be kept clear of the " Flying Area " in Aircraft Carriers.

(xii) In ships with mark 6 M directors in which the optical lines of sight can easily be disturbed when adjusting the visual/radar alignment, an additional Bench Mark is required for sight testing the alignment between the two D.A.B. Sights. It is to be placed so that when the master sight (in this case the right hand eye piece of the layers sight) is " on " one of the System or Datum Bench Marks, the other sight (right hand eye piece of the trainers sight) is " on " this additional mark.

(xiii) In the case of a director (M.R.S.3 for example) where a " non-action " reference telescope is designated as the master sight, an additional Bench Mark is to be fitted to check the parallelism between the " Reference Telescope " and the D.A.B. Sight.

APPENDIX 1—*continued.*

Datum Scribe Lines.

17. Concurrently with the siting of Bench Marks, Datum Scribe Lines should be provided.

These are required—

(*a*) To enable the zero positions to be re-established in the case of loss of Datum Bench Marks due to superficial damage.

(*b*) As a quick check, particularly in the case of sided mountings which cannot sight their Bench Marks without removing training or elevation stops.

Note.—For checking alignment, Scribe lines must be used with discretion as they will only show the alignment of a unit as a whole. They will not reveal any displacement of the sight line within the unit.

18. These lines should be marked on two adjacent portions of the base ring and rotating structure of the equipment, or if this cannot be arranged, on stiff " pointers " attached to the fixed and/or rotating structures. These pointers are already provided as standard fittings on certain equipments.

Note.—These " Datum Scribe Lines " should not be confused with the scribe lines used during initial installation (paragraph 6) which are drawn on the fixed seatings and base rings.

19. Datum Scribe Lines should be positioned to indicate the true zero positions, or if this is not possible, an exact sector value displaced therefrom, or if unavoidable any other approved position. They are, however, to be placed so that they can be lined up without removing training stops.

20. Similar arrangements to those in paragraph 18 are to be provided for the elevating mass, though in the majority of cases, it will be necessary to provide " pop-marks " and trammels to indicate the correct position of the elevating mass relative to the cradle.

The true position indicator reading when the scribe lines are in line or the trammel in place is to be recorded adjacent to the scribe lines or " pop-marks ". (Appendix 2, paragraph 26.)

Electrical Alignment.

21. The Electrical Alignment is carried out in three stages—

(*a*) *Stage* 1.—Each magslip element (or synchro) in the gun chain must be lined up in its datum position. In the case of directors and gun mountings, the datum positions cannot be established until the Final mechanical alignment is undertaken.

Note.—In practice, it is usual to adjust the zero position of these magslip elements (or synchros) concurrently with the final mechanical alignment and installation of bench marks and immediately after the position indicators have been set to zero.

(*b*) *Stage* 2.—A check is made that each element in the gun chain functions correctly, as a change in connections can introduce a small error in alignment.

(*c*) *Stage* 3.—With the system switched on electrically and the director Master Sight parallel to its Common Datums, a check is made that with the mountings in auto control, the electrical transmission will cause the mountings to position themselves so that their Master Sights are parallel to the mounting Common Datums within the backlash tolerance allowed.

APPENDIX 1—*continued.*

Note.—If all the magslip elements have been checked for correct alignment in Stage 1, no adjustments should be necessary during Stage 3 of the Alignment. In order to achieve complete alignment, however, it may be necessary to rack a magslip. This is to be carried out only at the " Approved Racking Position " nominated in the system handbook and in the Alignment Drawing (*vide* Appendix 2, paragraph 37 (*c*) (iii)).

22. Attention is drawn to B.R. 2034 concerning the maximum allowable standstill misalignment at equipments in auto and the setting up procedure for divided reset.

23. Full details of the electrical alignment procedure will be given in the relevant system handbooks.

Bench Mark Alignment Test.

24. The Bench Mark Alignment Test is to confirm that with the system in Auto and the Director Master Sight on its System Bench Mark, the Mounting Position indicator readings are the same as the Director Position Indicator readings and the Mounting Master Sights are on their System Bench Marks within the tolerances allowed. (Appendix 2, paragraph 36.)

Notes.

(i) In this condition, tilt correctors, dip, convergence and other geometrical corrections are set to zero (or infinity as applicable) and the system is aligned to the Common Datums.

(ii) An Installation Bench Mark Alignment Test is carried out after Final Mechanical Alignment, Electrical Alignment and setting to work of the system.

(iii) Bench Mark Alignment Tests are carried out at periodic intervals by ship's staff. (Appendix 3, paragraph 4.)

Distant Object Director Test.

25. A Distant Object Director Test is carried out to confirm the overall alignment and that convergence, dip, &c., are being correctly applied.

26. Any discrepancies discovered during this test are to be fully investigated and corrected.

Attention is drawn to Appendix 3, paragraph 12 note (i) regarding the precautions necessary during a Distant Object Director Test.

Notes.

(i) If relative tilt be set at the tilt correctors, all Master Sight Lines should be parallel.

(ii) Addition of convergence, dip and other geometrical corrections should cause coincidence in a Distant Object Director Test within the tolerances allowed (Appendix 3, paragraph 12, Note (iii)).

Radar/Visual Alignment.

27. In addition to obtaining alignment between the director optical sight line and the gun bore, it is necessary to align the Radar Beam to the optical sight line.

28. In most directors the necessary facilities are available to enable the radar beam to be adjusted to the optical sight line without disturbing the sight line alignment.

APPENDIX 1—*continued.*

29. In some directors the optical sight line has to be adjusted to the Radar Beam. In these cases adjustment will disturb the alignment of the optical sight line and this must then be corrected by a further adjustment at the director transmission unit.

30. Full details of the procedure will be given in the relevant radar or director hand books.

Note.—The aldis telescope brackets fitted on radar nacelles are aligned with the physical centre line of the nacelle and are provided for use in shop trials and initial installation only. They may not be parallel to the radar beam and are therefore not to be used for Radar Alignment purposes.

Check Receiver Test.

31. A Check Receiver Test is to enable a quick check of the alignment to be carried out without the necessity of checking Bench Marks.

32. When correct alignment has been confirmed, the Director is laid on a known elevation and bearing by D.P.I. and known dip, convergence, range and other geometrical corrections applied. The mounting G.P.I. readings are recorded on " Receiver Check Data Cards " for use during subsequent Check Receiver Tests.

APPENDIX 2.

INSTALLATION AND INITIAL ALIGNMENT.

Responsibility for Installation and Initial Alignment.

Responsibility for provision of Master Training Datum Marks rests with—

(*a*) The Shipbuilder, to the satisfaction of the General Overseer, in the case of ships building by contract.

(*b*) Dockyard officers in the case of ships building or under modernisation, conversion, large repairs, or undergoing refit in a Dockyard.

(*c*) For ships in hand for modernisation, conversion, large repairs or under refit by contract where the alignment of permanent marks is beyond the capacity of the contractors, application should be made to Navy Office for the assistance of a dockyard team.

2. The responsibility for the installation and alignment of gunnery equipment (excluding gunnery radar) to the required accuracy rests with the General Overseer for ships in contractors yards, and with the General Manager, for ships in hand in a Dockyard, but if the alignment is beyond the capacity of the contractors, application should be made to Navy Office for the assistance of a dockyard team.

3. Responsibility for the provision of Bench Marks rests with the Shipbuilder but responsibility for the accurate positioning of Bench Marks and Datum Scribe Lines rests with the General Overseer or General Manager, Engineering Department as appropriate, with the advice of C.S.T.F.N.D. when necessary, *vide* Appendix 1, paragraph 16, Notes (v) and (vi) respectively.

4. The responsibility for the alignment of Radar (including Gunnery Radar) rests with the General Overseer if the ship is being dealt with under contract, or the General Manager if in a Dockyard.

5. The responsibility for aligning the lubber's points of gyro and transmitting magnetic compasses and compass repeaters rests with the General Manager's representative on installation.

APPENDIX 2—*continued.*

Equipment Seatings.

6. All mounting, director, stable elements and G.R.U. stabilizer seatings are to be machined by the shipbuilders parallel to the designed waterplane to sufficient accuracy so that at the final tilt test the following tilts will not be exceeded:—

(*a*) SU Mountings—5 minutes.

(*b*) A.A./SU and A.A. Mountings—The tilt between any *one* mounting and the mean of all mountings (Relative Tilt) must not exceed 2.5 minutes.

(*c*) Directors fitted with Tilt Correctors—The tilt between the director and the mean of all the mountings must not exceed 5 minutes.

(*d*) Equipment fitted with tilt-correcting rings—15 minutes (i.e. when the rings are set to zero).

(*e*) G.R.U. Stabilizer if not fitted with tilt-rings—Within 5 minutes both of the director and the mean of the mountings. If this figure is exceeded liners are to be fitted to bring the G.R.U. tilt within tolerance.

Installation of Equipment.

7. All equipments are to be placed on their seatings with scribe lines coincident to ensure initial alignment within 15 minutes of the Master Training Datum.

8. Where practicable, equipments whose base rings can be rotated (i.e. inched round) are to be aligned by theodolite to the Master Training Datum before drilling off and bolting down.

9. Where this is impracticable the equipment is to be bolted down and its true bearing measured by theodolite.

10. Where jigs are used to drill seatings the jig is to be adjusted to its correct bearing by theodolite before drilling starts.

11. Sided Equipments are to be installed with their centre lines coincident with the line on the seating that is at right-angles to the ship's fore and aft line.

12. In order to preserve alignment for equipments not already designed for fitted bolts, dowels are subsequently to be fitted between the equipments and their deck pads.

13. In the case of non-transferable gun mountings, e.g., 6-in. D.P. Mark 26 and 4.5-in. Mark 6 Mountings, &c., the Master Sight is to be aligned parallel to the Master Training Datum prior to the installation of the locking bolt housings. During this installation, the backlash between the locking bolt and its housing should be meaned.

Note.—The method of aligning the Master Sight parallel to the Master Training Datum is given in paragraph 20.

INSTALLATION ALIGNMENT.

Final Mechanical Alignment (*Preliminaries*).

14. As stated in the note to Appendix 1, paragraph 10, tilt liners, where fitted, must have been set before mechanical alignment can be carried out. In addition, an Erection Test must have been carried out on the individual equipment.

15. The ship is to be upright within 30 minutes and is to be either—

(*a*) In Tilt Test condition or afloat and shored against movement; or

(*b*) In dry dock; or

(*c*) Afloat in still water.

APPENDIX 2—*continued.*

Notes.

(i) If condition (*b*) is applicable, only the Training Datum Bench Marks can be positioned and secured. The Elevation Datum Bench Marks and the System Bench Marks must be positioned for elevation and finally secured *after* the ship is afloat. This procedure will also be necessary if a Common Elevation and Training Datum Bench Mark is used.

(ii) Where the final positioning and securing of Datum and System Bench Marks is deferred until after the ship is afloat, it will not be necessary to repeat the training alignment, providing that the position of the Bench Marks for training has been clearly marked and it is confirmed by Position Indicator readings taken at the time of the training alignment and after the ship is afloat that the positions marked have not altered. Care must be taken to ensure that any backlash in the Position Indicator drives is absorbed in the same direction in each case.

(iii) (*c*) is permissible only when dockside sighting marks are NOT used. Care must be taken to avoid movements or loading operations which disturb the ship when levelling up theodolites or taking clinometer readings.

(iv) When positioning Elevation Bench Marks the ship should be as near as possible to average loading conditions.

16. Before using either theodolites or clinometers they are to be checked for accuracy and index error. Many errors in Bench Marks have been traced to inaccuracies in the instruments or to a method of using the instruments in such a way that compensation is not made for these inaccuracies. Details of methods of checking and/or compensating for inaccuracies will be given in B.R. 2034 which is about to be re-issued. In the meantime much of this information is given in the pamphlets provided with each instrument.

17. Care must also be taken that bore telescopes are correctly centralized and are truly parallel with gun bore.

18. Before using clinometer planes for elevation alignment the planes are ot be checked parallel to the master sight line to which they refer and due allowance made for any errors. The procedure for this is given in Appendix 4, paragraph 5.

Procedure.

19. The following gives the broad principle of the alignment procedure but for more details in the use of theodolites and clinometers reference must be made to Appendix 4, paragraph 1 *et. seq.* and to B.R. 2034.

Training.

20. (*a*) The principle of alignment is that of equal angles.

(*b*) The master theodolite is aligned to the fore and aft line of the ship by being set up in a plane parallel to the datum level (or director roller path) and over one datum mark of the Master Training Datum and sighting the other. It is then trained onto the master sight of the equipment, whilst the equipment is trained so that the master sight looks at the theodolite.

Note.—In the case of Directors, the angle of depression of the master sight to the master theodolite is such that the master theodolite *must* be set up in the plane of the roller path of the director in order to avoid cross-levelling errors. For gun-mountings, however, the angle of depression is smaller and sufficient accuracy is obtained if the master sight is aligned parallel to the datum level of the ship. This also avoids changing the plane of the theodolite when more than one mounting is involved.

APPENDIX 2—*continued.*

(*c*) The angle through which the theodolite has moved from the Master Training Datum to collimate with the master sight of the equipment is the bearing of the equipment. Record the position indicator reading.

(*d*) The equipment should then be trained through this bearing to bring it to the fore and aft line, the angle being measured by a theodolite mounted over the centre of rotation of the equipment and set in the plane of the roller path. A check should also be made that the Position Indicator agrees with the angle trained within the tolerance allowed.

(*e*) (i) Having thus trained the equipment into the true fore and aft line, the position indicators are set to zero and the Datum Bench Marks positioned for training. If an Installation Distant Object Alignment Test is required it should however be carried out and the zero positions confirmed before positioning Bench Marks.

(ii) If however the Datum Bench Marks are set at an angle from the zero position *vide* Appendix 1, paragraph 15 Note (i) the equipment must first be trained as requisite using the position indicators or a theodolite as appropriate.

(iii) System Bench Marks can now also be positioned by an appropriate angle measurement from the Datum Bench Marks.

21. If a piece of equipment cannot sight a master theodolite, the angles can be transferred by an itinerant theodolite, but if this is off the ship, the latter must be shored to prevent movement (*see* Appendix 4, paragraph 3).

Elevation.

22. The full procedure is given in Appendix 4, paragraph 4 *et seq.* but in principle is—

(*a*) Measure the tilt of the roller path along the sight line.
(*b*) Lay the master sight to the tilt angle (making allowance for the clinometer plane errors).

The sight line will now be parallel to the roller path.

(*c*) Set Position indicator to zero.
(*d*) Check on a second and well displaced bearing and, where required, by Installation Distant Object Alignment Test (Appendix 1, paragraph 11).
(*e*) Train to position where Bench Mark is to be fitted and position the Datum Bench Mark.
(*f*) Elevate by clinometer or accurate position indicator and train as necessary to position the System Bench Mark.

The detail procedure for elevation alignment of between decks equipments (i.e. stable elements and G.R.U's) is given in Appendix 4, paragraph 10.

Installation Distant Object Alignment Test.

23. Ideally, the Installation Distant Object Alignment Test should be carried out concurrently with the Final Mechanical Alignment by instrument before the Bench Marks are finally secured. With the ship in tilt-test conditions, however, it will rarely be possible to view distant objects from the master sights because they will be obscured by the dock walls and dockside structures. Under these circumstances, the alignment can proceed and Bench Marks secured but the Distant Object Alignment Test must be carried out at the first available opportunity.

24. If discrepancies are revealed in the instrument readings as a result of the Distant Object Alignment Test and these errors cannot be satisfactorily resolved, the Final Mechanical Alignment must be repeated.

APPENDIX 2—*continued.*

Datum Scribe Lines.

25. Concurrently with the siting of Bench Marks, Datum Scribe Lines should be provided.

26. A brass plate is to be fitted adjacent to the scribe line or centre pop mark showing the true Position Indicator reading when the scribe lines are in line or the trammel in place. The length of the trammel should be shown, so that it can be checked for correct length before use, but it is also desirable to provide two centre pop marks on the mounting structure against which the trammel can be checked.

27. The Elevation Datum Scribe Lines should be positioned as far as possible from the trunnions in order to give the maximum accuracy.

Electrical Alignment.

28. The final part of the Stage I Electrical Alignment can be conveniently carried out concurrently with the Final Mechanical Alignment. If as a result of the Distant Object Alignment Test it is necessary to adjust the Position Indicator readings, the Electrical Alignment must also be repeated.

Installation Bench Mark Alignment Test.

29. On completion of tuning in Auto the Weapon Control System and Gun Mountings, an Installation Bench Mark Alignment Test is to be carried out. This test, which is identical to the Routine Bench Mark Alignment Test carried out by Ship's Officers (Appendix 3, paragraph 4) is to confirm that on completion of setting to work of the system, the Bench Mark Alignment is correct within the tolerances allowed (paragraphs 34–36).

30. Any discrepancies are to be fully investigated and corrected.

Note.—As this test is carried out during the final stages of the ship's completion programme, the assistance of ship's personnel should be available.

Installation Distant Object Director Test.

31. On completion of the Installation Bench Mark Alignment Test, an Installation Distant Object Director Test is to be carried out to confirm the overall alignment. During this test, checks should be made that convergence, dip, &c., are being correctly applied.

32. Any discrepancies are to be fully investigated and corrected.

33. Attention is drawn to Appendix 3, paragraph 12, Note (i) regarding the precautions necessary during a distant object test.

Note.—The assistance of ship's personnel should be available for this test.

Accuracy of Alignment.

34. The absolute accuracy to which equipments can be installed, and to which the sight lines can be aligned in space (i.e. to be truly parallel, or as modified by tilt) is extremely difficult to measure, and therefore no tolerances are specified.

APPENDIX 2—*continued.*

35. If however the mechanical alignment is confirmed by Installation Distant Object Alignment Test, and the overall alignment by a Distant Object Director Test, a relative accuracy of alignment in accordance with the definition below should be within the tolerance (in minutes of arc) shown in paragraph 36.

> " When the controlling master sight is laid on its Bench Marks first from one direction and then from the other the mean position of the controlled master sight is to be within the stated tolerance of its Bench Mark."

Note.—The actual amount the controlled sight may be off its Bench Marks, in either direction (i.e. system backlash), depends on the particular system and will be shown in the relevant O.G.C.T. schedule.

Tolerances (in minutes of arc).

36. (*a*) Medium range gunnery systems .. .. ± 3
(*b*) Close range gunnery systems whether associated with close or medium range armament .. .. ± 6
(*c*) Stabilizing equipment .. .. ± 15
(*d*) Gun direction sights .. .. ± 15
(*e*) Self-contained systems directly linked to a weapon direction system .. .. ± 15
(*f*) The precise alignment of completely independent weapons is not important.

Alignment Drawings.

37. The Shipbuilder or dockyard concerned is to prepare an " As-fitted " drawing showing the following information—

(*a*) Position of all Master Training Datum Marks.
(*b*) Position of all Datum and System Bench Marks, indicating against each whether it is an elevation (or training) Datum or System Bench Mark and the mounting or director with which it is associated.
(*c*) A table listing—
(i) The Master sights selected, and the register number of the binocular or telescope used during the alignment.
(ii) The true elevation and bearing relative to the common Datums defined in Appendix 1, paragraph 5 for each mark.
(iii) The magslip approved to be racked if necessary to achieve final electrical alignment, *vide* Appendix 1, paragraph 21 (*c*) Note.
(iv) Any uncorrected errors between clinometer planes and the master sight or roller path to which they refer.

38. The General Overseer or General Manager, is also responsible for inserting the tabulated information (paragraph 37 (*c*)) in and completing Table 1 of the Director Test Book (D.N.O. 10458) and the O/E Master Record.

39. Where battens are required, this is to be clearly indicated on the drawing and in the records referred to above.

40. A copy of the drawing is to be kept in the ship's book and the relevant extract for each sight, director and mounting is to be engraved on a tally plate on or closely adjacent to the equipment, clearly specifying which sight is the master. (Appendix 3, paragraph 15.) The responsibility for the provision and positioning of these tally plates rests with the General Overseer or General Manager, as appropriate.

APPENDIX 3.

ROUTINE ALIGNMENT TESTS BY SHIP'S STAFF.

Check Receivers.

When correct alignment has been confirmed, " Receiver Check Date " should be established. To establish these, the director or G.R.U. (when this is the initiating element) should be laid on a known elevation and bearing by G.P.I. and known dip, convergence, range and other geometrical corrections applied. The mounting G.P.I. readings should then be noted.

2. These readings are known as " Receiver Check Data " and should be recorded on cards in the compartments concerned and noted in the O/E Master Record. As a check in case of variations, two or more sets of check data on well separated bearings and elevations should be established.

3. As a quick check of the alignment to be carried out on leaving harbour, closing up the armament, change of defence or cruising watches, or as required, all that is necessary is to apply the check data and note that the G.P.I. readings are correct.

Notes.

(i) The director or G.R.U. elevation and bearing chosen should be those on which the maximum amount of the armament will bear.

(ii) In directors without G.P.I.'s or receivers, an existing Bench Mark or other suitable well defined mark in the ship should be chosen as the director aiming point.

(iii) *If, as the result of Bench Mark Alignment Checks, it is necessary to make adjustments, Check Data must be corrected.*

(iv) In the case of equipment fitted with a multiple number of Position Indicators, e.g., 6-in. D.P. Mark 26 Mounting, the readings of all rack and motor position indicators should be recorded initially and the most accessible position indicator designated the " Master ". During the Check Receiver Test, it is only necessary to check the reading of the Master instrument.

Bench Mark Alignment Tests.

4. Experience has shown that the most accurate and reliable method of checking the system alignment is by means of " Bench Marks " and furthermore it is the only method at sea. The Bench Mark Method is therefore to be the primary method of checking alignment.

5. All that is necessary for this test is to check that, with the system in " Auto " and the Director on its System Bench Mark, the gun is also on its System Bench Mark.

Notes.

(i) As Bench Marks are sited relative to the Master Training Datum, and individual equipments roller path planes, it is necessary during this test for *tilt correctors to be set to zero* and for dip, convergence, range, deflections and other firing and geometrical corrections to be set to zero or infinity as appropriate.

(ii) The Check Receiver Test will check that the tilt and other corrections are subsequently correctly re-applied.

6. The error in the position of each gun to its Bench Mark in either direction should not exceed the permitted transmission backlash tolerance shown in the system schedules. The mean error by middling the backlash should also not exceed the tolerance given in Appendix 2, paragraph 36.

APPENDIX 3—*continued.*

7. If the mean error does not exceed the tolerance, no re-alignment action need be taken. If, however, it is exceeded, the Bench Mark Test should be repeated and if the errors persist the cause should be traced and eliminated.

Note.—It is most unlikely that the Bench Marks will be at fault. The probable causes of error are as follows—

(*a*) faults in the transmission to the R.P.C.

(*b*) variations in servo positional alignment resulting from day-to-day variation of amplifier or servo characteristics.

(*c*) errors due to variations of voltage and frequency supplies.

(*d*) errors due to friction of moving parts.

(*e*) errors due to the inconsistent zeroising of transmitters such as hand follow through correctors which are at present zeroised by eye. Care should be taken to eliminate any of these errors before racking magslips or synchros.

(*f*) Magslip or synchro out of adjustment.

(*g*) References and bore telescopes not in line.

Caution.—To avoid introducing errors due to collimation errors within the director master sight, particularly D.A.B. Sights, these sights should be removed from their brackets as infrequently as possible. When replacing or changing master sight binoculars or telescopes the alignment should be checked. For details, reference should be made to the relevant equipment handbooks. If necessary the position indicators should first be checked by reference to the Datum Scribe Lines (Appendix 1, paragraph 17).

8. In ships where the test cannot be carried out in auto the directors and/or guns should be laid on their respective Bench Marks by local power or hand control and their positions read off the gun position indicators in order to check the indicator alignment. The test can then be carried out in " Auto " by reference to indicator readings. Where mountings are not fitted with gun position indicators care is to be taken to allow for backlash which may exist in the receiver drives.

Note.—When carrying out this test the following points in particular must be carefully watched—

(*a*) Great care is required at the sighting positions at guns and directors to ensure that a valid reference to gun bore and director position is being used. Particular care is necessary when installing the bore telescopes. (Appendix 4, paragraph 4 Note.)

(*b*) A careful check of transmissions must always be made before carrying out an alignment test, in order to reduce the errors referred to in the note in paragraph 7 above to a minimum.

(*c*) Equipment misalignment should always be measured whenever carrying out an alignment test in order to check that the electrical alignment is correct. Any misalignment found is to be recorded in the Director Test Book (D.N.O. 10458).

(*d*) Datum Scribe Line readings should always be taken with the system in auto as a check and the results entered in the Director Test Book.

(*e*) A very common cause of discrepancy is loss of mechanical or electrical zero position of an individual unit. In case of discrepancy these points should therefore always be checked against the Datum Bench Marks.

APPENDIX 3—*continued.*

(*f*) When more than one mounting is connected to a common transmitter, care must be taken that both or all mountings are switched on, in auto and run into line, as a " Stuck Position Error " may otherwise be introduced.

(*g*) Where self-contained A.C.U.'s are fitted, they must either be switched-on, or the auxiliary servo unit should be withdrawn.

9. Errors which cannot be traced may be racked out as a *temporary expedient only*, and are to be reintroduced as soon as possible and the search for the cause of the error resumed. The racking of magslips or synchros is never to be considered as a permanent correction for misalignment revealed by a Bench Mark Test until all other possible sources of error have been thoroughly investigated, and should only take place at the " Approved Racking Position " which will be shown in the system handbooks, on the Alignment Drawing and the O/E Master Record. (Appendix 1, paragraph 21 (*c*) Note.)

Distant Object Director Test.

10. If the errors still persist a Distant Object Director Test in auto should be carried out under Tilt Test or favourable still water conditions at the first opportunity.

11. If the results of this test are within 6 minutes of the System Bench Mark Test, there is no evidence to suspect the Bench Mark Alignment or Tilt Settings.

12. If, however, the discrepancy is greater than 6 minutes, the Distant Object Test should be repeated, and if the discrepancies persist and the cause cannot be found, the ship is to request the Dockyard to carry out a tilt test and check alignment of the Bench Marks.

Notes.

(i) The errors referred to in paragraph 7 are as likely to cause errors in a Distant Object Test as they are in a Bench Mark Test and the precautions in paragraph 8 must therefore also be taken.

(ii) A director test using a Distant Object can only be considered to be accurate provided that during the test the following exacting conditions are satisfied—

(*a*) The ship should preferably be in a " Tilt Test " condition, but with care it can be carried out under favourable conditions in still water provided there is little relative motion between the ship and the target, and the moment the guns and director crosswires cross the target is clearly defined. Any method of carrying out a Director Test with movement between the ship and the distant object that requires the operators to call " on, on, on " is not consistent with the precision required from modern control systems and should only be used as a rough check that very large errors in alignment do not exist.

(*b*) The range of the object is accurately known and that the appropriate convergence for the range and any other corrections applied during a distant object test but nulled in the bench mark test, are being correctly computed and applied. If necessary the computation of these corrections should be checked against the appropriate schedules to confirm that any discrepancies are not errors of computation rather than of alignment.

(*c*) The tests are carried out several times with the final handwheel movements from opposite directions to eliminate backlash.

APPENDIX 3—*continued.*

(*d*) When carried out with the ship other than completely still and with the director held still relative to the ship in such a position that the ship movement will bring the director cross wire slowly across the target, errors due to the human re-action time to ring the test bell to indicate " On " and to re-act to the bell must be eliminated. To eliminate these errors the test should be repeated several times with the ship movement in opposite directions for each direction of final hand wheel movement.

(iii) The permissible tolerances for a Distant Object Test, when carried out under good conditions, will vary with different Fire Control Systems and are likely to exceed ± 6 minutes in systems other than those specified below—

M.R.S.3 (all mods.)	M.R.S.8.
F.P.S.3	All Surface only Systems.

Records.

13. All ships are to keep a careful record in the Director Test Book of all bench mark and distant object test readings whether they are inside or outside tolerance, and of any corrections made in the system. Commanding Officers will be required to produce this book at Admirals' Inspections and O.G.C.T's

Reports.

14. When ships have their Bench Marks repositioned or checked they are to forward a report to Navy Office through their Administrative Authority giving the following information where possible—

(*a*) Original position of Bench Marks, i.e., in degrees and minutes for training and elevation and the structure or deck on which they have been fitted.

(*b*) New position of Bench Marks as in (*a*) above.

(*c*) Error in minutes of original position of Bench Marks.

(*d*) Possible causes for the errors in (*c*) above.

(*e*) The method by which the Bench Marks were checked.

(*f*) Results of Distant Object Tests which have been carried out under favourable conditions as a check:—

(i) On Bench Marks prior to the marks being checked by Dockyard.

(ii) On Bench Marks after the marks have been checked by Dockyard.

Inspections.

15. Compliance with the instructions in paragraph 1 and those in Appendix 2, paragraphs 37, 38 and 39 is to be verified on each occasion of an O.G.C.T.

APPENDIX 4.

PRINCIPLES OF ALIGNMENT PROCEDURES.

Setting up the Master Theodolite for Training Alignment.

1. It is normally sufficiently accurate to set up the theodolite in the ship's datum level. In the case of directors in particular, it is necessary however to use the plane of the roller path as the datum plane.

APPENDIX 4—*continued.*

This is because—

(*a*) The tilt-liners will already have been set to the mean tilt of the mountings, and the roller path may not therefore be in the same plane as the ship's datum level.

(*b*) The elevation of the theodolite and depression of the director master sight are usually sufficiently large to introduce a significant cross-levelling error, if the director roller path and the ship's datum level are not parallel.

To Set Theodolite in the Datum Plane.

2. (*a*) Measure the " heel " and " trim " (i.e.) measured tilt across and along the fore and aft line of the datum line in use. (*See* paragraph 5 (*b*) for measurement of roller path tilt.)

(*b*) If angle of trim is greater than angle of heel—

(i) Arrange the theodolite so that two of the three levelling screws are in a line approximately fore and aft. Traverse the rotating plate about its vertical axis until the spirit level which it carries is also in a fore and aft line. Adjust the levelling screws until the bubble is central. Traverse through 90° about the vertical axis and adjust the remaining levelling screw until the bubble is again central. Check that the bubble remains central when traversed to any bearing. The theodolite is now terrestrially level and ready to be set into the datum plane.

(ii) Traverse the telescope about its vertical axis until its line of sight is approximately fore and aft, and aimed at any fixed mark. Read and record the angle of the vertical circle for this mark.

(iii) As appropriate, elevate or depress the telescope from this reading by the amount of trim measured. Bring the telescope crosswise back to the mark by simultaneous equal and opposite movements of the two levelling screws in the fore and aft line, taking care to maintain the spirit level (which is mounted at right-angles to the theodolite line of sight) central by use of the third screw if necessary.

(iv) The theodolite is now horizontal transversely, but parallel to the datum plane in the fore and aft line.

(v) Repeat the procedure of (iii) above but with the theodolite aimed at any fixed mark approximately at right-angles to the fore and aft line. As appropriate, elevate or depress the telescope by the amount of heel. The third levelling screw only is used in the adjustment to avoid interference with the plane already established for trim.

(vi) The theodolite is now completely in the datum plane in use and is ready for use.

(*c*) If angle of trim is less than the angle of heel—

Proceed as in (*b*) (i) but arrange the two levelling screws to lie in an athwart ships direction, and begin with the spirit level also in this direction.

APPENDIX 4—*continued.*

Setting up the Itinerant Theodolite.

3. To check the alignment of positions which cannot sight the master theodolite, an itinerant theodolite should be set up where it can be seen from the master theodolite and the position to be aligned.

(*a*) The tribrach of this itinerant theodolite is first set to the plane of the master theodolite by bubble readings and vertical circle angles as described above.

(*b*) The itinerant theodolite is then adjusted parallel to the master theodolite by the principle of equal angles.

(*c*) By further application of this principle the equipment can be aligned to the itinerant theodolite.

Use of Clinometers and Theodolites for Elevation Alignment.

Check of Accuracy of Clinometer Plane.

4. Depending on the particular equipment, clinometer planes may or may not be fitted on the elevating mass parallel to the master sight line and/or on the rotating structure parallel to the roller path. The procedure in each case differs *but* in each case the accuracy of the clinometer plane with reference to the master sight must be checked. Any uncorrected error is to be noted on the alignment data drawing and O/E Master Record, and due allowance made for the error during the test.

Note.—In Gun Mountings, this error is liable to vary when barrels are changed but the barrel to barrel differences are small and should be absorbed within the tolerances allowed for the Bench Mark Alignment Test. When the Master Sight is fitted at the muzzle end of a gun, changes in the Master Sight Line are liable to occur due to uneven barrel wear and localized " high spots ". Errors due to this latter condition can be minimized by always shipping the Master Sight bore adaptor in the same position.

5. To check the clinometer plane—

(*a*) On the elevating mass.

(i) Mount a theodolite at any convenient point, set up in the earth's horizontal plane, and collimate with the master sight.

(ii) Mount a clinometer on the clinometer plane.

(iii) The elevation of the theodolite is equal to the depression of the master sight and should be the same as the clinometer reading. Any difference is the error in the parallelism between the clinometer plane and the master sight.

Notes.

(i) In the particular case of checking gun and cradle clinometer planes the error of one clinometer plane is obtained by the above method. A clinometer is then mounted on both clinometer planes and the difference between the clinometer readings is related to the error of the first clinometer plane to obtain the error of the second clinometer plane.

APPENDIX 4—*continued.*

(ii) In mountings where only cradle clinometer planes are fitted (or the gun clinometer plane is inaccessible) a clinometer plane is sometimes provided for the bore telescope adaptor. This clinometer plane is parallel to the Master Sight Line. If a clinometer is mounted on both planes, the error in the cradle clinometer plane is the difference between the two readings.

(*b*) On the rotating structure.

(i) Mount a clinometer on the clinometer plane, train on the selected bearing and take a reading.

(ii) Train the structure through 180° and take a further reading.

(iii) The error in the clinometer plane will then be half the algebraic sum of the two readings.

Note.—Half the algebraic difference will give the measured tilt of the roller path on the selected bearing.

Caution:

(1) Extreme care is necessary in applying the correct algebraic sign to the clinometer readings and it is recommended that sketches on the lines of figure 1 should be prepared when making the necessary calculations.

(2) If the ship is afloat a second clinometer should be mounted on the fixed structure so that any movement of the ship may be detected and due allowance made.

Use of Clinometers and Theodolites for Elevation—Procedure.

Two Clinometer Planes fitted.

6. (One on the elevating structure parallel to the axis of the master sight and one on the rotating structure parallel to the roller path.)

(*a*) Mount a clinometer on each plane.

(*b*) Elevate or depress the equipment until the two clinometers give the same reading, adjusted as necessary for clinometer plane errors, as determined in paragraphs 5 (*a*) and (*b*) above.

(*c*) Adjust the equipment so that it then is electrically and mechanically at zero.

One Clinometer plane on the elevating structure parallel to the axis of the master sight.

7. (*a*) Mount a clinometer on the plane provided on the elevation portion, and on any convenient level surface on the non-elevating portion.

(*b*) Measure the tilt of the mounting on a given bearing by reading the clinometer on the non-elevating portion on bearings 180° apart (the tilt being half the difference of the two readings). *See* paragraph 5 (*b*).

(*c*) Train the equipment back to the original bearing.

(*d*) Elevate the elevating portion until the clinometer on it reads the tilt of the mounting as determined in (*b*) above, adjusted as necessary for the clinometer plane error, as determined in paragraph 5 (*a*) above.

(*e*) Adjust the equipment so that it then is electrically and mechanically at zero.

APPENDIX 4—*continued.*

One Clinometer plane on the Rotating structure parallel to the roller path.

8. In this case a theodolite must be used.

(*a*) Mount the theodolite, set up in the horizontal plane, at any convenient position visible from the master sight of the equipment to be aligned.

(*b*) Mount a clinometer on the plane provided on the non-elevating portion.

(*c*) Train and elevate the theodolite and the equipment until the theodolite and the master sight are in line.

(*d*) Note the reading of the clinometer.

(*e*) Note the elevation of the theodolite.

(*f*) Elevate the equipment through an angle equal to the algebraic difference of the theodolite elevation and the tilt as measured by the clinometer as in paragraph 5 (*b*). To do this a clinometer may be placed on any suitable part of the elevating structure provided that it is flat and provided that the clinometer lies along the line of sight.

No Clinometer Planes provided.

9. (*a*) Mount a theodolite as in paragraph 8 (*a*).

(*b*) Mount a clinometer on any convenient level surface on the non-elevating portion.

(*c*) Determine the tilt of the non-elevating portion along the bearing of the theodolite by a similar method to that in paragraph 5 (*b*).

(*d*) Train and elevate the theodolite and the equipment until the theodolite and the master sight are in line.

(*e*) Proceed as in paragraph 8 using the tilt determined.

Method of alignment of between decks equipment.

10. The procedure for aligning a G.R.U. stabiliser is given below. The procedure for the stable element of the Mark 37 computer system is contained in its handbook. The procedure for other stable elements, where not contained in their handbooks, may readily be determined from the principles of the G.R.U. stabiliser alignment and those contained in paragraph 6 et seq.

11. (*a*) G.R.U. stabilisers are provided with clino planes on the elevating portion only as follows—

Early G.R.U. Stabs., Mark 1	..	On top of Stabiliser Box.
Later G.R.U. Stabs., Mark 1	..	On side of Stabiliser Box.
G.R.U. Stabs., Mark 2	..	On side of Stabiliser Box.
G.R.U. Stabs., Mark 3	..	On outer bow of upper system.

(*b*) Before leaving the manufacturers, all G.R.U. stabilisers are accurately set so that—

(i) The clinometer plane is aligned with the axis of the rate gyro when no misalignment exists at the elevation pick up.

(ii) When the clinometer plane is parallel to the base of the stabiliser an elevation dial shows zero. This dial can be read to an accuracy of six minutes in the case of the G.R.U. stabiliser, Marks 1 and 2, and one minute in the case of the G.R.U. stabiliser, Mark 3.

APPENDIX 4—*continued.*

(*c*) No adjustment is therefore necessary either to the clino plane or the elevation dial on installation but a routine check of the elevation transmitters should be made as follows—

(i) Elevate or depress the Stabiliser Box (or outer bow in the G.R.U. stabilizer Mark 3) by hand until the elevation dial reads zero.

(ii) Check that elevation transmitters are in the pegged position.

(*d*) Should it become necessary to check the elevation dial at any time, e.g. after replacing a Stabiliser Box in the G.R.U. stabiliser Mark 1 or 2, the following routine should be carried out—

(i) Proceed as in paragraph 7 (*a*) to (*d*).

(ii) If the stabiliser elevation dial does not now reach zero, adjust the dial by slackening off the clamp screws of the vernier ring and realigning the ring to show zero. Reclamp the vernier ring and check the peg positions of the elevation transmitters when elevation is zero.

Figure 1

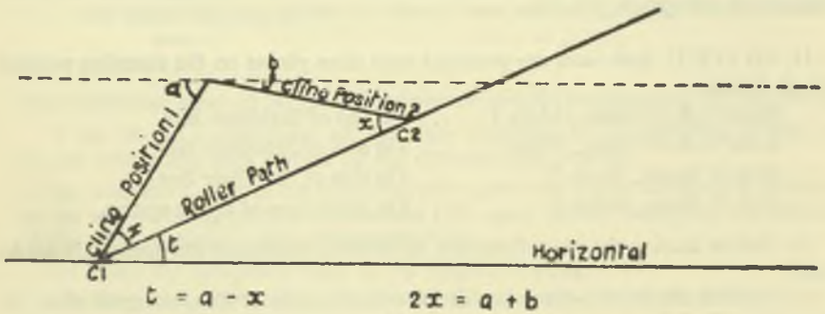
t = tilt of roller path.

x = error of clino plane relative to roller path.

a = 1st reading of clino (on selected bearing).

b = 2nd reading of clino (at 180° to selected bearing).

(*a*) Error of clino plane greater than tilt of roller path.

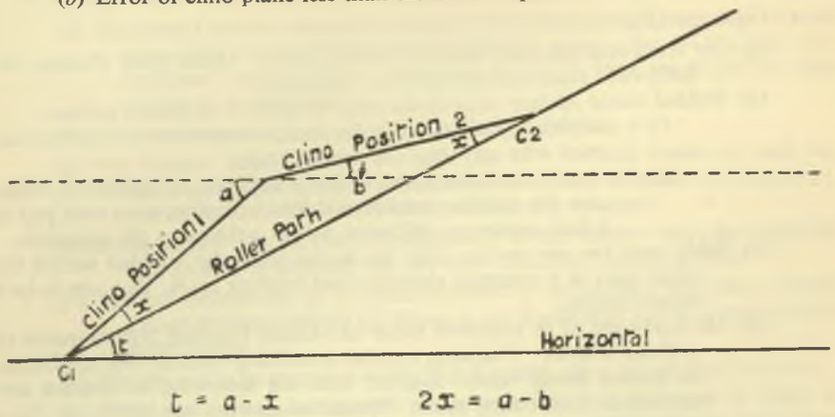


At positions C_1 and C_2 the clino adjustments are in the same direction.

$\therefore$ Error $x = \frac{1}{2}(a + b)$. Tilt $t = \frac{1}{2}(a - b)$.

APPENDIX 4—*continued.*

(*b*) Error of clino plane less than tilt of roller path



At positions C_1 and C_2 the clino adjustments are in opposite directions, i.e. b is negative.

$\therefore x = \frac{1}{2}[a - (-b)]$.

$\therefore x = \frac{1}{2}(a + b)$.

$\therefore$ Error $x = \frac{1}{2}(a + b)$. Tilt $t = \frac{1}{2}(a - b)$.

Note.—When calculating the clino plane error and tilt the formulae used are the same for both conditions provided the readings are added algebraically.

(D.W. 737/51/5.)

(*Navy Order* 249 *of* 1960.)

UNCLASSIFIED.

249.—Gunnery Equipment—Datum and Bench Marks—Manufacture and Fitting Instructions.

(*A.F.O.* 2879/1959.)

Instructions have been issued in Navy Order 248 of 1960 (*Gunnery Equipment—Bench Marks, Alignment and Alignment Tests—Instructions*), on the methods of alignment, the positioning of Master Training Datum, Datum and System Bench Marks and their use. The following instructions specify the material, engraving and method of fixing these marks for future installations.

2. Retrospective action is not required to change the marks already fitted in existing installations. Existing stocks of solid stainless steel plate already held in Dockyards for this service should continue to be used to exhaustion.

3. Admiralty has advised that B.R. 292 will be amended.

MASTER TRAINING DATUM, DATUM AND SYSTEM BENCH MARKS.

Positions NOT fitted with battens.

4. These marks are to be—

(*a*) Cut from stainless steel sheet 14 S.W.G. thick. (Rate Book Pattern No. X8034/014 class and group B2 (*a*) section 3.)

(*b*) Welded round all four sides direct onto the deck or bulkhead unless—

(i) a padpiece, also welded to the deck, is required to bring the face level with any deck covering fitted,

(ii) the marks are being fitted to high tensile steel structure in which case the stainless steel should first be welded to a steel pad of ¼-inch minimum thickness before welding to the structure.

(*c*) When used for one motion only the marks are to be 3 inches square but when used as a common elevation and training mark, they are to be 4 inches square.

(*d*) All marks are to be engraved either as Master Training Datum marks or as Bench marks. The latter are also to indicate whether they are Datum or System Bench marks together with the mounting or director and motion to which they refer. Typical engravings are shown in Navy Order Diagram Issue 6/60 (1) Figure 1.

(*e*) The designation should be in lettering $\frac{3}{16}$-in. high. The lines should be 0.3-in. thick and the circles 1.1-in. mean diameter. All engravings should be .04-in. deep and filled with black wax.

Positions fitted with battens.

5. These marks are to be—

(*a*) Cut from stainless steel sheet 14 S.W.G. thick and welded round all four sides to a steel pad of ¼-inch minimum thickness.

(*b*) The pads can be welded direct to the bulkhead or deck (including high tensile steel structure) except where an additional pad is necessary to bring the face level with any deck covering fitted. A flat top surface is to be provided.

(*c*) The marks are to be 6 inches x 4 inches and drilled, complete with pad to take the battens in accordance with Navy Order Diagram Issue 6/60 (2) Figure 2.

(*d*) They are to be engraved as for positions not fitted with battens but are also to carry the words BATTEN POSITION.

(*e*) (i) All Bench mark positions fitted to carry battens are to be provided with cover plates cut from 14 S.W.G. stainless steel. (Rate Book Pattern X8034/014).

(ii) The cover plates are to be engraved similar to the mark for which they are provided but are also to carry the words COVER PLATE. A typical cover plate is shown in Navy Order Diagram Issue 6/60 (3) Figure 3.

(iii) Cover plates are to be secured with brass securing screws and are invariably to be in place when the marks are not in use.

Aluminium Structures.

6. (*a*) When Master Training Datum marks, Bench marks or Batten positions are required on aluminium structures they should be made of aluminium welded to the structure and engraved as for stainless steel marks.

(*b*) Aluminium cover plates secured by bright steel cadmium plated securing screws are to be provided as for stainless steel cover plates.

Battens.

7. Battens may be either vertical or horizontal.

(*a*) Horizontal battens are not to exceed 3 feet in length and may only be used when they can be fitted parallel with and project beyond the edge of a bulkhead or rigid deck. They are not to be fitted to project at right angles to a bulkhead.

(*b*) Vertical battens are not to exceed 4 feet in length.

(*c*) For System Bench marks, the cone tip of a vertical batten is used for training alignment and the engraved line is used for elevation alignment. For horizontal battens, these positions are reversed.

(*d*) If the batten is to be used for alignment of one motion only, the engraved line should be omitted and the cone truncated as appropriate.

(*e*) Vertical battens are to be manufactured in accordance with Navy Order Diagram Issue 6/60 (4) (5) Figure 4 and horizontal battens in accordance with Figure 5.

(*f*) Battens are to be engraved as for Bench marks along the edge of the base.

(*g*) When not in use, battens are to be stowed in wooden boxes in order to safeguard them against damage. The responsibility for providing these boxes in the first instance rests with the authority responsible for providing the battens.

Preservation.

8. All stainless steel or aluminium Master Training Datum marks, Bench marks, Batten positions, Cover plates and their securing screws are to be kept well covered with Grease XG. 310. Particular care is required to keep the dowel and pintle holes in Batten positions well filled with grease.

New Construction Ships.

9. In new construction ships, the responsibility for the provision of Master Training Datum marks, Bench marks and battens rests with the shipbuilder. If difficulty is experienced in obtaining stainless steel sheet of 14 S.W.G., thicker sheet or stainless steel clad, (i.e. mild steel with a facing of stainless steel) may be used in lieu.

10. If difficulty is still experienced in obtaining supplies of the small quantities required, the fact should be reported to Navy Office with a view to obtaining supplies from Naval resources.

(D.W. 737/51/6.)

(*Navy Order* 248 *of* 1960.)

UNCLASSIFIED.

250.—Gunnery Equipment Alignment Tests—Approved Racking Positions.

(*A.F.O.* 2880/1959.)

Introduction.

Navy Order 248 of 1960 (*Gunnery Equipment—Bench Marks, Alignment and Alignment Tests—Instructions*) directs that if it is necessary to " rack " a magslip or synchro in order to obtain complete alignment, this adjustment is only to be carried out at the " approved racking position ".

2. The purpose of such positions is—

(*a*) To provide a point at which the " final touch " can be given to the gunnery system alignment.

(*b*) To facilitate the alignment of cross-connected systems.

(*c*) To provide a means of temporarily racking out errors until their cause can be ascertained and remedied.

(*d*) To prevent indiscriminate adjustments and hence to make it easier to maintain alignment.

Note.—In the case of (*a*) and (*b*) above, if all the magslips or synchros in the gun chain have been lined up electrically in their pegged positions during the electrical alignment, no adjustments should be necessary when testing the auto alignment.

Choice of Racking Position.

3. Racking positions have been chosen observing the following order of preferences—

(*a*) The nearest convenient Follow-through Transmitter to the mounting concerned.

(*b*) The mounting Coincidence Transmitter when divided-reset is not employed.

(*c*) The initiating transmitter if it controls only one mounting employing divided-reset.

(*d*) If the initiating transmitter controls more than one mounting, then the motor and load Coincidence Transmitters must be racked together.

Note.—The instructions for lining up divided-reset systems have been reviewed and revised instructions have now been incorporated in B.R. 2034 which is about to be reissued.

4. In the attached table, only the gun order chain of the following systems has been considered: F.P.S.3, M.R.S.3 Mod. 1, A.A./SU.2 and M.R.S.8. It is important that adjustments are made in the order given.

TABLE.

System.	*Applicable to.*	*Training—Approved Racking Position.*	*Elevation—Approved Racking Position.*	*Existing Instructions.*
F.P.S.2 .. F.P.S.3 ..	R.A.N. Battle Class Destroyers R.A.N. "Daring" Class Destroyers West Head Gunnery Range	1. A.A. (and Su) Primary.—The appropriate lateral convergence fine F.T.T. in the transit of the A.F.C.C. 12 2. Starshell.—The appropriate S.S. training difference fine F.T.T. 3. A.A. Emergency.—The appropriate eye shooting sight deck plane deflection fine F.T.T. 4. Su Emergency.—The appropriate Deflection + Drift fine F.T.T. in the A.F.C.C. 12	1. A.A. (and Su) Primary.—The appropriate vertical convergence fine F.T.T. in the transit of the A.F.C.C. 12 2. Starshell.—The appropriate S.S. Elevation difference fine F.T.T. 3. A.A. Emergency.—The appropriate eye shooting vertical deflection fine F.T.T. 4. Su Emergency.—The appropriate TE + Dip fine F.T.T. in the A.F.C.C. 12	Nil
M.R.S.3 Mod. 1 A.A./Su.2	R.A.N. Frigates Type 12 .. West Head Gunnery Range	1. A.A. and Local Su.—The appropriate fine lateral convergence F.T.T. in the A.F.C.B. 10 Gun Data Unit 2. Main Su.—The appropriate deck gun deflection fine F.T.T. in the A.F.C.B. 10 Application Unit 3. Starshell.—The appropriate S.S. difference fine F.T.T. in the Application Unit	1. A.A. and Local Su.—The appropriate fine vertical convergence F.T.T. in the Gun Data Unit of the A.F.C.B. 10 2. Main Su.—The appropriate fine F.T.T. in the G.E.C.U. of the A.F.C.B. 10 3. Starshell.—The appropriate S.S. difference fine F.T.T. in the Application Unit of the A.F.C.B. 10	Nil

TABLE—*continued.*

System.	*Applicable to.*	*Training—Approved Racking Position.*	*Elevation—Approved Racking Position.*	*Existing Instructions.*
M.R.S.8 ..	R.A.N. "Daring" Class Destroyers West Head Gunnery Range	The appropriate Dd + Drift fine F.T.T. in the D.B.U. or S.B.U. Gun Transmission Unit	The appropriate DV + T.E. fine F.T.T. in the D.B.U. or S.B.U. Gun Transmission Unit	Nil

(D.W. 737/51/7.)

(*Navy Order* 248 *of* 1960.)

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C.N.O. 251/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
26th April, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

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251.—Ballistics—List of Range Tables, Fuze Scales and Trajectory Charts.

(*A.F.O.* 1/1960.)

The information given in the appendixes to this order is for the Australian and New Zealand Stations. Current tables of guns not included in these appendixes will be found in A.F.O. 1/1960.

2. *Contents of Appendixes—*

Section I—Establishments authorized for range tables, fuze scales and rocket trajectory charts.

Section II—List of current range tables, fuze scales and trajectory charts.

Section III—List of range tables and fuze cables held in reserve for special services.

Appendix A—List in numerical order of range tables and rocket trajectory charts issued to the Fleet, with details of amendments additional and revised pages.

Appendix B—Tables removed since the issue of the previous list (Navy Order 230 of 1959).

New and Old Style Tables.

3. The first of the new style tables in small booklets and with distinctively coloured covers have been issued during 1957 and 1958. The information is numerically the same as that in the old style tables bearing the same number but the layout has been changed and standardized throughout all calibres and corresponds to the instruction book for their use " Ballistic Corrections " (Part 10 of the Gunnery Manual). Shell trajectory charts are incorporated in the books. A few tables, mainly those for guns which will not be used with fire control gear, have not been brought into the new style; their use is largely confined to checking local sights.

4. This order refers to new style tables unless otherwise stated. The letters O.S. are used to indicate old style tables.

5. Some of the tables included in the current list have been superseded, but are retained on account of the fire control or gun sights graduated to them.

6. Appendix A lists all current amending A.F.O.'s issued, together with details of additional and revised pages which will bring the tables up to date. All " P " series amendments up to and including December, 1959 are included in this order. Reprints of the tables incorporate amendments to date and may have different page numbers from the original issue. Amendments and new or amended pages for range tables are now issued in the A.F.O. " P " series which are notified monthly in C.N.O.'s under the separate issue of " Books distributed during month and year ". **Any ship not receiving the amendment within four weeks of the date of receipt of the notifying C.N.O., is to place a demand with the Superintending Naval and Air Store Officer, Sydney, unless cause is known for the delay, such as non-receipt of mails, ship's absence from distributing authority, &c.**

7. On receipt of this order, all range tables are to be mustered against appendix A and Sections I and II, deficiencies being reported immediately and replacements demanded from the Superintending Naval and Air Store Officer, Sydney.

8. Ships should only hold Range Tables applicable to their Fire Control Systems. Tables held surplus to those shown in Section I should be returned to the Superintending Naval and Air Store Officer, Sydney, with the exception of copies of tables listed in appendix B, which should be destroyed in accordance with instructions in Form B.R. 1—Establishment and Numerical List of Books of Reference.

9. For information and record only, a supplementary list is given in Section III of range tables and fuze scales required for guns held in reserve for special services. This list includes some tables which appear also in the main list, but no general issue of special services tables as such will be made.

10. Navy Order 230 of 1959 is hereby cancelled.

Section I.

ESTABLISHMENTS AUTHORIZED FOR RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS.

A complete set of range tables consists of—

A The range tables to which fire control instruments or gun sights are graduated.

A (i) The latest range table appropriate to the guns controlled.

B The range and elevation scale to which fire control instruments or gun sights are graduated.

B (i) The latest range and elevation scale appropriate to the guns controlled.

C The range and time scale (for guns larger than 4-in. and for certain calibres and marks of gun of 4-in. calibre and below).

D Starshell range table, only if starshell is available.

E Anti-aircraft range table, for A.A. and dual purpose guns only.

F Trajectory charts, for 2-in. rockets.

G Range table for RE/P shell (4-in. Marks 16* and 21 only).

H Second order tables (if issued) instead of R & E and R & T tables.

Normal establishment:

2. The normal establishment of range tables is as follows:—

Flag Officers	One complete set for all guns.
Captains (D) and Captains (F)	One complete set for all gun systems in the squadron
Dockyards	One complete set for all guns.
H.M.A. Gunnery School ..	One complete set for all guns.
Ordnance Engineer Overseers ..	On demand from Superintending Naval and Air Store Officer, Sydney.

Carriers, Daring Class, Battle Class and repair ships	One complete set for all gun systems fitted.
Tribal Class and frigates ..	For all guns and rockets carried: Range tables to which A.A. and S.U. fire control gear is graduated (*see* Note). Starshell and RE/P range tables. Rocket and falling target shell trajectory charts. (R & E and R & T scales will not be supplied to these ships.)

NOTE: Certain guns, without A.A. fire control are supplied with—

Q.F., 4-in., Mark 19	R.T. 497
Q.F., 4-in., Mark 5	R.T. 429
40/60 (on single mountings)	R.T. 532.

Tables for instructional purposes:

3. Twelve additional copies of the following tables are to be held by H.M.A. Gunnery School for instructional purposes:—

4.5-in. Marks 1, 3, 4 and 5 Guns.	4-in. Marks 16* and 21 Guns.
Tables Nos. 399A	Tables Nos. 369
400	370
401	371
402B	373B
402C	587
423	612
464	653
465	687
581	656
630	
641	
644.	

4. *Publications concerning range tables and ballastics.*

No. and Title.	Amending A.F.O.'s.
B.R. 980 (A)/1935, Range Tables, Introduction	P436/39, P39/40, P80/42, P176/42, P500/42, P399/45, P192/51.
B.R. 980 (A) (1)/1935, Notes on Ballistics, with Addendum No. 1	P62/37, P40/40, P81/42, P177/42, P549/42, P66/43, P339/52, P74/54.
B.R. 1898 (10), Gunnery Manual, Volume 1, Part 10, Ballistic Corrections	P282/57, Aust. Am No. 1

SECTION II.

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS.

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile Weight. (4)	Charge. (5)	M.V. (6)	Agrees with Table No. (7)	Allied Fire Control System. (8)	Remarks. (9)
			lb. oz.		ft/s.			
5.25-in. Mark 1	*409	SURT	80 0	Full	2600	—	A.F.C.C. Mark 7* ..	—
	410	R & E	80 0	Full	2700/2450	409	A.F.C.T. Mark 6, 6* ..	
	411	R & T	80 0	Full	2700/2450	409	A.F.C.T. Marks 6, 6*, Mod. 10	—
	*632	SURT	79 0	Full	2600	—		—
	633	R & E	79 0	Full	2700/2450	632	A.F.C.B. Mark 10	
	634	R & T	79 0	Full	2700/2450	632	G.F.C.S. Mark 37	
	*418A	AART	80 0	Full	2600	—	G.F.C.S. Mark 37 ..	Fuzes Nos. 206, 207, 211 and N3
	*635	AART	78 0	Full	2600	—	F.P.S. Mark 5 ..	—
	607	Star RT	71 0	Full	2700	—	—	Fuze No. 215
4.7-in. Mark 12	254	SURT	50 0	Full	2600	—	—	—
	547	AART	49 2½	Full	2600	—	—	Fuzes Nos. 211, 207 and 206
	O.B.104	TC						
	405A	AART	49 0	Full	2600	—		Fuzes Nos. 206, 207 and 211
	O.C.70	TC					Nil remarks	
	215A	Star RT	43 8	Star	1900	—		Fuze No. 198
	588	Star RT	43 2	Star	1900	—		Fuzes Nos. 206 or 207

* *See* Appendix A (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS—*continued.*

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile Weight. (4)	Charge. (5)	M.V. (6)	Agrees with Table No. (7)	Allied Fire Control System. (8)	Remarks. (9)
			lb. oz.		ft/s.			
4.5-in. Marks 1, 3, 4 and 5	*399A	SURT	55 0	Full	2350	—	A.F.C.C. Marks 1*, 1**, 7, 12 Mod. 0, 1, 2	Standard Shell. SAP
	400	R & E	55 0	Full	2500/2200	399A		—
	401	R & T	55 0	Full	2500/2200	399A	F.C.B. Mark 2** ..	—
	*581	SURT	55 0	Full	2350	—	G.F.C.S. Mark 37 ..	Standard shell HE, Fuze No. 206, as in Table 402C
	*402B	AART	55 0	Full	2350	—	H.A.C.S. Mark 4 ..	Fuzes Nos. 206, 207, 211, N3 and N80 series
	*402C		55 0	Full	2350	—	C.R.B.F. Marks 3, 4	
							F.P.S. Mark 2, 3 ..	
							F.K.C. Mark 2**	
							S.E.D.C. Mark 1	
							G.F.C.S. Mark 37	
	*641	SURT	55 0	Full	2350	—	A.F.C.C. Mark 12 Mod. 10, 11, 12	Standard shell, HET Mark N10, Fuze No. 211
							M.R.S. 3 Mod. 1	
							M.R.S. 7 Mod. 1	
							C.R.B.F. Mark 4 Mod. 4; M.R.S. 8	
							F.C.B. 10 Mod. 1, 3, 6, 7, 7A, 8	
	*644	AART	55 0	Full	2350	—	C.R.B.F. Mark 4 Mod. 4	
							M.R.S. 3 Mod. 1	
							M.R.S. 7 Mod. 1	
							M.R.S. 8	
							F.P.S. Mark 5	
	686	SORT	55 0	Full	2550/2150	641, 644	—	
	630	Star RT	49 15	Full	2450	—	—	Fuze No. 215
4-in. Marks 16* and 21	*369	SURT	35 14	Full	2600	—	A.F.C.C. Marks 3*, 7**, 11, 11*	—
	370	R & E	35 14	Full	2700/2450	369		
	371	R & T	35 14	Full	2700/2450	369	F.C.B. Marks 2, 2*, 6, 6*, 6* Mark 8*	—
	*373B	AART	35 0	Full	2600	—	F.K.C. Marks 2*, 2**, 3*, 3**, 5	Fuzes Nos. 206, 207, 211, N80 and N3 Series
							F.P.S. Mark 1	
							C.R.B.F. Mark 7 Mod. 1	
							S.E.D.C. Marks 2, 3, 3*	
							G.F.C.S. Mark 63	
	587	Star RT	29 3	Star	2100	—	—	Fuze No. 207
	612	RE/P Shell RT	29 7	Special	1225	—	—	Fuze No. 198, Mark 2
	*653‡	SURT	35 0	Full	2600	—	M.R.S. 6	Standrard Shell HE (35 lb.) Mark N2, Fuze No. 211
	687‡	SURT	35 0	Full	2800/2400	653/656	C.R.B.F. Mark 7 (other than Mod. 1)	
	*656‡	AART	35 0	Full	2600	—		
4-in. Mark 19	496	SURT	35 14	Full	1275	—	—	—
	497	AART	35 7	Full	1275	—	—	Fuze No. 400, Mark 1 FPS Mark 1
	540	Star RT	29 10	Star	1475	—	—	Fuze No. 198, Mark 2
4-in. Mark 23	627	SURT	35 13	Full	1750	—	—	—
	628	Star RT	29 10	Star	1950	—	—	Fuze No. 198, Mark 2
2-in. Rocket Flare	D.N.O. 9	TC	—	—	—	—	—	Head No. 3, with Launcher Mark 3P (straight rails)
	D.N.O. 10	TC	—	—	—	—	—	Head No. 3, with Launcher Mark 5 (spiral rails)

* *See* Appendix A (new pages). † Formerly 40-mm. Bofors. ‡ Available for issue mid 1960.

SECTION II.—*continued.*

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS—*continued.*

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile Weight. (4)	Charge. (5)	M.V. (6)	Agrees with Table No. (7)	Allied Fire Control System. (8)	Remarks. (9)
			lb. oz.		ft/s.			
2-in. Rocket Target	D.N.O. 4	TC	—	—	—	—	—	Frigates and above fitted with launchers or projectors
3-pdr. sub-calibre Mark 1	176A	SURT	3 5	Full	1875	—	—	Surface sub-calibre for 6-in. and 5.25-in. guns
40/60† All Marks	532	AART	2 0	Full	2800	—	S.T.D. C.R.B.F. Marks 1, 2, 2m, 9	—
	652	AART	2 0	Full	2740	—	M.R.S. 8	—
	685	SORT	2 0	Full	2940/2540	652		
2-pdr. SU sub-calibre, Marks 1 and 2	169A	SURT	2 0	Full	1900	—	—	CP shell weighted
	355A	SURT	2 0	Full	1900	—	—	CNF shell weighted
	316A	SURT	2 0	Full	1900	—	—	Projectile Practice, Mark 1
	320A	AART	2 0	Full	1900	—	—	CNF shell, Fuze No. 125
	364A	SURT	2 2½	Full	1900	—	—	Projectile Practice, Mark 2
All 0.303-in. machine guns and rifles firing Mark 7 Ammunition	312	SURT	174 0	Mark 7 Ammunition	2440	—	—	—

† Formerly 40-mm. Bofors.

SECTION III.

RANGE TABLES AND FUZE SCALES HELD IN RESERVE FOR SPECIAL SERVICES.

(No general issue of these tables will be made.)

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile Weight. (4)	Charge. (5)	M.V. (6)	Agrees with Table No. (7)	Allied Fire Control System. (8)	Remarks. (9)
			lb. oz.		ft/s.			
‡4.5-in. Marks 1, 3, 4 and 5	*423	SURT	55 0	Reduced	1775	—	P62/44, P104/45, P482/46, P159/50, P175/51, P274/51, P132/52	Page 1 revised July, 1946
	464	R & E	55 0	Reduced	1850/1700	423	—	Pages 1A, 1B revised March, 1950
	465	R & T	55 0	Reduced	1850/1700	423	—	
4-in. Mark 5-5***	361	SURT	31 7¾	AA	2350	—	(above refers to O.S.)	
	429	AART	31 0	AA	2350	—	—	
	216	Star RT	28 12	Star	1710	—	—	
4-in. Marks 16* and 21	*369	SURT						
	*373B	AART						
	587	Star RT						
	612	RE/P Shell RT						New style. For details *see* Section 11
4-in. Mark 19	496	SURT						
	497	AAFS						
	540	Star RT						
40/60† All Marks	532	AART						
	652	AART						
	685	SORT						
20-mm. Oerlikon	467	SURT	4⅜	—	2725	—	P134/49	—
	468	AART	4⅜	—	2725	—	P135/49	—

* *See* Appendix A (new pages). † Formerly 40-mm. Bofors. ‡ Reduced charge.

APPENDIX A.

LIST IN NUMERICAL ORDER OF RANGE TABLES AND TRAJECTORY CHARTS IN B.R. 2050 SERIES WITH DETAILS OF AMENDMENTS.

RANGE TABLES.

Serial No.	Calibre and Mark of Gun.	Current Amending A.F.O.'s.	Additional and Revised Pages.
169A	2-pdr. SU sub-cal.	—	—
176A	3-pdr. SU sub-cal.	—	—
215A	4.7-in. Mark 12	P. 496/50	—
254	4.7-in. Mark 12	P. 417/38	—
		P. 475/50	—
		P. 549/51	—
		P. 251/52	—
312	.303	—	—
316A	2-pdr. SU sub-cal.	—	—
320A	2-pdr. SU sub-cal.	—	—
342	6-in. Mark 23	P. 189/57	—
		P. 63/58	—
		P. 716/59	2 and 3 (Revised Sept., 1959)
355A	2-pdr. SU sub-cal.	P. 318/58	—
364A	2-pdr. SU sub-cal.	P. 317/58	—
369	4-in. Mark 16* and 21	P. 192/57	—
		P. 515/58	—
		P. 145/59	—
		P. 738/59	2 and 3 (Revised Sept., 1959)
370	4-in. Mark 16* and 21	P. 193/57	—
371	4-in. Mark 16* and 21	—	—
373B	4-in. Mark 16* and 21	P. 195/57	—
		P. 517/58	—
		P. 144/59	—
		P. 740/59	2, 3, 7 and 8 (Revised Sept., 1959)
399A	4.5-in. Marks 1, 3, 4 and 5	P. 521/57	9 and 10 (Revised Feb., 1957)
		P. 286/58	—
		P. 550/58	—
		P. 464/59	—
		P. 732/59	—
400	4.5-in. Marks 1, 3, 4 and 5	Aust. Am. No. 1	2, 3, 11 and 12 (Revised Sept., 1959)
		P. 196/57	—
401	4.5-in. Marks 1, 3, 4 and 5	—	—

APPENDIX A—*continued.*

RANGE TABLES—*continued.*

Serial No.	Calibre and Mark of Gun.	Current Amending A.F.O.'s.	Additional and Revised Pages.
402B	4.5-in. Marks 1, 3, 4 and 5	P. 197/57 ..	—
		P. 284/58 ..	11 and 12 (Revised March, 1958)
		P. 465/59 ..	—
		P. 733/59 ..	2 and 3 (Revised Sept., 1959)
402C	4.5-in. Marks 1, 3, 4 and 5	P. 322/57 ..	—
		P.283/58 ..	11 and 12 (Revised March, 1958)
		P. 466/59 ..	—
		Aust. Am. No. 1	—
		P. 737/59 ..	2 and 3 (Revised Sept., 1959)
405A O.C. 70	4.7-in. Mark 12 ..	P. 281/47 ..	—
		P. 477/50 ..	—
		P. 511/51 ..	—
		P. 254/52 ..	—
409	5.25-in. Mark 1 ..	P. 198/57 ..	—
		P. 402/58 ..	—
		P. 498/58 ..	—
		P. 718/59 ..	2 and 3 (Revised Sept., 1959)
410	5.25-in. Mark 1 ..	P. 199/57 ..	—
411	5.25-in. Mark 1 ..	—	—
418A	5.25-in. Mark 1 ..	P. 252/57 ..	—
467	20-mm. Oerlikon ..	—	—
468	20-mm. Oerlikon ..	—	—
496	4-in. Mark 19 ..	—	—
497	4-in. mark 19 ..	—	—
532	40/60 All Marks ..	—	—
540	4-in. Mark 19 ..	—	—
547 O.B. 104	4.7-in. Mark 12 ..	P. 372/47 ..	—
		P. 478/50 ..	—
		P. 256/52 ..	—
		P. 457/52 ..	—
581	4.5-in. Marks 1, 3, 4 and 5	P. 522/57 ..	—
		P. 285/58 ..	—
		P. 551/58 ..	—
		P. 467/59 ..	—
		P. 734/59 ..	2, 3, 7 and 8 (Revised Sept., 1959)
587	4-in. Marks 16* and 21	—	—
588	4.7-in. Mark 12 ..	P. 57/45 ..	—
		P. 177/45 ..	—
		P. 498/50 ..	—
607	5.25-in. Mark 1 ..	—	—
612	4-in. Marks 16* and 21	—	—

APPENDIX A—*continued.*

RANGE TABLES—*continued.*

Serial No.	Calibre and Mark of Gun.	Current Amending A.F.O.'s.	Additional and Revised Pages.
627	4-in. Mark 23 ..	—	—
628	4-in. Mark 23 ..	—	—
630	4.5-in. Marks 1, 3, 4 and 5	—	—
632	5.25-in. Mark 1 ..	P. 200/57 ..	—
		P. 405/58 ..	—
		P. 501/58 ..	—
		P. 721/59 ..	2 and 3 (Revised Sept., 1959)
633	5.25-in. Mark 1 ..	—	—
634	5.25-in. Mark 1 ..	—	—
635	5.25-in. Mark 1 ..	P. 406/58 ..	—
		P. 502/58 ..	—
		P. 722/59 ..	2 and 3 (Revised Sept., 1959)
641	4.5-in. Marks 1, 3, 4 and 5	Aust. Am. No. 1	—
		Aust. Am. No. 2	—
		P. 468/59 ..	—
		P. 735/59 ..	2 and 3 (Revised Sept., 1959)
644	4.5-in. Marks 1, 3, 4 and 5	P. 469/59 ..	—
		P. 736/59 ..	2 and 3 (Revised Sept., 1959)
652	40/60 All Marks ..	—	—
*653	4-in. Marks 16* and 21	P. 741/59 ..	2 and 3 (Revised Sept., 1959)
*656	4-in. Marks 16* and 21	P. 742/59 ..	2 and 3 (Revised Sept., 1959)
685	40/60 All Marks ..	P. 522/58 ..	—
686	4.5-in. Marks 1, 3, 4 and 5	P. 470/59 ..	—
*687	4-in. Marks 16* and 21	—	—

* Available for circulation mid 1960.

TRAJECTORY CHARTS.

D.N.O., O.B. and O.C. Series.

Serial No.	Calibre.	Mark of Gun.	Serial No.	Calibre.	Mark of Gun.
4	2-in.	Rocket Target	O.C. 70	4.7-in.	9 and 12
9	2-in.	Rocket Flare	O.B. 104	4.7-in.	9 and 12
10	2-in.	Rocket Flare			

Other Trajectory Charts, when required, are now incorporated at the back of the relevant Range Tables and are not issued separately.

APPENDIX B.

LIST OF TABLES REMOVED FROM LAST CURRENT LIST.

Calibre.	Serial No. of Table.	Nature of Table.	Remarks.
1-in. Aiming Rifle	288	SURT	—
5.25-in. Mark 1	418	AART	—
4-in. Mark 16* and 21 ..	373A	AART	—
6-in. Mark 23	342	SURT	—
	343	R & E	—
	344	R & T	—
	348	SURT	—
	349	R & E	—
	350	R & T	—
	408A	AART	—

(D.W. 700/70/13.)

(*Navy Order* 230 *of* 1959.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 252-267/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
28th April, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

2350/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

RESTRICTED. Cancelled C N O 5 9 71/62

252.—Holdings of Support Craft in the R.A.N.

The appendix of this order shows the allocation of Support Craft to the various Naval Authorities.

2. Naval Board approval is to be obtained before any transfer of craft between authorities takes place.

3. If approval is obtained, the Receiving Authority is to inform Navy Office by letter on receipt of the craft.

4. Any communication is to contain the following information—

(*a*) Type of Craft.

(*b*) Register Number.

5. In cases of urgency, approval to transfer craft may be sought by signal.

6. Reporting of re-allocation of support craft within commands is not required except that administrative authorities are to report craft issued to ships under construction or recommissioning.

7. This order does not apply to pulling and sailing craft.

8. Where craft are shown " Declare for Disposal " in the appendix to this order, authorities concerned are to raise Disposal form No. 1 in sextuplicate.

9. Authorities will be advised by letter of action to be taken with respect to craf to be held in Reserve.

10. Navy Order 38 of 1959 is hereby cancelled.

APPENDIX.

A.B.C. Class Reference.	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1915	Motor Water Lighter	MWL 251	N.O.I.C. W.A.	
		MWL 253	F.O.I.C. E.A.	Reserve
		MWL 254	F.O.I.C. E.A.	
		MWL 255	F.O.I.C. E.A.	Reserve
		MWL 256	N.O.I.C. Vic.	
		MWL 257	F.O.I.C. E.A.	
1915	Motor Refrigerator Lighter	MRL 252	N.O.I.C. New Guinea	
		MRL 253	F.O.I.C. E.A.	Reserve

APPENDIX—*continued.*

A.B.C. Class Reference.	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1915	Motor Stores Lighter	MSL 701	F.O.I.C. E.A.	Reserve
		MSL 702	F.O.I.C. E.A.	
		MSL 703	F.O.I.C. E.A.	
		MSL 706	N.O.I.C. New Guinea	To be disposed of when beyond economical repair
		MSL 707	F.O.I.C. E.A.	
1915	General Purpose Vessel	GPV 821	N.O.I.C. S.A.	
		GPV 901	F.O.I.C. E.A.	
		GPV 902	F.O.I.C. E.A.	
		GPV 957	N.O.I.C. Qld.	
		GPV 958	N.O.I.C. Vic.	
		GPV 961	F.O.I.C. E.A.	
		GPV 962	F.O.I.C. E.A.	
		GPV 968	N.O.I.C. Vic.	
1905	Landing Craft Vehicle Personnel	C 54798	F.O.I.C. E.A.	Declare for disposal
1925	Diving Boat ..	DB1 ..	F.O.I.C. E.A.	
		DB2 ..	F.O.I.C. E.A.	
1925	Diesel Tug, 93-ft. ..	D.T. 931	N.O.I.C. W.A.	
		D.T. 932	F.O.I.C. E.A.	
1925	Steam Tug ..	336 ..	F.O.I.C. E.A.	
1925	Towboat, 45-ft. ..	T.B. 5 ..	N.O.I.C. New Guinea	To be declared for disposal when beyond economical repair
		T.B. 7 ..	F.O.I.C. E.A.	
		T.B. 9 ..	F.O.I.C. E.A.	
		A.T. 1536	C.S.T. F.N.D.	
1940	Seaward Defence Boat	SDB 1321	F.O.I.C. E.A.	
		SDB 1324	N.O.I.C. Tas.	
		SDB 1325	N.O.I.C. W.A.	
1940	Search and Rescue Craft, 63-ft.	SAR 910	F.O.I.C. E.A.	
		SAR 916	F.O.I.C. E.A.	
		SAR 918	F.O.I.C. E.A.	
		SAR 919	F.O.I.C. E.A.	
1940	Search and Rescue Craft, 48-ft.	SAR 02–12	C.S.T. F.N.D.	
		SAR 02–14	C.S.T. F.N.D.	

APPENDIX—*continued.*

A.B.C. Class Reference.	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1940	Torpedo Recovery Vessel	TRV 2 ..	F.O.I.C. E.A.	
1940	Motor Dory, 26-ft. ..	DR 2 ..	F.O.I.C. E.A.	Declare for disposal
		DR 3 ..	F.O.I.C. E.A.	
		DR 5 ..	F.O.I.C. E.A.	To be disposed of when beyond economical repair
		DR 6 ..	F.O.I.C. E.A.	Declare for disposal
		DR 10 ..	F.O.I.C. E.A.	To be disposed of when beyond economical repair
		DR 11 ..	F.O.I.C. E.A.	Declare for disposal
		DR 12 ..	F.O.I.C. E.A.	Declare for disposal
		DR 13 ..	F.O.I.C. E.A.	To be disposed of when beyond economical repair
		DR 14 ..	F.O.I.C. E.A.	To be disposed of when beyond economical repair
		DR 653..	F.O.I.C. E.A.	To be disposed of when beyond economical repair
		AM 1718	F.O.I.C. E.A.	Declare for disposal
—	Motor Whaler 1 *ex* USN.	1138 ..	F.O.I.C. E.A.	
1940	Australian Work Boats, 40-ft.	AWB 403	N.O.I.C. S.A.	
		AWB 404	F.O.I.C. E.A.	
		AWB 405	F.O.I.C. E.A.	
		AWB 407	F.O.I.C. E.A.	
		AWB 409	N.O.I.C. New Guinea	
		AWB 411	N.O.I.C. W.A.	
		AWB 412	C.S.T. F.N.D.	
		AWB 413	N.O.I.C. W.A.	
		AWB 416	F.O.I.C. E.A.	
		AWB 417	F.O.I.C. E.A.	
		AWB 418	F.O.I.C. E.A.	
		AWB 419	F.O.I.C. E.A.	
		AWB 420	F.O.I.C. E.A.	
		AWB 421	F.O.I.C. E.A.	
		AWB 422	F.O.I.C. E.A.	
		AWB 423	N.O.I.C. Tas.	
		AWB 424	F.O.I.C. E.A.	
		AWB 425	F.O.I.C. E.A.	
		AWB 426	N.O.I.C. Vic.	
		AWB 427	F.O.I.C. E.A.	

APPENDIX—*continued.*

A.B.C. Class Reference	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1940	Australian Work Boat, 40-ft.—*contd.*	AWB 428	N.O.I.C. Vic.	
		AWB 430	F.O.I.C. E.A.	
		AWB 431	N.O.I.C. Qld.	
		AWB 432	N.O.I.C. Qld.	
		AWB 433	F.O.I.C. E.A.	
		AWB 434	C.S.T. F.N.D.	
		AWB 435	C.S.T. F.N.D.	
		AWB 436	F.O.I.C. E.A.	
		AWB 437	N.O.I.C. Vic.	
		AWB 438	F.O.I.C. E.A.	
		AWB 439	F.O.I.C. E.A.	
		AWB 440	F.O.I.C. E.A.	
		AWB 441	F.O.I.C. E.A.	
		AWB 442	F.O.I.C. E.A.	
		AWB 443	N.O.I.C. N.A.	
		AWB 444	F.O.I.C. E.A.	
		AWB 445	N.O.I.C. Vic.	
		AM 1658	F.O.I.C. E.A.	
		AM 1873	F.O.I.C. E.A.	
		AM 2008	F.O.I.C. E.A.	
		AM 2009	F.O.I.C. E.A.	
	Work Boat, 26-ft. (G.R.P. Hull)	WB 2601	F.O.I.C. E.A.	
1940	Motor Survey Boat, 34-ft.	328	Warrego	
		329	R.N.Z.N.	
		380	F.O.I.C. E.A.	
		381	F.O.I.C. E.A.	
		1393	F.O.I.C. E.A.	
1940	Motor Cutter, 32-ft.	158	F.O.I.C. E.A.	
		271	C.S.T. F.N.D.	
		5338	Melbourne	
		5376	Melbourne	
		5377	Melbourne	
		441458	F.O.I.C. E.A.	
		441459	F.O.I.C. E.A.	
		44893	F.O.I.C. E.A.	
1940	Motor Cutter, 25-ft.	602	Queenborough	
		603	Gascoyne	
		604	Vendetta	
		605	Vendetta	
		606	Voyager	
		607	Voyager	
		809	Quiberon	
		810	Queenborough	
		811	Anzac	

APPENDIX—*continued.*

A.B.C. Class Reference.	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1940	Motor Cutter, 25-ft. —*continued.*	812	Quickmatch	
		813	Quiberon	
		814	F.O.I.C. E.A.	
		818	R.N.Z.N.	
		819	F.O.I.C. E.A.	
		820	F.O.I.C. E.A.	
		821	F.O.I.C. E.A.	
		822	Diamantina	
		830	F.O.I.C. E.A.	
		831	Warrego	
		833	F.O.I.C. E.A.	
		834	Paluma	
		836	Vampire	
		837	Vampire	
		1146	F.O.I.C. E.A.	
		1147	F.O.I.C. E.A.	
		1148	F.O.I.C. E.A.	
		1149	Quickmatch	
		1150	F.O.I.C. E.A.	
		1203	Tobruk	
		1204	Tobruk	
		1385	Swan	
		1387	Anzac	
		1394	F.O.I.C. E.A.	
		1395	Swan	
		431144	N.O.I.C. W.A.	
—	Motor Dinghy, 14-ft.	183	F.O.I.C. E.A.	
1940	Motor Dinghy, 16-ft.	255	F.O.I.C. E.A.	
		311	F.O.I.C. E.A.	
		312	F.O.I.C. E.A.	Hull only
1940	Motor Dinghy, 17-ft. 6-in.	114	F.O.I.C. E.A.	
		115	Koala	
		128	F.O.I.C. E.A.	
		129	F.O.I.C. E.A.	
		130	Kimbla	
		131	F.O.I.C. E.A.	
		199	F.O.I.C. E.A.	
		200	F.O.I.C. E.A.	
		201	F.O.I.C. E.A.	
		202	Wagga	
		307	F.O.I.C. E.A.	Hull only
		342	F.O.I.C. E.A.	
		343	R.N.Z.N.	
		347	F.O.I.C. E.A.	
		493	Warreen	

APPENDIX—*continued.*

A.B.C. Class Reference	Type.	Registered No. of Individual Craft.	Authority to whom allocated.	Remarks.
1940	Motor Dinghy, 17-ft. 6-in.—*continued.*	663	F.O.I.C. E.A.	
		668	F.O.I.C. E.A.	
		677	F.O.I.C. E.A.	Declare for disposal
		678	F.O.I.C. E.A.	
		679	F.O.I.C. E.A.	
		686	F.O.I.C. E.A.	
		794	F.O.I.C. E.A.	
		796	F.O.I.C. E.A.	
		799	F.O.I.C. E.A.	
		803	F.O.I.C. E.A.	
		804	F.O.I.C. E.A.	
		808	Woomera	
		1117	F.O.I.C. E.A.	
		1118	N.O.I.C. W.A.	
1940	Boom Working Boat 17-ft. 4-in.	155	F.O.I.C. E.A.	
		257	Koala	
		293	F.O.I.C. E.A.	
		376	Kangaroo	
1940	Fast Motor Boat, 35-ft.	207	F.O.C.A.F.	
		250	F.O.I.C. E.A.	
1940	Fast Motor Boat, 30-ft.	251	F.O.I.C. E.A.	
		8001	Melbourne	
		44413	F.O.I.C. E.A.	
		45802	F.O.I.C. E.A.	
		45805	Melbourne	
		45810	F.O.I.C. E.A.	
		45811	F.O.I.C. E.A.	
1940	Fast Motor Boat, 25-ft.	206	F.O.I.C. E.A.	All 25-ft. Fast Motor Boats are to be disposed of as they become uneconomical to maintain and operate
		313	F.O.I.C. E.A.	
		314	F.O.I.C. E.A.	
		316	F.O.I.C. E.A.	
		317	F.O.I.C. E.A.	
		427	F.O.I.C. E.A.	
		587	F.O.I.C. E.A.	
		588	F.O.I.C. E.A.	
		1201	F.O.I.C. E.A.	
1940	Miscellaneous Motor Boats	168	F.O.I.C. E.A.	
		171	F.O.I.C. E.A.	
		172	F.O.I.C. E.A.	
		179	N.O.I.C. W.A.	Declare for disposal
		203	F.O.I.C. E.A.	
		266	F.O.I.C. E.A.	
		296	F.O.I.C. E.A.	

APPENDIX—*continued.*

A.B.C. Class Reference.	Type.	Registered No. of Individual Craft.	Authority to whom allocated.	Remarks.
1940	Miscellaneous Motor Boats—*continued.*	373	F.O.I.C. E.A.	
		585	F.O.I.C. E.A.	
		586	F.O.I.C. E.A.	
		1310	N.O.I.C. New Guinea	
1930	Aircraft Lighter	ACL 301	F.O.I.C. E.A.	Declare for disposal
		ACL 302	F.O.I.C. E.A.	
		ACL 303	F.O.I.C. E.A.	
		ACL 304	F.O.I.C. E.A.	Declare for disposal
1930	Harbour Sullage Lighter	HSL 541	F.O.I.C. E.A.	
		HSL 542	F.O.I.C. E.A.	
		HSL 543	F.O.I.C. E.A.	
		HSL 544	F.O.I.C. E.A.	
		HSL 546	F.O.I.C. E.A.	
		HSL 584	F.O.I.C. E.A.	
		HSL 771	F.O.I.C. E.A.	
1930	Dumb Lighter for Mooring	DPL 3	F.O.I.C. E.A.	
1930	Flat Top Lighter	FTL 601	F.O.I.C. E.A.	
		FTL 603	F.O.I.C. E.A.	
		FTL 604	F.O.I.C. E.A.	
		FTL 605	F.O.I.C. E.A.	
		FTL 607	F.O.I.C. E.A.	
		FTL 608	F.O.I.C. E.A.	
		FTL 610	F.O.I.C. E.A.	
		FTL 615	F.O.I.C. E.A.	
		FTL 616	F.O.I.C. E.A.	
		FTL 764	F.O.I.C. E.A.	
		FTL 765	F.O.I.C. E.A.	
1930	Tobruk Lighter	AB 1325	N.O.I.C. Qld.	
1930	Boom Net Punt	1234	N.O.I.C. Qld.	
1930	Oil Fuel Lighter	OFL 1201	F.O.I.C. E.A.	
		OFL 1202	F.O.I.C. E.A.	
		OFL 1203	G.M.W.D.	
		OFL 1204	F.O.I.C. E.A.	
		OFL 1205	F.O.I.C. E.A.	
		OFL 1206	N.O.I.C. N.A.	
		OFL 1207	N.O.I.C. New Guinea	
		OFL 1208	F.O.I.C. E.A.	

APPENDIX—*continued.*

A.B.C. Class Reference	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1930	Oil Fuel Lighter ..	OFL(S)–1 OFL(S)–2 OFL –4	N.O.I.C. W.A. F.O.I.C. E.A. F.O.I.C. E.A.	(S) Denotes fitted with separation equipment
—	Aviation Fuel Lighter	AFL 501	F.O.I.C. E.A.	
1930	Distillate Lighter ..	DL 1 ..	F.O.I.C. E.A.	
1930	Steel Ammunition Lighter, 30 tons	SAL 3 ..	F.O.I.C. E.A.	
1930	Concrete Ammunition Lighter	CAL 501 CAL 502 CAL 503 CAL 504 CAL 506 CAL 508 CAL 101 CAL 102 CAL 201 CAL 202 CAL 203 CAL 204 CAL 205 CAL 206 CAL 208 CAL 209	F.O.I.C. E.A. N.O.I.C. New Guinea F.O.I.C. E.A. F.O.I.C. E.A. N.O.I.C. New Guinea F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A.	50 tons 100 tons 200 tons
1930	Steel Phillipine Lighter	SPL 101 SPL 102 AB 1302 AB 1303 AB 1283 AB 2262 AB 2263	N.O.I.C. Vic. N.O.I.C. Vic. F.O.I.C. E.A. N.O.I.C. Vic. F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A.	100 tons 300 tons
1930	Steel Barge (Ship Shaped)	SB 592 .. SB 693 ..	F.O.I.C. E.A. F.O.I.C. E.A.	30 tons
1930	Sectional Steel Lighter 100 tons	SSL 562	N.O.I.C. Vic.	
1930	Lock-up Lighter ..	LUL 501 LUL 507	F.O.I.C. E.A. F.O.I.C. E.A.	

APPENDIX—*continued.*

A.B.C. Class Reference.	*Type.*	*Registered No. of Individual Craft.*	*Authority to whom allocated.*	*Remarks.*
1930	Steel Lighter ..	SL 1 .. SL 2 ..	F.O.I.C. E.A. F.O.I.C. E.A.	
1930	Well Lighter ..	WL 277..	F.O.I.C. E.A.	
1935	Self Propelled Derrick Lighter	SPDL 1..	F.O.I.C. E.A.	
1935	Diving Barge ..	DB 3 ..	F.O.I.C. E.A.	
1935	Deperming Lighter ..	DGL 1 .. DGL 2 ..	F.O.I.C. E.A. N.O.I.C. W.A.	
1935	Battle Practice Target	BPT 1 .. BPT 2 ..	F.O.I.C. E.A. F.O.I.C. E.A.	
—	High Speed Surface Targets	HST 101 HST 102	F.O.I.C. E.A. F.O.I.C. E.A.	
1945	Flat Top Lighter ..	FTL 260 FTL 262 FTL 1388	F.O.I.C. E.A. F.O.I.C. E.A. F.O.I.C. E.A.	

(DNC 1275/251/6.)

(*Navy Order* 38 *of* 1959.)

UNCLASSIFIED.

253.—Road Safety—Personnel on the March.

(*A.F.O.* 105/1960.)

When personnel are marching on roads in formed bodies, look-out men are to be posted at a suitable distance in front and rear and in line with the outer file, to warn motorists.

2. In daylight the warning is to be by hand signals or the display of a notice. At or after dusk, the look-out man in front is to carry a white lamp and the look-out man in the rear a red lamp.

3. Traffic signals are to be observed by marching formations in the same way as by other road users. Marching formations are to keep to the left side of the road.

4. These are the minimum precautions which should be taken.

(HPB 177/1/5.)

Safety Precautions – Land ?

Section 2.

PERSONNEL.

UNCLASSIFIED.

254.—Conditions of Service in H.M.A.S. TARANGAU.

It is the policy of the Naval Board that the Ship's Company of H.M.A.S. TARANGAU shall, subject to the requirements of the service, be comprised of volunteers.

2. The present requirement is—

Officers (accompanied)	13
Ratings (accompanied)	37
Ratings (unaccompanied)	20

3. Unaccompanied ratings will be required to serve only one year at TARANGAU.

4. Furnished Married Quarters are available for all accompanied personnel who will be required to serve in the area for two years.

5. A member volunteering for accompanied service must, at the time of application, present a signed assurance from his wife that she is prepared to go to TARANGAU with him and sign a statement himself that to the best of his knowledge each member of his family whom he proposes to take with him is physically fit for such transfer, having regard to the climate and the limited medical facilities available.

6. A welfare report may be called for in cases where previous compassionate history suggests either that a man's proposal to take his family to TARANGAU or a married member's offer of unaccompanied service may cause difficulties likely to affect his service.

7. If Service requirements necessitate the appointment or draft of a member who is not a volunteer he will be required to serve only one year if he does not wish to take his wife and family. If granted a removal, which will be dependent on the statement required in paragraph 5 above, he will be required to serve two years. If, for medical reasons it is not possible to transfer his wife and family, he will be required to serve only one year.

8. Return removals from the New Guinea area will not, except for approved compassionate reasons be granted before the member has completed his period of service in the area, unless he is appointed or drafted from the area otherwise than at his own request.

9. When a member's family leaves the area before completion of his period of service in the area, a draft not having been approved, a return removal will not normally be granted except as indicated in paragraph 8 above. The member will be required, subject to the exigencies of the service, to complete his period of service in the area.

10. As all service residences in the New Guinea area are fully furnished, privately-owned refrigerators and other furniture included in the approved scale of furniture for service residences in that area will not be transported to that area at the expense of the department.

11. Supplementary items which are not included in the approved scale of furniture for service residences in the New Guinea area, e.g., radios, prams, sewing machines, lawn mowers, vacuum cleaners, floor polishers, &c., will be transported at the expense of the Department. *See* Navy Order 1054 of 1959.

12. The position regarding waiver of percentage charges on furniture, &c., in tropical married quarters is shown in Navy Orders 571 of 1959 and 830 of 1959. *See also* Navy Order 1054 of 1959.

13. Provision for leave travel to Goroka during service at TARANGAU is set out in Navy Order 404 of 1959.

14. I.P.I. 231/29, paragraph 11, defines the policy regarding private motor vehicles at TARANGAU.

15. These conditions should be brought to the attention of all officers and ratings. Names of volunteers for service at H.M.A.S. TARANGAU should be forwarded in accordance with Navy Order 229 of 1959, paragraph 11. Volunteers should state whether they wish to be considered for accompanied or unaccompanied drafting.

16. I.P.I. Article 231/5 is to be annotated " This article refers only to Darwin Area *vide* Navy Order 254 of 1960 ".

17. I.P.I. will be amended in due course.

(HPB 302/2/1.)

(*Navy Orders* 229, 404, 571, 830 *and* 1054 *of* 1959 *and* 254 *of* 1960.)

UNCLASSIFIED.

255.—Medical, Hospital and Dental Treatment for Families of United Kingdom Personnel in Australia.

The National Health Service applies only to the United Kingdom and makes no provision for treatment abroad. In Australia arrangements are, however, made to provide so far as practicable, for the persons specified in the following paragraphs, medical and dental treatment and benefits equivalent to the benefits provided free of charge under the National Health Service in the United Kingdom. In this order the Medical Director-General is the Medical Director-General of the Royal Australian Navy.

2. *Naval Families.*—The following members of the families of serving officers, ratings and other ranks of the Royal Navy are eligible to benefit, provided they have proceeded to Australia under officially approved arrangements, or if their presence on the Australia station has been approved—

(*a*) Wives.

(*b*) Children under eighteen years of age. Children who reach the age of eighteen while abroad cease to be entitled to free treatment unless they are physically or mentally incapacitated or unless the treatment had been started but not completed before they reach the age of eighteen

(*c*) Children of eighteen years of age if they have been granted a free passage after reaching that age.

(*d*) Domestic servants, children's nurses or governesses who are of British nationality, were engaged in the United Kingdom and have been granted a free passage from the United Kingdom to the station abroad.

(*e*) School children granted, under the approved scheme, a free passage from the United Kingdom to visit Service parents overseas will be eligible to receive urgent medical treatment and emergency dental treatment at

public expense during their visit (including voyage periods), but routine and non-emergency treatment at public expense is to have prior Admiralty authority.

Members of families who elect to remain in Australia after the husband has left it cease to be eligible for medical treatment under these arrangements. **It is emphasized that there is no entitlement to free medical, hospital and dental services overseas if, not being entitled to a free passage, a serving officer, rating or other rank takes his family abroad privately. He will, in this case, be responsible for his family's medical, &c., expenses.**

3. *Civilian Staff and their Families.*—The following are entitled—

(*a*) United Kingdom based non-industrial and industrial staff.

(*b*) The following members of households of United Kingdom based staff provided they were granted passage to the station at Admiralty expense and that they continue to live as members of the household (children away during term time undergoing full time instruction at educational establishments under official arrangements being regarded as fulfilling this condition)—

(i) Wives. (A wife married abroad for whom passage was not provided may be included if her husband is, with Admiralty approval, in receipt of the married accompanied rate of F.S.A.).

(ii) Daughters—so long as they remain unmarried.

(iii) Sons up to the age of sixteen years (eighteen years if they are continuing full-time education or serving as Dockyard apprentices) and thereafter to the end of the father's normal three year tour of duty in which they reach that age; and other sons if they are incapacitated by mental or physical infirmity from earning their own living.

(iv) Domestic servants and children's nurses of British nationality.

Members of households who elect to remain abroad after the husband or father has returned to the United Kingdom cease to be eligible for treatment under these arrangements.

4. *Benefits Covered.*—The benefits covered include—

Medical, including hospital and maternity treatment;

Dental treatment;

Optical treatment;

and the supply of necessary appliances. Treatment and appliances will conform as closely as possible to the standards of the National Health Service; charges for certain appliances will be made at National Health Service rates as laid down hereunder. **Treatment, appliances or accommodation in excess of National Health Service standards are the patient's own liability and will not be provided at public expense.**

5. *Arrangements for Treatment.*—Individuals will make their own arrangements for necessary treatment on the most reasonable terms available and forward a claim for refund through normal channels. Expenses so incurred will be refunded provided the proper authority is satisfied—

(*a*) that the treatment was necessary;

(*b*) that the arrangements made conform as far as possible to the standards laid down in paragraph 4 above, and that they were made on the most reasonable terms available.

Refunds for hospital treatment will be limited to the cost of treatment in a general ward unless no such accommodation was available or unless private accommodation was necessary for medical reasons.

6. *Conditions of Reimbursement.*—The following are the conditions under which reimbursement will be effected of medical, ophthalmic and dental expenses incurred by the dependants of Royal Navy presonnel serving in Australia and Admiralty civilian officers on loan to the Commonwealth Naval Board, and their families. Claims for refund of medical, dental and hospital expenses are to be rendered direct to the Medical Director-General, Department of the Navy, Victoria Barracks, Melbourne, marked " Confidential ", and in addition to receipts, &c., are to include the following information in a separate statement—

(*a*) *Doctor's and Hospital Accounts:*

Diagnosis.
Nature of any operation.
Number of visits and/or consultations by doctor.
Dates of treatment in hospital.

(*b*) *Dentist's Accounts:*

Itemized statement of work done. *Also see* notes at bottom of paragraph 14.

(*c*) *Chemist's Accounts:*

Itemized statement of account.

(*d*) Dates of birth of children.

(*e*) The name of ship or establishment where the claimant is serving and if he is scheduled to return to the United Kingdom within 30 days from date of lodging claim.

7. *Treatment by Medical Practitioners.*—Where it is necessary to seek treatment, &c., by medical practitioners, the services of a general medical practitioner are to be availed of in the first instance. All reasonable expenses in respect of treatment, &c., by general medical practitioners will be reimbursed.

8. *Treatment by Specialists and Consultants.*—Reimbursement of specialist or consultant charges will be made only when treatment by a specialist or consultant is considered necessary by a general medical practitioner. In such cases the member is to forward with his claim to the Medical Director-General, a certificate from the medical practitioner in charge of the case, indicating that such treatment was considered necessary. Where a specialist or consultant has been consulted in the first instance, reimbursement will be effected at the rates charged by general medical practitioners.

9. *Hospital Accommodation.*—Hospital benefits allowable under the United Kingdom National Health Service are limited in the United Kingdom to accommodation and treatment in the general ward of a hospital, and no distinction is made in the standard of treatment or accommodation according to the status of the civilian officer, rank or rating of the member whose dependants are concerned. In Australia hospital accommodation will be reimbursed to the maximum extent of 63s. 7d. per day, inclusive of all hospital charges, plus the cost of special laboratory and X-ray examinations. The daily rate allowed will be reviewed annually.

10. *Obstetrical Treatment.*—

(*a*) Fees in respect of hospital treatment of obstetrical cases will be as defined in paragraph 9 hereof.

(*b*) A maximum refund of £15 15s. in respect of pre-natal and post-natal care and confinement will be allowed in respect of fees paid to a general medical practitioner. In addition a maximum fee of £2 2s. will be allowed for circumcision.

(*c*) In the event of complications arising, the conditions of paragraph 8 will apply.

11. *Pharmaceutical Supplies.*—Reimbursement of pharmaceutical expenses will be limited to the cost of doctors' prescriptions and maternity kits, which mothers are required to provide before admission to certain maternity hospitals. Items such as baby foods and orange juice are not allowable under the provisions of the United Kingdom National Health Service.

12. *Optical Benefits.*—Contributions, as set out hereunder, are required towards the cost of spectacles—

	s.	*d.*
Frames	12	3
Lenses (per pair)	25	0

Note: No contribution towards the cost of spectacles is payable in respect of children up to and including fifteen years of age—

(i) Reimbursement of the cost of spectacles to the maximum extent of £4 10s. less the contribution required, will be allowed in addition to a maximum fee of £3 3s. payable to an ophthalmologist in respect of examination and prescription for spectacles.

(ii) The cost of two pairs of spectacles (i.e., maximum of £9), less contributions required, will be refunded provided a certificate is produced from an ophthalmologist or optician certifying the necessity for two pairs of spectacles.

(iii) Where an ophthalmologist or optician certifies as to the necessity for bifocal spectacles, a maximum amount of £3 3s. will be allowed, additional to the amounts allowed in clause (i) of this paragraph.

13. *Surgical and Orthopaedic Appliances.*—The following contributions are required towards the cost of surgical appliances—

Appliances—	£	*s.*	*d.*
Surgical boots, or shoes, per pair (including fellow if any) ..	3	15	0
Surgical abdominal supports, each	1	5	0
Elastic hosiery: Anklets, kneecaps, leggings, thigh pieces, each	0	6	3
Stockings, knee stockings, thigh stockings, knee leggings, thigh kneecaps, each	0	12	6
Wigs, any type, each	3	2	6

Repairs—	*Men.* *s.*	*d.*	*Women.* *s.*	*d.*
Surgical boots or shoes, per pair (including fellow if any)—				
Soling	10	0	7	6
Heeling	3	1	1	10
Soling and heeling	13	1	9	4
Long soling, including heeling ..	16	10	16	10

All reasonable expenses incurred in connexion with the supply, maintenance and renewal of surgical and orthopaedic appliances will be reimbursed, less the contribution required, subject to the production of a medical certificate authorizing the need thereof.

14. *Dental.*—Dental expenses will be reimbursed in accordance with the scale as shown in the Appendix to this order.

APPENDIX.

Items.	*Rates.*
1. (*a*) Attendance conducting dental examination for appointment to or enlistment in the Permanent Forces, or on duty at dental post	£2 10s. for each attendance of up to 1¼ hours, plus an additional 15s. for each half hour or part thereof in excess of those 1¼ hours.
(*b*) Dental examination (including documentation) of candidates for appointment to or enlistment in the Permanent Forces, when the examination cannot be carried out at a Service Dental Post and has to be conducted at the practitioner's surgery	£ *s.* *d.* 1 candidate .. .. 1 1 0 2 candidates .. .. 1 11 6 3 candidates .. .. 2 2 0 Where more than 3 candidates are to be examined, fee to be payable on a sessional basis as in Item 1 (*a*)
2. *Extractions*—	
(*a*) With local anaesthetic ..	15s. for first tooth, 5s. for each additional tooth.
(*b*) Multiple extraction under general anaesthetic	Minimum £2 2s.; maximum £3 3s.
3. *Fillings*—	
(*a*) Amalgam	£1 5s. if involving one surface.
Synthetic porcelain	£1 11s. 6d. if involving two surfaces.
Acrylic	£1 17s. 6d. if involving three surfaces.
(*b*) Base metal or acrylic inlays ..	Minimum £2 2s.; maximum £3 3s.
(*c*) Gold inlays	As for base metal inlays, plus the cost of metal, which is to be met by the member.
(*d*) Root fillings	*See* Item 11.
4. *Treatment of Infections, &c.*—	
(*a*) Prophylaxis	£1 1s. limited to one visit (simple prophylaxis)
(*b*) Gingivectomy	To be carried out by a specialist and subject to the prior approval of the Medical Director-General or his authorized representative. Maximum fee £15 15s.
(*c*) Gingival infections	£1 1s. per visit, with a maximum fee of £4 4s. for whole treatment.
5. *Operations*—	
(*a*) Minor oral operations ..	To be carried out by a specialist, and subject to the prior approval of the Medical Director-General or his authorized representative Fee £3 3s. to £5 5s.

APPENDIX—*continued.*

Items.	*Rates.*
(*b*) Major oral operations ..	To be fixed by prior negotiation and subject to the prior approval of the Medical Director-General or his authorized representative.
6. *Dentures*—	£ *s.* *d.*
(*a*) Full upper or lower.. ..	15 15 0
(*b*) Full upper and lower ..	28 7 0
(*c*) Partial dentures—	
For one or two teeth ..	6 6 0
For each additional tooth beyond two teeth or each additional clasp beyond two clasps	1 1 0
7. *Repairs to Dentures*—	£ *s.* *d.*
(*a*) Ordinary fracture or replacement of tooth	1 11 6
(*b*) Addition of new tooth or clasp	2 2 0
(*c*) Relining (processed) upper or lower	5 5 0
(*d*) Relining (cold cure).. ..	2 12 6
8. *Crowns and bridgework*	To be done only if prior approval regarding work and fee is given by the Medical Director-General or his authorized representative.
9. *X-rays*—	£ *s.* *d.*
(*a*) X-ray and, where required, a written report—	
Up to 2 films	1 1 0
Each additional film ..	0 7 6
(*b*) Full mouth (14 films) ..	5 5 0
	Prior approval of the Medical Director-General or his authorized representative is to be obtained for more than 2 films.
10. *Sedative Dressings*—	
Emergency treatment for relief of pain or control of haemorrhage	10s. 6d. (which charge is to be included in the fee for complete restoration if carried out by the same dentist).
11. *Root Fillings*—	
(*a*) Removal of pulp and root filling	£2 2s. per tooth (limited to 10 anterior teeth).
(*b*) Treatment of putrescent pulp and root filling	£3 3s. per tooth (limited to 10 anterior teeth).

APPENDIX—*continued.*

Items.	*Rates.*
	£ *s.* *d.*
12. Consultation and examination fee and submission of report	1 1 0
13. *Anaesthetist's Fee*—	£ *s.* *d.*
(*a*) Open inhalation anaesthesia ..	2 2 0
(*b*) Closed inhalation or intravenous anaesthesia ..	3 3 0

Notes:

(i) With regard to fillings (item 3a) reimbursement of the amounts greater than £1 5s. will only be made if the dental practitioner certifies that two or three surfaces were involved.

(ii) With regard to fillings (item 3c) reasonable additional fees incurred in connection with the use of precious metals will be reimbursed only where a certificate is furnished by the dental practitioner to the effect that the use of such precious metals was necessary and no other material was suitable.

(iii) Prior approval for supply of metal dentures and orthodontic treatment is to be obtained from the Medical Director-General.

15. Contributions are required towards the cost of dentures and are as follows—

Description of Denture.	*Amount.* £ *s.* *d.*
1, 2 or 3 teeth	2 10 0
4 to 8 teeth	2 16 3
More than 8 teeth	3 2 6
Full upper and lower denture	5 6 3
No charge to exceed	5 6 3

(MDG 271/51/5.)

UNCLASSIFIED.

256.—Officers' Messes—Accounting.

A uniform system of accounting in officers' messes was introduced in 1958 and is now in use in all ships and establishments of the R.A.N.

2. This system is designed to be as elastic as possible and towards this end only such forms as provide a uniform basis of accounting are compulsory, whilst a number of other forms are printed for optional use. The former include a Cash Book, Creditors Ledger, Wine Books, Marketing Book, and Mess Bills Book, whilst in the latter category are such forms as the Mess Meals Book, Extras Book, Stock Record and Summary of Stock. The optional forms required vary according to the size of the mess, and the use of such forms may be a matter for comment and recommendations by auditing officers.

3. The following instructions are promulgated for the guidance of all officers concerned—

Duties of Office Bearers.

4. It is necessary to define the duties of the various office bearers in order that instructions for keeping accounts may be followed. These duties are set out below.

Mess Treasurer.

5. The Mess Treasurer is to control and account for all Wardroom funds and keep all accounts with tradespeople. He is responsible for the compilation and collection of mess bills and for the payment of all accounts. The various Caterers are responsible to the Treasurer for the prompt rendering of information required by him.

6. The Treasurer may, if necessary, make sub-advances to Mess Caterers for such purposes as making cash purchases, &c.

7. In large messes it may be desirable to appoint an Assistant Treasurer.

The Wine Caterer.

8. The Wine Caterer is responsible for the wardroom's stock of wines and minerals, &c. He is responsible for ascertaining the correctness of wine accounts and for passing the accounts to the Treasurer for payment. He is responsible for the compilation of wine bills and surpluses and for passing the information to the Treasurer.

9. The Treasurer is to have access at all times to the Wine Books and accounts.

The Food Caterer—Tobacco Caterer, &c.

10. These are positions which may or may not be filled according to the size of the mess. Similarly it may be desirable in large messes for additional positions to be created.

11. Responsibility to the Treasurer is similar to that of the Wine Caterer.

12. It is permissible for all office bearers except the Treasurer to combine two or more mess duties.

Books and Accounts.

13. The following is a general outline of books and forms for use in Officers' Mess Accounting:

Cash Book.

14. Form A.S. 2100Z is to be kept by the Mess Treasurer who is required to enter every cash and banking transaction (including cash purchases) in it.

15. The " receipts " side of the Cash Book has two money columns, viz.: " Cash " and " Bank ". There is no need for receipts to be itemized further.

16. The " expenditure " side of the Cash Book has sufficient columns to allow payments to be itemized. Sub-allowances to Caterers are not to be treated as expenditure but cash disbursed by caterers from these advances are to be brought to account in the Cash Book.

17. As both sides of the Cash Book has " Bank " columns, there is no need to keep a separate book for banking transactions. When banking a sum of money the only accounting action necessary is an entry in the " Cash " column on the expenditure side and an entry in the " bank " column on the receipt side. The state of the mess bank account can be readily determined by totalling the " bank " columns and the cash balance by totalling the cash columns.

Creditors' Ledger.

18. Form A.S. 482 is to be kept by the Treasurer for the purpose of ensuring that accurate accounts are kept with firms with whom the mess deals. All accounts are to be passed to the Treasurer on receipt. The Treasurer is then to enter the

account in the ledger and return the account to the caterer concerned for certification. After certifying the account as being correct, and noting it in his own book, the caterer is to return it to the Treasurer for retention for audit purposes, and the Treasurer is to note the fact that the account has been certified against the entry in the ledger.

19. Cash purchases are not to be entered in the ledger, but directly in the Cash Book.

Mess Bills.

20. These are to be compiled by the Treasurer by entering the charges communicated by the Caterers.

21. While the actual form of mess bill is left to individual messes, form A.S. 2101Z is to be used by the Treasurer for the purpose of maintaining a record of bills. The total of the payment column of this book is to be carried to the receipts side of the Cash Book, any unpaid amounts being carried forward to the next period in the Mess Bill Book.

Wine Books.

22. The following revised forms will be available shortly for the purpose of accounting for wines:—

A.S. 254—Wine Chit.
A.S. 252—Daily Record of Wine Consumption.
A.S. 252a—Officers' Wine Account.
A.S. 253—Wine and Minerals Stock Sheet.
A.S. 253a—Stock Account Record.
A.S. 253b—Calculation of Surplus.
A.S. 2101y—Caterers Monthly Account Sheet.

Form A.S. 252 will be available in two sizes for small and large messes.

23. The following method of wine accounting is to be adopted on receipt of the revised forms—

Wine Chit—Form A.S. 254.

24. To be completed by the officer showing type of drink, quantity, Mess Number and signature. Forms A.S. 254 is optional in small messes.

Daily Record of Wine Consumption—Form A.S. 252.

25. Before commencement of business, wine chits for the previous day are to be extracted on to this form. In such messes where wine chits are not used, drinks are to be entered direct on to this sheet as they are poured. Each Sheet is to be costed separately for wines, &c., and minerals and subsequently proved. The following information is then available—

(*a*) individual consumption for the day, for both wines and minerals;
(*b*) total consumption for the day;
(*c*) total value of wines/minerals consumed for the day;

the Wardroom Wine Bar may then be checked for any discrepancies.

Officers' Wine Account—Form A.S. 252*a*.

26. Individual consumption and cost are then transferred to this form which is to be totalled weekly and proved against the weekly total of stock consumed, A.S. 253. Form A.S. 252a is to be perused by the Captain weekly.

Wine and Minerals Stock Sheet—Form A.S. 253.

27. The daily totals of stock consumed are transferred to this form from A.S. 252, together with the daily value of stock consumed. The weekly value of stock consumed is to be proved against the weekly totals of the officers' wine accounts—Form A.S. 252a. Breakages, ullages, &c., are also to be recorded on this form. The monthly total will provide the following information:—

(*a*) Consumption for the month—to be recorded in the Stock Record Form A.S. 253a.

(*b*) Total value of consumption for the month—to be proved against the monthly total of officers' wine accounts—Form A.S. 252a.

Stock Account Record—Form A.S. 253*a*.

28. Monthly totals of stock consumed/openings are transcribed to this form from Stock Account Form A.S. 253. All receipts and occasional supplies to other ships, &c., are also to be recorded as they occur, providing a continuous record of stock of individual items. This record will be easily verified from the Gangway Wine and Spirit Book.

Calculation of Surplus Sheet—Form A.S. 253*b*.

29. This record provides a record of officers' personal accounts (without mess share) for periods up to a year, for the calculating of surplus to be paid.

Caterers Monthly Account Sheet—Form A.S. 2101*y*.

30. This form is to be used by all caterers for the purpose of informing the Treasurer of charges to be made against individual members of the mess for the month and the total value to be credited to the account concerned.

Marketing Book.

31. This book is to be kept by the Food Caterer for the purpose of recording purchases of foodstuffs with a view to their eventual charge against members of the mess.

32. The book is to contain separate columns to record cash purchases and those obtained on credit from firms.

33. It should be noted that payments to or from the Supply Officer in respect of mess credits or debits are to be handled direct by the Treasurer, who is, however, to inform the Caterer of the amounts involved for the purpose of assessing messing charges to members.

34. The following books are available for optional use by Food Caterers—

(*a*) Mess Meals Book—an adaption of Admiralty Form S.481.

(*b*) Extra Book—an adaption of Admiralty Form S.483.

35. Wine and Minerals Stock Sheet Form A.S. 253 and Stock Account Record Form A.S. 253a may be adapted for use by all Caterers.

Auditing.

36. Mess accounts are to be considered as one unit and a single team of auditors provided. It will be necessary for a larger auditing team in some messes in order that the task is not unduly prolonged.

37. Attention is drawn to Navy Order 6 of 1959.

(DGS 201/51/3.)

(*Navy Order* 6 *of* 1959.)

Section 3.

HULL, MACHINERY EQUIPMENT AND STORES.

UNCLASSIFIED.

257.—Dangers of Using Test Lamps—Ships with 440V A.C. Main Supply Systems.

(*A.F.O.* 317/1960.)

Two cases of fire in R.N. ships' 440V A.C. main switchboards have been reported. In both cases it was established that the fire was initiated during the use of improvised test lamps.

2. Ships' staff are warned that the use of improvised equipment for testing fuses, &c., in ships fitted with A.C. systems may be dangerous. Commercial type testers are also considered unsuitable as they usually have a low internal resistance some are frequency conscious, and none known meet the safety requirements.

Neon tester A.P. 32206 alone is approved for such testing. This tester has a high internal resistance between the prods, giving a considerable measure of safety in use, and has now been issued to all ships fitted with A.C. supply systems on a scale that should allow one to each general electrical rating.

3. Testers should not be applied across busbars of main switchboards. When it is necessary to test *in situ* whether one of a pair or trio of fuses has blown, the practice of " diagonal " testing should normally be employed, so that one fuse is always in circuit, with the test gear. When it becomes necessary, however, to check fuses connected in the primary side of a three phase transformer, the " across fuse " method of testing should be used in order to avoid misleading results.

4. " Diagonal " testing is the usual description of the method whereby one prod of the tester is connected to a busbar and the other prod is connected to the service terminal of the fuse connected to another busbar. A live indication on the tester indicates that the fuse is sound.

5. " Across fuse " testing is the usual description of the method employed when one prod of the tester is connected to a busbar and the other prod is connected to its service terminal with the fuse removed. A live indication on the tester when one fuse is replaced in one of the lines indicates that the fuse is sound.

6. On main switchboards and similar equipment the live side of each fuse should be indicated on the panel by a red dot (or line) in the case of 440V A.C. and by a black or white dot in the case of 115V A.C. In future ships the live side of sets of fuses will always be at the top, but in earlier equipment there is some variation.

(DEE 177/51/14.)

Safety Precautions — marine ?

RESTRICTED.

258.—Ballistics—Range Tables—Amendments to MV/Wear Data.

(*A.F.O.* 466/1960.)

Amendments to the MV/Wear data shown in Section A, Part I of the Surface and A.A. Range Tables, are in course of issue. The main feature of these amendments is the separation of the component for " sigma " correction, from the figure for expected M.V. In future, " sigma " correction will be shown in a separate column, as a plus or minus correction. This new column is headed " Correction for muzzle wear ".

2. " Sigma " corrections for 4-in. mark 16, 4.5-in., and 5.25-in. naval guns were introduced in Range Table MV/Wear data during 1958, but were not shown separately. However, with the introduction of type 900 Muzzle Velocity Measuring Equipment (M.V.M.E.) for general use, it is necessary to separate out the value of these corrections, so as to ensure an exact basis for comparison between M.V. measured by type 900, and the M.V. expected from measurement at 1 inch c.r.

3. The evolution of " sigma " corrections resulted from a study of Range and Accuracy records of various Naval guns over a number of years. The method adopted was to compare directly the achieved values of $K\sigma$ against the measured M.V.'s of the firings. It was shown that, in worn guns if the ejection conditions deteriorate during barrel life (which they do in the majority of guns), the shell suffers abnormal retardation until yaw is damped out (i.e., the shell suffers a penalty in M.V. for the remainder of its flight).

4. The presentation in Section A, Part I. of the Range Tables has been altered as follows—

1st Column ..	Mean Wear at 1 inch c.r.
2nd Column ..	M.V. expected from wear at 1 inch c.r. *or* measured by type 900 M.V.M.E.
3rd Column ..	Correction for Muzzle Wear (i.e., " sigma " effect).
4th Column ..	Deduction for rounds fired since last wear measurement.

Section A, Part I., should be entered against wear at 1 inch c.r. and the estimated M.V. read from the 2nd Column. Alternatively, the M.V. is derived from calibration by type 900 M.V.M.E. M.V. derived in either of these ways does not take account of the effect of wear of the barrel at the muzzle. For example, type 900 measures M.V. too close to the muzzle for muzzle wear to have any appreciable effect. For convenience, the " sigma " correction is tabulated against wear of the barrel at 1 inch c.r.

5. To summarize, the most accurate method of obtaining M.V. for service use, is now as follows—

(*a*) *If type* 900 *calibration is not available.*—The M.V. expected from the most recent measurement at 1 inch c.r. adjusted in the first place for rounds fired since measurement, and then by the amount of the corresponding " sigma " correction; or

(*b*) *If type* 900 *calibration is available.*—The M.V. derived from the calibration, adjusted by the amount of the corresponding " sigma " correction.

6. It will be noted that the " sigma " correction shown in the Range Tables normally starts with a " plus " correction in a new barrel, passing through zero to a much larger " minus " correction. The reason for this is that $K\sigma$ varies with the state of wear of the gun, and the Range Table is constructed for a part-worn gun. The " sigma " correction is thus Zero for Range Table conditions; it is therefore " plus " in a new barrel.

7. On receipt of new MV/Wear pages, ships are to conform with these instructions.

8. Admiralty has advised that B.R. 1898(10) will be amended.

(DW 737/52/10.)

UNCLASSIFIED.

259.—Gun Mountings—4.5 Twin R.P. 41 Mountings Marks 6, 6* and 6* Mod. F. Clinometer Planes.

(*a*) *Ships, establishments and authorities concerned*	Ship and establishments so fitted.
(*b*) *Type of equipment* ..	4.5 twin R.P. 41 mountings mk. 6 series.
(*c*) *Part of equipment affected*	Clinometer plane on revolving structure turntable.
(*d*) *Purpose of modification* ..	To provide a more stable face plate for the clinometer plane.
(*e*) *Nature of modification* ..	(*a*) To remove the clinometer plane face plate from the turntable floor and resite it on the upper roller path plate. (*b*) To modify the protective cover and resite it in the new position. (*c*) Plug redundant tapped holes in Gunhouse floor.
(*f*) *Drawings*	N.51450 (A.N.).
(*g*) *By whom to be done* ..	Dockyard.
(*h*) *When to be done*.. ..	At the earliest opportunity.
(*i*) *Modification No*... ..	A.N. 98 for mks. 6 and 6* mountings. A.N. 1 for mk. 6* mod. 1 mountings.

(DW 736/59/9.)

UNCLASSIFIED.

260.—Gun Mountings—4.5 Twin R.P. 41 Marks 6, 6* and 6* Mod. 1 Mountings Zero Securing Gear for Cradle.

(*a*) *Ships, establishments and authorities concerned*	Ships, establishments and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	4.5 twin R.P. 41 mk. 6 series mountings.
(*c*) *Part of equipment affected*	Zero securing gear for cradle.
(*d*) *Purpose of modification* ..	To prevent bending of the struts when supporting the cradle.
(*e*) *Nature of modification* ..	Weld a pad on each strut to form a seating for each end of the existing Run Out Chock (Breast Shore), which is to be fitted between the struts when the latter are bolted in position.
(*f*) *Drawings*	N.46101 item 17. N.36339 Rev.
(*g*) *By whom to be done* ..	Dockyard. As a defect.
(*h*) *When to be done*.. ..	As convenient.
(*i*) *How to be recorded* ..	Mod. A.N. 99 for mks. 6 and 6* mountings. Mod. A.N. 2 for mk. 6* mod. 1 mountings.

(DW 736/259/14.)

UNCLASSIFIED.

261.—Gun Mountings—40-mm. Mark 7 Mountings—Union Nuts for Pipe Work—Modification No. 56.

(*A.F.O.* 2715/1958.)

(*a*) *Ships, establishments and authorities concerned*	Ships and shore establishments in which these mountings are held.
(*b*) *Type and marks of mounting*	40-mm. mark 7.
(*c*) *Part of gun mounting affected*	Hydraulic system, union nuts.
(*d*) *Purpose of modification* ..	To introduce union nuts having improved proportions in the range ¼-in., ⅜-in. and ½-in. B.S.P. sizes.
(*e*) *Nature of modification* ..	To exchange the ¼-in., ⅜-in. and ½-in. B.S.P. union nuts at present fitted, which have been found, in some cases, to be too flimsy to withstand service conditions, by union nuts of better design. *N.B.*—Arrangements are being made by Gunnery Equipment Stores Officer Sydney, for an initial distribution of 6-No. union nuts of each size for each mounting carried. in ships in commission and establishments. Nuts in existing "A" sets will also be replaced. The new pattern nuts need not be fitted until the existing nuts become unserviceable due to fracture or distortion.
(*f*) *Drawing and A.F.O. Diagram*	D.N.O. 11017; Navy Order Diagram Issue 7/60.
(*g*) *By whom to be done* ..	Ship's staff or establishment concerned.
(*h*) *When to be done* ..	As soon as the union nuts at present fitted become defective.
(*i*) *How to be treated* ..	As a defect.

2. *Gunnery Equipment Depots only.*—Stocks and future returns of superseded union nuts are to be brought to produce.

(DW 736/64/8.)

UNCLASSIFIED.

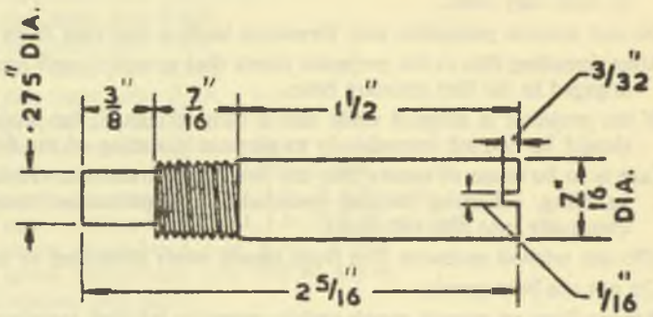
262.—Torpedoes—21-in. Marks 8** and 9** Torpedoes—Gag for Water Non-Return Valve of Valve Group.

(*A.F.O.* 50/1960.)

In order to test the buoyancy chamber in accordance with routine O.11 of the "Instructions for Carrying Out Maintenance Routines" it is necessary to gag the water non-return valve.

2. Ships' or Depot Ships' Staffs are to manufacture the gag as shown in the diagram below—

GAG (WATER NON-RETURN VALVE).
21-INCH MARKS 8** AND 9** TORPEDOES.



Threaded Portion—0.437-in. Dia. 20 T.P.I.

Material—Mild Steel (Group 2 DEF 13A).

3. An amendment to the "Instructions for Carrying Out Maintenance Routines" will be forwarded without demand.

4. Navy Order 994 of 1958 is hereby cancelled.

(DW 712/51/35.)

(*Navy Order* 994 *of* 1958.)

UNCLASSIFIED.

263.—Care of Instructional Films.

It is essential that the attention of all concerned be drawn to the increasing number of films which are being withdrawn from circulation from the R.A.N. Film Library, Sydney, because of avoidable damage. The care of all films must be the operator's first consideration if supplies of films are not to be curtailed. Unless damage to film is detected and remedied, the film is quickly ruined by subsequent showings. Films are expensive costing between £10 and £30 for each 400-ft. reel in black and white and between £25 and £50 for each 400-ft. reel in colour.

2. Strict observance of the following general points will do much to prolong the life of films and reduce the materials and time expended in the cleaning and repair of films returned to the R.A.N. Film Library—

(*a*) Rewind film steadily and safely—it should take at least one minute to wind 400 feet of 16-mm. film. Avoid rapid acceleration and deceleration. Rewind film on a clean tidy bench.

(*b*) Clean the complete film path of the projector before each show.

(*c*) Clean the projector gate before each reel. Particular attention should be given to the light aperture.

(*d*) Maintain and lubricate the projector regularly. Avoid excessive lubrication. Check the projector oil seals to ensure that they do not leak. If leaks are detected the projector should be returned to the appropriate (Superintending) Naval Store Officer for replacement.

(*e*) Keep film away from its biggest enemies—dust, grit, and oil.
(*f*) Handle film by edges only.
(*g*) Keep film away from heat.
(*h*) Do not let film drop on to a floor or deck, no matter how clean the floor or deck may seem.
(*i*) Do not remove protective and threading leaders and tails from films.
(*j*) After threading film in the projector check that sprocket teeth are correctly engaged in the film sprocket holes.
(*k*) If the projector is stopped while film is being screened, the projector gate should be opened immediately to prevent blistering of the film.
(*l*) Care is to be taken to ensure that the film is not creased or crinkled while handling, otherwise broken sprocket holes, permanent creases, and eventually torn film will result.
(*m*) Do not unwind excessive film from spools when threading or rewinding.
(*n*) Do not use bent spools.
(*o*) Return films on correct spools and in correctly labelled containers.

(DNAS 519/56/47.)

264.—(This order will not be issued).

UNCLASSIFIED.

265.—Naval Stores (General)—(Class E, Group 7)—Oil OX (Aust.) 9 Specification SAE70-R1.

Future supplies of Oil OX (Aust.) 9 which supersedes Oil OF.15, in the R.A.N., will be purchased to Specification SAE.70–R1.

2. The Australian Joint Services publication " Handbook of Fuels, Lubricants and Allied Products for Australian Services " will be amended.

3. Navy Order 86 of 1959 is hereby cancelled.

(DNAS 523/51/69.)

(*Navy Order* 86 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

266.—Books—Reprinting of B.R. 1837 Pts. (1) and (2) Vocabulary of N.A. Stores (Gunwharf)—Division " D ".

(*A.F.O.* 209/1960.)

Further to Navy Order 413 of 1959, existing common items pertinent to division " C " and " D " of B.R. 1837, parts 1 and 2, Vocabulary of N.A. Stores (Gunwharf), have been re-numbered in the new AB series, and those given for the guns indicated below are promulgated for advance information.

O.Q.F. 40/60, MARKS 9, 10 , 11 AND N1 SERIES.

Old Number and Item.	*New Number.*
DT 249 ball, anti-friction, 7-mm. or $\frac{9}{32}$-in.	AB 378
DT 273 nut, hex., $\frac{3}{8}$-in. B.S.F.	AB 005
DT 351 nut, hex., lock, $\frac{1}{4}$-in. B.S.F.	AB 109
DT 428 nut, lock, $\frac{3}{8}$-in. B.S.F.	AB 733
DT 533 nut, lock, $\frac{1}{2}$-in. B.S.F.	AB 044
DT 545 nut, lock, $\frac{3}{4}$-in. B.S.F.	AB 772
DV 900 pin, taper split, $\frac{9}{64}$-in. x 1-in.	AB 877
DV 913 pin, taper split, $\frac{3}{16}$-in. x 1-in.	AB 890
DV 926 pin, taper split, $\frac{3}{16}$-in. x $1\frac{1}{4}$-in.	AB 825
DV 645 screw, countersunk head, No. 2 B.A. x $\frac{7}{16}$-in.	AB 515
DV 671 screw, countersunk head, $\frac{1}{4}$-in. B.S.F. x $\frac{1}{2}$in.	AB 554
DV 749 screw, countersunk head, $\frac{3}{8}$-in. B.S.W. x $1\frac{5}{8}$-in.	AB 009
DV 581 screw, round head, $\frac{1}{4}$-in. B.S.F. x $\frac{3}{8}$-in.	AB 061
DV 594 screw, round head, $\frac{1}{4}$-in. B.S.W. x $\frac{3}{8}$-in.	AB 620
DV 299 washer, $\frac{3}{8}$-in. B.S.F.	AB 414
DV 507 washer, shake proof, Type 11, $\frac{1}{2}$-in.	AB 428
DV 559 washer, spring, single turn, No. 4 B.A.	AB 584

(DNAS 465/52/257.)

(*Navy Order* 413 *of* 1959.)

UNCLASSIFIED.

267.—Form A.S. 239—Recommendations for Advancement and Conduct Sheet—Revision.

Form A.S. 239—Recommendation for Advancement and Conduct Sheet has been revised and is available on demand from the Superintending Naval and Air Stores Officer, Sydney.

2. Provision has been made in the revised form for all leave taken to be recorded, and initially a copy of the revised form is to be inserted in the Certificate of Service of all ratings borne. Stocks of forms are to be demanded on the basis of one for each rating borne plus 25 per cent. for wastage. Thereafter forms A.S. 239 will be inserted in Certificates of Service at H.M.A.S. CERBERUS during the recruit stage.

3. Forms A.S. 239 (established 1950) are to remain in Certificates of Service for twelve months or until the rating is drafted to another ship or establishment, whichever is the later.

(HPB 464/54/81.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 268-291/60.

COMMONWEALTH NAVY ORDERS

C.N.O's

Navy Office, Canberra,
2nd May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Mosf Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

2351/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

268.—Medical Prevention of Tetanus in the Service.

Reports have been received following annual inspections of ships and establishments that a large number of personnel, both officers and ratings, have not yet received the full course of protection against tetanus.

2. Particular care should be taken regarding new entries, who may have received the first two injections on entry and may have been drafted in the interim before the third dose was due.

3. In view of the constant incidence of tetanus, even in Australia, it is considered essential that full protection should be completed without delay.

4. A complete survey of all members is to be carried out and a quarterly report is to be included in all medical journals stating the numbers not yet fully immunized, together with the reasons therefore.

5. Navy Orders 390 of 1958 and 314 of 1959 refer.

(M.D.G. 327/54/15.)

(*Navy Orders* 390 *of* 1958 *and* 314 *of* 1959.)

UNCLASSIFIED.

269.—R.A.N. Shore Authorities and Ships in Harbour—Communication Arrangements.

Most shore authorities are served by the R.A.N. Tape Relay Network, the relay stations of which in Canberra, Sydney, Darwin and Melbourne are manned continuously. Shore establishments which are tributary stations off this network normally cease communication watch outside working hours, but watch is resumed if required to transmit or receive priority signal traffic and above.

2. Normally Sydney M.S.O. will be responsible for signal traffic for ships in harbour at Sydney. By arrangement Melbourne M.S.O. will guard for ships secured to the telephone in Melbourne. Two tape relay positions are available for ships berthed alongside in Sydney, and one tributory position for visiting ships in Melbourne. At other Australian ports ships must normally maintain seagoing communication watch, unless special arrangements are made such as a communication guard, or in the case of single operator ships, routeing of traffic by telephone or commercial telegram via the nearest Post Office.

3. The following authorities and their associated establishments are served during working hours by A.M.F. or R.A.A.F. channels. Signals which must reach them outside these times or over the weekend should be made priority, in which case they will be routed to either Canberra or Sydney and then passed by urgent commercial telegram—

N.O.I.C. W.A. (served by R.A.A.F.).
N.O.I.C. S.A. (served by R.A.A.F./TELEX).
N.O.I.C. QLD. (served by A.M.F./TELEX).
N.O.I.C. TAS. (served by A.M.F.).

4. In view of this, and in particular because of expense involved in sending urgent telegrams, priority signals to all these authorities and their associated establishments should be used with discretion. Where such an authority may be an information addressee in a priority signal, but the urgency only applies to the action addressee, the use of dual precedence should be considered. If time permits deferred and routine messages should be despatched by ships and establishments direct to these and other appropriate authorities by airgram or postagram when practicable.

5. Melbourne M.S.O. is responsible for the signal traffic of N.O.I.C. VIC. and establishments in the Melbourne area. This M.S.O. is opened during the hours 0830–2230 Monday to Friday and 0900–1700 Saturday and Sunday but a Naval watchkeeper is generally available in Melbourne Tape Relay Centre which is jointly manned by R.A.N. and R.A.A.F. personnel.

6. N.O.I.C. QLD. and N.O.I.C. S.A. are served by the P.M.G. Teleprinter Exchange Service (TELEX), and by this means normal signal traffic is passed to and from the A.M.F. Tape Relay Network at Brisbane and the R.A.A.F. Network at Adelaide, respectively. As well, during working hours high precedence traffic can be passed direct between these authorities and Canberra or Sydney M.S.O.'s which are also connected to TELEX.

7. These instructions will be included in R.A.N.O.P.s.

8. Navy Order 878 of 1959 is hereby cancelled.

(D.S.D. 16/1/13.)

(*Navy Order* 878 *of* 1959.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

270.—A.B.C.D. Trials and Training.

A.B.C.D. schools are located at H.M.A.S. CERBERUS and H.M.A.S. PENGUIN. There is also an A.B.C.D. section at H.M.A.S. LEEUWIN. The purpose of these schools is to train personnel in the basic principles underlying the technique and organization of Atomic, Biological and Chemical Protection and Damage Control.

2. The training of personnel in the A.B.C.D. schools is intended only as a background for the training and exercises which must take place in all ships and establishments. Completion of the appropriate courses however, by as many officers and ratings as possible, will provide the essential knowledge upon which A.B.C.D. efficiency is built. Completion of the course will also enhance a man's prospects of acquiring the A.B.C.D. qualification necessary for advancement. Moreover, facilities for practical training which cannot be carried out in ships, such as fire-fighting and practical A.B.C. exercises, can be made available at the schools.

3. The responsibility for co-ordination of A.B.C.D. training matters in the A.B.C.D. schools, and in Reserve Training Establishments is vested in the Officer-in-Charge, A.B.C.D. School, H.M.A.S. PENGUIN.

4. This officer is also responsible under the Inspection and Trials Organization for the inspection of A.B.C.D. arrangements in new construction ships and ships undergoing modernization or conversion.

5. A copy of reports of major A.B.C.D. exercises, ship's heeling trials, closing-down trials and pre-wetting trials, is to be forwarded, through administrative authorities, to H.M.A.S. PENGUIN for information. Reports in duplicate, of major damage to H.M.A. ships, due to collision, fire or grounding are to be forwarded to the Naval Board, through administrative authorities, by the ship concerned. Subsequently one copy will be forwarded to H.M.A.S. PENGUIN.

6. The appendix hereto lists courses and other facilities available in the A.B.C.D. schools.

Administrative Instructions for Courses at H.M.A.S. PENGUIN.

7. *Applications.*—Applications for courses, details of which are promulgated periodically in Navy Orders, are to be made to the Commanding Officer, H.M.A.S. PENGUIN, stating:

(*a*) course required and date;

(*b*) details of candidates, including names, ranks or ratings and official numbers;

(*c*) accommodation requirements;

(*d*) transport requirements when other than routine transport is required on arrival in Sydney.

8. *Dress.*—

(*a*) Officers are to have No. 14 action dress.

(*b*) Ratings are to have two sets of No. 8 action working dress.

(*c*) Personnel on course are to have their anti-gas respirators if already issued.

9. *Meals.*—Ratings who are not accommodated in PENGUIN will be provided with the mid-day meal.

10. *Joining Instructions.*—

(*a*) Personnel who are to be accommodated in H.M.A.S. PENGIUN are to join on, or before the day prior to the commencing date of the course.

(*b*) Courses commence at 0815.

11. *Results.*—Course results, which are not to be regarded as advancement qualifications, will be forwarded as follows—

(*a*) Officers of Commander's rank and above	A.C.N.B. notified of completion of course.
(*b*) Officers junior to Commander's rank	Results to A.C.N.B. copy to own ship.
(*c*) A.B.C.D. Instructors	Results to A.C.N.B. copy to own ship.
(*d*) All other ratings	Results to own ship.
(*e*) Reserve Officers and ratings ..	Results to the Director of Naval Reserves.

Notations which are to be made on page 3 of Service Certificates will be included in the notification of the results.

12. Navy Order 432 of 1958 is hereby cancelled.

APPENDIX.

Courses and Other Facilities Available.

Courses.

The following courses are available—

Courses.	*Duration.*	*For whom Intended.*	*Location.*	*Remarks.*
Preliminary Defence	5 days ..	Recruits of all branches; Officers on completion of Indoctrination Course	F.N.D. LEEUWIN	3 days ship safety, 2 days A.B.C. protection (includes issue of respirators)
Junior A.B.C.D.	3 days D.C. 2 days A.B.C.	Able rates and below ..	F.N.D. PENGUIN LEEUWIN	
Standard D.C.	5 days ..	All officers and ratings of Acting Leading Rate and above	PENGUIN	*See* note (*a*)
Advanced D.C.	5 days ..	Officers of all branches; Ratings—Petty Officers and above who have completed a Standard D.C. course within the past 12 months	PENGUIN	
Standard A.B.C.	5 days ..	All officers and ratings of Acting Leading Rate and above. Naval Dockyard police	PENGUIN	*See* note (*a*)
Advanced A.B.C.	5 days ..	Officers of all Branches Ratings—Petty Officers and above who have completed a Standard A.B.C. Course within the past twelve months	PENGUIN	Includes Monitoring and A.B.C. Repair subjects
Passive Defence Officer's Course	2 weeks ..	Selected officers of naval and civil staffs, Naval Dockyard Police of Sergeant's rank and above. C.P.O.'s and P.O.'s selected by A.C.N.B.	PENGUIN	Nominated by A.C.N.B.
Senior Officer's Course	1 day A.B.C. 1 day D.C.	Officers of Lt. Cdr's. rank and above	PENGUIN	

Courses.	*Duration.*	*For whom Intended.*	*Location.*	*Remarks.*
A.B.C.D. Instructor	6 weeks	P.O.'s and above selected by A.C.N.B.	PENGUIN	*See* note (*b*) Consists of Standard and Advanced A.B.C., and D.C. courses, 1 week understudying in A.B.C.D. School and 1 week Instructional Technique Course (WATSON)
A.B.C.D. Officer	5 weeks ..	Officers selected by A.C.N.B.	PENGUIN	Consists of Standard and Advanced A.B.C. and D.C. and 1 week understudying in A.B.C.D. School
D.C. Engineer Officer	4 weeks ..	Officers selected by A.C.N.B. or ship concerned	PENGUIN	Standard A.B.C.D. courses. Advanced D.C. course plus one week understudy period
Monitoring Officer	3 weeks ..	Officers selected by A.C.N.B. or ship concerned	PENGUIN	Standard and Advanced A.B.C. and Standard D.C.
Combined Services Medical Officers	1 week ..	As nominated by M.D.G. and officers of Defence Standards Laboratories	PENGUIN	Medical aspects of A.B.C. Warfare
Examination Service Officers A.B.C.	7 Instructional days	Officers of the Reserve Forces selected by A.C.N.B.	PENGUIN	

Notes:

(*a*) Junior rates may be accepted in these courses at the discretion of the Officer-in-Charge, A.B.C.D. School.

(*b*) Candidates for A.B.C.D. Instructor must obtain a pass in the I.T. course.

Additional Facilities Available.

2. The following additional facilities are available at H.M.A.S. PENGUIN, and will be provided, subject to reasonable notice being given and to the School's commitments—

(*a*) 1 day's ship control teams training.

(*b*) 1 day's practical monitoring instruction.

(*c*) 1 day's fire-fighting training.
(*d*) 1 day's aircraft fire-fighting and rescue training.
(*e*) Testing and calibration of radiac instruments.

311/4/37
(D.T.S.R. 4006/61/45.)

(*Navy Order* 432 *of* 1958.)

UNCLASSIFIED.

271.—Band Branch—Change of Uniform and Ratings' Titles.

Navy Order 5 of 1960 is to be amended as follows—

Paragraph 2, last sentence,

delete—" Class 111 ".,

insert—" Class 11 ".

Paragraph 7,

delete—" Musician passed professionally for Leading Musician and Leading Musician—Basic device—star above."

insert—" Musician passed professionally for Leading Musician and Leading Musician—Basic device—star above and below."

(H.P.B. 930/51/15.)

(*Navy Order* 5 *of* 1960.)

UNCLASSIFIED.

272.—Compassionate Leave Following Grant of Removal.

Navy Order 229 of 1959 is to be amended as follows—

(1) **Paragraph 28.**

Clause [a]—*delete* at the end, the word " and ".

Clause [b]—*insert* the following after clause (*b*)—

" and

(*c*) On removal—where it is necessary because of the wife's health or because the ages of the children are such that it would not be reasonable to expect her to bear the sole responsibility for the movement of the family."

(2) **Paragraph 36.**—*insert* the following after paragraph 36—

" 36A. Where an application for compassionate leave is made under paragraph 28 (*c*) of this order by a member serving in H.M.A S. MELVILLE or H.M.A.S. TARANGAU, the circumstances of the case together with the recommendation of the Captain should be reported to the Naval Board for decision."

(3) **Paragraph 37.**—*insert* at the beginning of paragraph 37—

" Except as provided in paragraph 36A."

(H.P.B. 252/8/6.)

(*Navy Order* 229 *of* 1959.)

UNCLASSIFIED.

273.—Fleet Board Examinations for Leading Tactical Communication Operator and Leading Radio Communication Operator.

In order to assist candidates for Communication Fleet Boards to reach the standards required for examination for Leading Rate, it has been decided to—

(*a*) introduce one month refresher courses at F.N.D. and S.T.C. Sydney;

(*b*) fix dates of boards to suit ships' programmes so that as many candidates as possible can be spared for the courses.

2. Three courses a year will be held immediately prior to Fleet Boards and dates will be notified in advance. Candidates should attend if they can be spared without relief. Attendance at a course is not a requirement before a candidate appears before a board.

3. Although it is desirable that candidates should attend a refresher course it is emphasized that it does not replace organized instruction in own ship or establishment. This must continue, and will of course be essential for ratings unable to attend the course.

4. So candidates can be more readily spared without relief for these courses and to assist ships and establishments to plan organized training to the best advantage, three Fleet Boards a year will be convened on set dates most conveniently arranged to suit ships' programmes. Dates of these boards (and associated courses) for the year will be arranged in advance between F.O.C.A.F., F.O.I.C.E.A. and C.S.T. F.N.D. and will be promulgated by Navy Office.

5. Although the three pre-arranged Fleet Boards will cover most examination requirements, if special circumstances make it desirable, individual convening authorities may convene additional Fleet Boards (without associated refresher courses) as required. Promulgation of details to ships and establishments concerned is to be arranged by the convening authority concerned.

6. Navy Order 1080 of 1959, paragraph 7, is to be deleted and the following substituted—

" 7. (*a*) Three Fleet Boards a year are to be convened on set dates most conveniently arranged to suit ships' programmes. Dates of these boards for the year (and associated refresher courses preceding them) are to be arranged in advance between F.O.C.A.F. F.O.I.C.E.A. and C.S.T. F.N.D. and will be promulgated by Navy Office.

(*b*) If special circumstances make it desirable individual convening authorities may convene additional Fleet Boards (without associated refresher courses), as required. Promulgation of details to ships and establishments concerned, is to be arranged by the authority concerned."

7. A.B.R. 10 and A.B.R. 5009 will be amended in due course.

(D.S.D. 312/24/1.)

(*Navy Order* 1080 *of* 1959.)

UNCLASSIFIED.

274.—Naval History Prize—1960.

The subject for the 1960 Admiralty Naval History Prize is—
" Samuel Pepys and the Navy's debt to him."

2. This competition is open to officers of the R.A.N. and W.R.A.N.S. for the Award of Certificates of Merit. Rules of the competition, particulars of books recommended for study and copies of " Hints to Competitors " can be obtained from the Director, Naval Education Service, Department of the Navy, Victoria Barracks, Melbourne.

3. Navy Order 972 of 1959 is hereby cancelled.

(D.N.E.S. 38/6/5.)

(*Navy Order* 972 *of* 1959.)

UNCLASSIFIED.

275.—Officers—Meteorological Officers Serving in Aircraft Carriers and at Naval Air Stations—Flying Experience.

(*A.F.O.* 315/1960.)

Meteorological Officers serving in carriers and at Naval Air Stations are to be given every opportunity to obtain flying experience suited to the type of briefing with which they are concerned.

2. Navy Order 306 of 1958 is hereby cancelled.

(D.A.W.O.T. 303/2/10.)

(*Navy Order* 306 *of* 1958.)

UNCLASSIFIED.

276.—Transport and Accommodation for Relatives of Dangerously Ill Members—Ausdil Scheme.

The approval regarding the transport and accommodation of the next-of-kin of a dangerously ill member under instructions 141 to 141/12 inclusive of Interim Pay Instructions provides for the transport of one adult only in each case.

2. In future where a relative specified in paragraph (3.) of Interim Pay Instructions 141/1 is either elderly or infirm, that relative may be accompanied by an attendant (of his or her own choosing) on the journey at the expense of the Department.

3. It may happen that where the news that a member has been placed on the dangerously ill list is conveyed to a close relative, a state of shock results. This in itself is not a reason for authorizing the travel at the expense of the Department of a second adult. (*See* Interim Pay Instructions 141/10.)

4. Where a second adult does travel but the above conditions are not fulfilled, it should be made clear that the person concerned travels at his own expense.

5. Interim Pay Instructions which will be amended, should be noted accordingly.

(H.P.B. 187/1/30.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

277.—Wireless—Aerial (Whip) Outfit AWN—Protection Against Spray.

(*A.F.O.* 44/1960.)

To provide greater protection of the lower insulator of Aerial (Whip) Outfit AWN against sea spray, an addendum to the Installation Specification B.797 is being issued. The alteration consists of fitting a protecting plate around the lower side of the insulator.

2. Ships already fitted with Aerial Outfit AWN in a position where the underside of the base, insulating, may be subjected to sea spray, are to include an item in the defect list to cover the fitting of the arrangement referred to in Note 4 on A.S.W.E. drawing D.88229.

(D.E.E. 518/51/214.)

UNCLASSIFIED.

278.—Electronic Valves—Pre-Issue Testing.

All electronic valves supplied in future for use in the following equipments will be pre-issue tested—

(*a*) Type 262 radar equipment.
(*b*) Types FH4 and FV11 D/F outfits.
(*c*) Airborne radio outfits.
(*d*) Test equipment.
(*e*) Flyplane electrical predictor.
(*f*) Gun amplifiers and acceleration compensation units associated with the Flyplane electrical predictor.

2. The above-mentioned valves are known as " Selected Valves ", the demanding and accounting procedures for which are set out in A.B.R. 4, articles 0605 and 1850. However, the total quantity of any particular valve held on board as spares should not exceed the total allowance of selected valves and non-selected valves calculated in accordance with A.B.R. 4, article 0314. Stocks will be maintained as necessary at the Naval Store Depots at Sydney and Port Melbourne.

3. Selected valves should be used in equipments other than those designated in paragraph 1 of this order, only when stocks of non-selected valves are not available.

4. Reconditioned valves are not to be issued for the services referred to in paragraph 1 of this order.

5. A.B.R. 4 will be amended.

6. Navy Order 1073 of 1958 is hereby cancelled.

(D.N.A.S. 519/54/10).

(*Navy Order* 1073 *of* 1958.)

UNCLASSIFIED.

279.—The R.A.N. System of Electrical Planned Maintenance—Description and Instructions.

Navy Order 678 of 1959 is to be amended as follows—

(*a*) *Insert* after paragraph 8 (*d*)—

" (*e*) Quarterly Progress Report Forms ".

(*b*) *Delete* paragraph 11 (*b*) and *insert* in its stead—

" (*b*) Quarterly Progress Report Forms are to be completed in accordance with instructions printed on reverse side of Report Form cover sheet and forwarded direct to Secretary, Department of the Navy, Navy Office, Canberra."

(D.E.E. 1209/51/17.)

(*Navy Order* 678 *of* 1959.)

UNCLASSIFIED.

280.—Diesel Engine Preventive Maintenance—Analysis of Lubricating Oil.

The Department of Civil Aviation has installed facilities in Melbourne for the spectrographic analysis of lubricating oil from diesel engines in an endeavour to determine the rate of wear of the various engine components. These facilities have been made available for the testing of oil from a selection of Naval diesel engines and it has been decided to carry out an investigation covering a number of Paxman 12 R.P.H. engines.

2. Sampling kits with full instructions for use will be issued shortly to H.M.A. ships VOYAGER, VAMPIRE, VENDETTA, QUEENBOROUGH, QUICKMATCH and QUIBERON. Samples of oil should then be drawn off at the specified times from each of the Paxman engines fitted in the above-mentioned ships. Full particulars in accordance with the sampling instructions should be provided with each sample and a duplicate copy of these particulars should be forwarded to the Director of Marine Engineering, Department of the Navy, Victoria Barracks, Melbourne. (A quantity of forms for this purpose will be issued with each sampling kit.)

3. The oil samples collected are to be forwarded direct to the address given in paragraph 6 of the sampling instructions. The most expeditious means available is to be used (e.g., air freight from remote areas). It should be particularly noted that, although clean canisters may be forwarded to ships by mail, under no circumstances should canisters containing oil be sent through the mail.

4. Reports of the analysis will be received at Navy Office and forwarded to ships concerned through the Administrative Authority in the usual way, together with any recommendations arising from the reports.

(D.M.E. 401/55/1.)

UNCLASSIFIED.

281.—Ammunition—Cartridges 50 grain, Ballistite for 2-in. Mortar Bombs—Withdrawal of Defective Lots.

(*A.F.O.* 321/1960.)

During annual inspection of OA058 cartridges 50 grain, ballistite, a number of cartridges of I.C.I. 6/55 filling, lot Nos. 356, 358 and 361 were found to be defective and it has been decided to withdraw all cartridges of these lots from service. These cartridges are classified ff (i.e., not dangerous, but may have a percentage of failures to function).

2. Any cartridges of these lots held on board H.M.A. ships or ashore are to be returned to the nearest R.A.N. Armament Depot for disposal quoting this order.

(D.W. 726/80/3.)

UNCLASSIFIED.

282.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 205/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest Naval Armament Depot as early as practicable. H.M.A. ships which are unable to comply within three months from the date of this order are to report the fact to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 855 RNC 863 RNC 864	SC 122	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 946XA RNC 1094XB	SC 109	B.L. 6-in.; Q.F. 4.7-in.
RNC 857 RNC 947XA	SC 103	B.L. 6-in.; Q.F. 5.25-in.; Q.F. 4-in.
RNC 1085XB	SC 061	B.L. 6-in.; Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.)
RNC 6244XA RNC 6249XA RNC 6266XA RNC 6267XA RNP 1507XA RNP 1509XA	ASN/T 190–054	Q.F. 4.7-in.; Q.F. 4-in. (F.A.)

2. Attention is drawn to article 211 of Naval Magazine and Explosive Regulations, B.R. 862, and paragraphs 6, 7 and 9 to article 53 of Naval Cordite Regulations, B.R. 862A.

3. Separate instructions have been issued to R.A.N. Armament Depots.

(D.W. 725/52/63.)

UNCLASSIFIED.

283.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 386/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. H.M.A. ships which are unable to comply within three months from the date of this order are to report the fact to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 868 ..		
RNC 875 ..		
RNC 977XA	SC 061	B.L. 6-in.; Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1119XB		
RNC 2541XJ		
RNC 872 ..	SC 109	B.L. 6-in.; Q.F. 4.7-in.
RNC 960XA		
RNC 974XA	SC 140	B.L. 6-in.; Q.F. 5.25-in.; Impulse torpedo
RNC 3494XM	SC 122	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 3515XM	SC 048	Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 4.5-in reduced charge; Q.F. 3-pdr.

2. Attention is drawn to article 211 of Naval Magazine and Explosive Regulations, B.R. 862, and paragraphs 6, 7 and 9 of article 53 of Naval Cordite Regulations, B.R. 862A.

3. Separate instructions have been issued to R.A.N. Armament Depots.

(D.W. 729/57/40.)

UNCLASSIFIED.

284.—Gunmountings—40-mm. Mark 7 Mountings—Modification to the Header Tank and Air Pump Assembly.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted, Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	40-mm. Mk. 7 mountings.
(*c*) *Part of equipment affected* ..	Air pump and header tank assembly
(*d*) *Purpose of modification* ..	To prevent water entering the oil system via the air pump.
(*e*) *Nature of modification* ..	Fit a cover between the knob and locknut on the air pump spindle.
(*f*) *Drawings*	D.O.U.W. A/51209, 29000/22.
(*g*) *By whom to be done* ..	Dockyards. As a defect
(*h*) *When to be done*	At earliest opportunity.
(*i*) *How to be recorded* ..	As modification A.N.5 to 40-mm. Mk. 7 mountings.

(D.W. 736/64/19.)

RESTRICTED.

285.—A/S Mortar, Mark 10—Ch 019 MECHANISM, Breech, Type B.

(*A.F.O.* 210/1960.)

Weapon	A/S Mortar, mark 10.
Part affected	CH 019 mechanism, breech.
Nature of modification ..	Replacement of the existing CH 356 guard, cable by one of an improved design, CH 811 guard, cable.
Purpose of the modification ..	To facilitate the removal of CH 019 mechanism for maintenance purposes, provide for the protection of the firing lead, and obviate the possibility of damage to the insulation during assembly of the lead.
By whom to be done	R.A.N. Armament Depots only. H.M.A. ships are to arrange with the nearest R.A.N. Armament Depot for the exchange, by R.A.N. Armament Depot staff, of unmodified CH 019 mechanisms on mortars.
	Unmodified CH 004 contacts (in CJ 042 chests), and CH 253 levers are also to be exchanged.
When to be done	At the earliest opportunity.
R.A.N. Armament Depots only	Instructions regarding this modification are promulgated in UW(A)27A/58.

(D.W. 736/251/3.)

UNCLASSIFIED.

286.—Naval Stores—General—Accounting—Stocktaking Discrepancy Reports—Forms A.S. 148/A.D. 176—Distribution of Copies.

In future, approved copies of Stocktaking Discrepancy Reports in respect of Naval and Air Stores will not be returned to the originator. A simple ronoed form of letter will be used notifying that the reports have been approved.

2. It will accordingly be necessary to forward one copy only of Stocktaking Discrepancy Reports to Navy Office in future, except that, the additional copies referred to in A.B.R. 4, Article 1605 (*b*), from H.M.A. ships, are still required.

3. A.B.R. 4 and other relevant publications will be amended.

(D.N.A.S. 400/51/46.)

UNCLASSIFIED.

287.—Naval Stores (General) (Class B, Group 10B)—Safety Walk Tread Strips—Allowances of Spares.

To enable repairs of safety walk tread strips to be carried out by ships staff 50 No. 6-in. x 24-in. cleats will be allowed as spares to all Daring Class Destroyers.

2. Supply will be effected without demand by the S.N.S.O. Sydney.

(D.N.A.S. 1215/57/17.)

UNCLASSIFIED.

288.—Naval Stores (General) (Class E, Group 8)—Boilers—Brickwork—Use of Refractory Mortar.

(*A.F.O.* 2495/1959.)

High temperature air setting refractory mortar, pattern E8/10050, was introduced in 1957 for use with standard keyed type bricks. It has now been decided to extend the use of this mortar to all existing types of furnace brickwork in view of the stronger and more uniform brick joints obtained.

2. The use of the existing type of joining cement may be continued for bonding existing brickwork, with the exception of standard keyed brickwork, until present stocks of these items are exhausted.

(D.N.A.S. 512/87/22.)

UNCLASSIFIED.

289.—Naval Stores (General)—Lamps, Filament, R.A.F. Vocabulary Section 5L—Transfer to Class/Group F25.

(*A.F.O.* 1028/1959.)

As from the date of this order, lamps, filament, hitherto held under R.A.F. Vocabulary Section 5L are to be dealt with under class/group F.25 and demands should henceforth be lodged with the nearest (Superintending) Naval Store Officer.

2. There will be no change in the Joint Service Catalogue Numbers on transfer from section 5L to class/group F.25 except for the insertion of a hyphen before the fourth figure as shown in the appendix.

3. Stocks and records in H.M.A. Naval and Air Store Depots should be adjusted as necessary.

4. H.M.A. ships and establishments should comply with A.R.B. 4, article 1812 (*a*) in regard to lamps of which stocks are held under section 5L, except that, in order to minimize the clerical work involved, the authority need not be noted on the ledger pages affected; instead, a manuscript certificate should be inserted at the front of ledgers to the effect that this order has been complied with. If stocks of any lamps are held under section 5L and class/group F.25, the remains under section 5L should be transferred to the class/group F.25 ledger page quoting this order as authority and the ledger page removed from the Air Store Account and placed in the Dead Ledger. Stocks are to be re-stowed as necessary and, pending an opportunity to carry out this work, the bin cards should be amended forthwith.

5. Details of the lamps to be transferred to class/group F.25 are shown in the appendix to this order.

6. Relevant publications will be amended.

APPENDIX.

LAMPS, FILAMENT TO BE TRANSFERRED FROM R.A.F. VOCAB. SECTON 5L TO CLASS/GROUP F.25. N.A.T.O. SUPPLY CLASSIFICATION GROUP 6240.

J.S. Cat. No.	*J.S. Cat. No.*	*J.S. Cat. No.*	*J.S. Cat. No.*	*J.S. Cat. No.*
995–1101	995–1218	995–2215	995–2431	995–4722
995–1102	995–1219	995–2217	995–2507	995–4727
995–1108	995–1220	995–2218	995–2511	995–6703
995–1109	995–1224	995–2221	995–2602	995–6705
995–1110	995–1226	995–2229	995–2603	995–9101
995–1114	995–1228	995–2230	995–2604	995–9106
995–1119	995–1230	995–2234	995–3202	995–9107
995–1122	995–1231	995–2241	995–3210	995–9108
995–1125	995–1232	995–2242	995–3211	995–9109
995–1128	995–1233	995–2245	995–3215	995–9111
995–1130	995–1236	995–2248	995–3216	995–9112
995–1131	995–1238	995–2249	995–3217	995–9118
995–1132	995–1239	995–2250	995–3219	995–9121
995–1133	995–1242	995–2251	995–3226	995–9122
995–1134	995–1243	995–2253	995–3229	995–9210
995–1135	995–1245	995–2254	995–3247	995–9211
995–1138	995–1246	995–2255	995–3271	995–9212
995–1141	995–1248	995–2256	995–3273	995–9215
995–1142	995–1254	995–2257	995–3277	995–9223
995–1143	995–1256	995–2258	995–3278	995–9702
995–1146	995–1260	995–2261	995–4201	995–9802
995–1153	995–1263	995–2267	995–4207	996–1103
995–1154	995–1267	995–2272	995–4305	996–2101
995–1155	995–1271	995–2276	995–4401	996–2108
995–1156	995–1272	995–2291	995–4402	996–4292
995–1164	995–1273	995–2294	995–4403	996–4330
995–1201	995–1277	995–2295	995–4407	996–4546
995–1204	995–1278	995–2298	995–4609	996–4582
995–1206	995–1282	995–2401	995–4702	996–4832
995–1208	995–1283	995–2404	995–4705	996–5723
995–1211	995–1284	995–2408	995–4712	996–7801
995–1213	995–1286	995–2411	995–4716	
995–1214	995–2102	995–2414	995–4717	
995–1215	995–2212	995–2422	995–4720	

(D.N.A.S. 519/76/2.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

290.—Aviation—Introduction of Revised Form A.S. 226—Pilots Summary and Assessment of Flying.

(*A.F.O.* 677/1959.)

Commanding officers are responsible for ensuring that pilots under their command have sufficient flying experience and ability to carry out the exercises for which they are detailed. In order to assist commanding officers in assessing the capabilities of newly appointed pilots, and with a view to reducing the number of accidents, form A.S.226 has been revised and is being distributed to all carriers and naval air stations; on recepit all old forms are to be destroyed.

2. On each occasion of a pilot's change of appointment form A.S. 226 is to be completed, in duplicate, by the Squadron Commander and Commander (Air) and counter-signed by the Captain. One copy of the form is to be affixed to the pilot's log book and the other copy sent to the commanding officer of the pilot's next ship or establishment.

3. I.F.A.A. article 810, paragraph (4) is to be amended to read—

"Annually on 1st January and on each change of appointment, an assessment is to be recorded in the Flying Log Book."

(D.N.A.S. 464/54/82.)

UNCLASSIFIED.

291.—Books—B.R. 292—The Ordnance Engineering Manual—B.R. 1096—Ordnance Engineering Notes. Gratuitous Issue to Air Mechanicians (O).

One copy each of B.R. 292—The Ordnance Engineering Manual—and B.R. 1096—Ordnance Engineering Notes—is to be issued gratuitously to Air Mechanicians (O) upon qualifying for General Service Ordnance duties.

2. Upon completion of training for Ordnance duties, Air Mechanicians (O) are to be issued with tool kit 01 in lieu of tool kit type A2 at present held.

3. I.P.I. and A.B.R. 4 Naval Storekeeping Manual, appendix 7, will be amended.

(D.N.A.S. 4002/102/32.)
303/257/1

With reference to Navy Order 1094 of 1959, Navy Orders 184 to 302 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 292-306/60

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
4th May, 1960.

The enclosed orders are promulgated for information guidance and necessary action.

By direction of the Naval Board.

Mosf Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

2823/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

RESTRICTED.

292.—Custody of Cabinet and Safe Keys.

A.C.N.B. Message D.T.G. 173F, November, 1958, provided for safes pattern 5297 to be supplied to H.M.A. ships as an interim measure prior to final fitting of dial type combination locks to all necessary safes and cabinets.

2. The following instructions are issued for the guidance of Commanding Officers to safeguard keys of safes and cabinets containing classified material when these new safes are fitted. They are to be read in conjunction with those contained in B.R. form U2D, page 18, paragraph 6, and obviate the need for the Commanding Officer and C.B. Officer to carry keys on their person.

> " When the safe stowages in the custody of the C.B. Officer are not in use all keys are to be placed in the dial type combination safe and that safe locked. The Commanding Officer is to have the combination of his safe placed in a sealed envelope and retained in the C.B. Officer's combination safe. Similarly the combination of the C.B. Officer's safe is to be retained by the Commanding Officer."

3. The remaining instructions in the reference in paragraph 2 above, still apply.

(DTSR 1617/206/14.)

UNCLASSIFIED.

293.—Royal Australian Naval Photographic Branch—Terms of Reference.

(*A.F.O.* 1718/1959.)

The Royal Australian Naval Photographic Branch is a branch of the Service manned by R.A.N. officers and ratings, and organized to provide photographic facilities for—

(*a*) Operational purposes.
(*b*) Surveys.
(*c*) Recording and analysis of practices and exercises.
(*d*) Instruction and training.
(*e*) Technical assessment and records.
(*f*) Naval information and publicity.
(*g*) Historical record.

2. The Director Air Warfare Organization and Training (Short Title, D.A.W.O.T.) has the following responsibilities for photography in the Fleet and in Shore Establishments—

(*a*) To act as the central and co-ordinating authority for photographic equipment and facilities to meet all requirements, and for policy with regard to the introduction of new equipment, future organization, and training requirements.

(*b*) The technical performance of all items of photographic material and equipment, with the exception of projection and sound reproduction apparatus and associated electrical gear.

(*c*) The layout of photographic facilities.

(*d*) The preparation of photographic technical instructions and the promulgation of information concerning progress and possible developments in photographic equipment and technique.

(*e*) Making arrangements through administrative authorities for all trials of photographic and allied equipment undertaken in the Fleet and in Shore Establishments.

(*f*) Advising the Personnel Directors on the syllabuses of training for personnel specializing in photography, and for non-specialist personnel, when so required.

(*g*) Maintaining a close liaison with the other Services, with the object of standardizing equipment where possible.

3. The Photographic Officer, R.A.N. Air Station, Nowra is—

(*a*) Responsible to the Captain, R.A.N. Air Station, Nowra, for the administration of the R.A.N. School of Photography.

(*b*) Responsible to F.O.I.C.E.A. for the technical efficiency of all shore based photographic sections in the Eastern Area.

(*c*) Responsible for advising C.S.T. F.N.D. on all photographic matters.

(*d*) To act in an advisory capacity to D.A.W.O.T. when no Photographic Officer is borne on the Naval Staff.

4. *The Royal Australian Naval School of Photography.*—This school is located at R.A.N. Air Station, Nowra, New South Wales—

(*a*) The functions of the R.A.N. School of Photography are—

(i) to undertake the training of all personnel specializing in photography, and of non-specialist personnel, when required.

(ii) to undertake the trials and testing of photographic and associated equipment and materials as required.

(*b*) The following courses are carried out at the R.A.N. School of Photography—

(i) Qualification for Photographer 3—Naval Airmen selected for Part II. Specialist qualification.

(ii) Qualification for Photographer 2—Ratings qualifying professionally for advancement to Leading Airmen.

(iii) Qualification for Photographer 1—Ratings qualifying professionally for advancement to Petty Officer Airmen.

Note: The training of selected officers for Squadron photographic duties, and the instruction of Observer School and Operational Flying School pupils, is also undertaken.

(*c*) Functions of the Shore Based Photographic Establishments are—

(i) to undertake the general photographic tasks as required within the individual unit, both Ground and/or Air;

(ii) to undertake Press and other publicity commitments, both cine and still;

(iii) to compile and maintain negative libraries, and to supply the Photographic Officer R.A.N. Air Station, Nowra, with negatives of particular merit or interest;

(iv) to undertake gunnery recording, and assessing, as required.

5. The Photographic Officer R.A.N. Air Station, Nowra, is authorized to deal direct with the following authorities, and establishments, on all technical matters affecting the shore based photographic task—

(*a*) D.A.W.O.T.

(*b*) Base Gunnery Officer, Sydney.

(*c*) Officer-in-Charge, Gunnery School, F.N.D.

(*d*) Commanding Officer, H.M.A.S. NIRIMBA.

(*e*) Fleet Photographic Officer.

(*f*) Central Photographic Establishment, R.A.A.F., East Sale.

(*g*) Officer-in-Charge, R.N. School of Photography, R.N.B., Portsmouth.

6. Copies of all correspondence, other than routine matters, are to be sent to D.A.W.O.T.

7. All matters of administration, policy, &c., are to be raised through the normal channels.

8. *The Fleet Photographic Officer.*—This officer is responsible to F.O.C.A.F. for the execution of the Fleet photographic task.

(DAWOT 2/3/7.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

294.—Pay Code Gratuities—New Provisions.

The following amendments have been made with effect from 14th December, 1959, in the rates of and conditions governing payment of gratuities other than gratuities under the *Defence Forces Retirements Benefits Act* 1948–59—

Medical Officers appointed for Short Service (*I.P.I.* 146/1)—

(*a*) The rate of gratuity has been increased from £125 to £200 per year.

(*b*) For officers serving on 14th December, 1959, gratuity will be calculated *pro rata* on a daily basis at the rate of £125 per year up to 13th December, 1959, inclusive and at the rate of £200 per year for subsequent service.

(*c*) The conditions governing payment of gratuity remain unchanged.

(*d*) The maximum period for which gratuity is payable to medical officers in respect of short service is eight years.

Male Officers promoted and appointed for Short Service continuous with Prior Service as a rating.

Where the aggregate of service performed is not less than six years, officers may qualify for gratuity as follows—

(*a*) An officer who completes the full period of short service for which appointed will be paid gratuity in respect of all service at the appropriate rate for the respective periods of officer and rating service, gratuity for service as a rating being calculated *pro rata* at a daily rate; and

(*b*) An officer who does not complete the full period of short service for which appointed will be paid gratuity at whichever is the greater of the following amounts—

(i) Gratuity to which the officer is entitled in respect of service as an officer; or

(ii) Gratuity which would have been payable to a rating for a completed engagement of six, nine or twelve years, whichever is the next lower in relation to the aggregate of service actually performed by the officer.

Ratings who elected under Section 80 *of the D.F.R.B. Act* 1948 *not to contribute to the fund and who do not revoke such allocations under Section* 75 *of the D.F.R.B. Act* 1959 (*I.P.I.* 146/5).

(*a*) There is no change in gratuity payable after twelve years service except that where a member is, on discharge, requested to enlist in the reserve and refuses to do so, the gratuity payable will be £160 in lieu of £360.

(*b*) Subject to the completion of engagement members will receive a gratuity of £50 for each completed year of service in excess of twelve years. Provided that where not less than twelve years' service was completed prior to 14th December, 1959, service between date of completion of twelve years' service and 13th December, 1959, inclusive will accrue gratuity at the rate of £30 per year calculated *pro rata* daily and service from 14th December, 1959, to date of completion of the thirteenth year of service, will accrue gratuity at the rate of £50 per year calculated *pro rata* daily.

(*c*) On discharge on reaching retiring age (i.e., 50 years for members of the R.A.N. and 55 years for members of the N.D.P.) gratuity may be paid as follows—

(i) For less than twelve years' service—£20 for each completed year.

(ii) For not less than twelve years' service—£360 plus £50 for each completed year of service in excess of twelve subject to the proviso in (*b*) above.

(*d*) On discharge on compassionate grounds a rating will be regarded for gratuity purpose as having completed an engagement of either nine, twelve, fifteen or eighteen years, whichever is the next lower to the number of years actually served.

(*e*) On retrenchment the following gratuity will be payable—

(i) For less than twelve years' service—£20 for each completed year.

(ii) For not less than twelve years' service—£360 plus £50 per year calculated *pro rata* daily for service in excess of twelve years subject to the proviso in (*b*) above.

(*f*) On discharge on medical grounds gratuity will, subject to clause (*h*), be payable as follows according to the degree of incapacity in relation to civil employment—

(i) Where the assessment of incapacity is not less than 60 per cent.—

- For less than twelve years—£360.
- For not less than twelve years—£360 plus £50 per year calculated *pro rata* daily for service in excess of twelve years to due date of completion of engagement or the attainment of prescribed retiring age, whichever first occurs, subject to the proviso in (*b*) above.

(ii) Where the assessment is less than 60 per cent.—

- For less than twelve years—£20 for each completed year.
- For not less than twelve years' service—£360 plus £50 per year for each completed year of service in excess of twelve subject to the proviso in (*b*) above.

(*g*) On discharge for disciplinary reasons gratuity is payable in respect of prior completed engagements only.

(*h*) In the case of married members deceased or incapacitated during periods of absence in excess of 21 days or whilst in desertion, gratuity payable to or in respect of such members will be calculated on the basis of prior completed engagements.

(*i*) Where a married member dies during the currency of an engagement, gratuity will be assessed on the basis that the member had served to the date for completion of his engagement or to retiring age, whichever would have first occurred.

Members of the W.R.A.N.S. (*I.P.I.* 258–258/1).

(*a*) *Officers*—

(i) On termination of service following completion of appointment gratuity will be payable at the rate of 10d. per diem to 13th December, 1959, and *pro rata* daily at the rate of £25 per year for service subsequent to that date to officers serving at 14th December, 1959.

(ii) An officer serving at 14th December, 1959, who resigns with the approval of the Naval Board after completion of not less than two years of short service will be paid gratuity assessed as in (i) above in respect of completed years of service.

(iii) Officers retired on medical grounds will be paid gratuity depending upon the percentage of incapacity in relation to civil employmen t as follows—

- Where not less than 60 per cent.—As in (i) above up to due date for completion of the period for which appointed; and
- Where less than 60 per cent.—As in (i) above up to date of completion of last full year of service.

(iv) In the case of officers entered subsequent to 13th December, 1959, gratuity will in all cases be payable in respect of completed years of service only.

(*b*) *Ratings*.—On discharge in the circumstances described, ratings will be entitled to payment of gratuity as follows—

(i) Where discharged on completion of engagement—

- For less than twelve years—£15 for each completed year of service.
- For nor less than twelve years—£180 plus £25 for each completed year of service in excess of twelve years.

(ii) Where discharged on promotion to Third Officer or retrenched—

- For less than twelve years—*Pro rata* daily at the rate of £15 per year.
- For not less than twelve years—£180 plus *pro rata* daily at the rate of £25 per year for service in excess of twelve years.

(iii) Where discharged on grounds of invalidity prior to completion of engagement gratuity will be payable as follows, according to the member's degree of incapacity in relation to civil employment—

- If not less than 60 per cent.—£15 for each year of service to twelve years and £25 per year for service in excess of twelve years which would have been completed had the member continued to serve until due date of completion of the engagement on which she was serving at date of discharge or attainment of retiring age whichever would have first occurred.
- If less than 60 per cent.—£15 for each completed year of service to twelve years, £25 for each completed year of service in excess of twelve.

(iv) On discharge prior to completion of engagement for other reasons—Gratuity will be assessed as in (*a*) above for the period served under completed engagements.

(*c*) Where a contributor to the D.F.R.B. Fund, who, having elected to purchase for pension purposes past service in respect of which she qualified for gratuity is discharged with no entitlement to pension she will be paid in respect of such service gratuity which she either elected not to be paid or refunded.

(*d*) Where a member on becoming a contributor to the D.F.R.B. Fund does not elect to purchase past service for pension purposes, gratuity for which she qualified in respect of service prior to becoming a contributor, is payable from the date on which she becomes a contributor. As the full amount is subject to taxation if paid during service, payment may be deferred until final retirement.

Pay Code Gratuity is not payable in respect of the following periods of Service—

(*a*) Service in respect of which a pension or gratuity is payable under the D.F.R.B. Act.

(*b*) Service in respect of which an officer has elected under Section 56 of the D.F.R.B. Act not to be paid gratuity.

(*c*) Service by a member appointed to the Commonwealth Public Service who elects to transfer to the Commonwealth Superannuation Fund contributions made to the D.F.R.B. Fund.

(*d*) Service by a medical officer appointed for short service during which the Officer is undergoing refresher training prior to retirement.

(*e*) Service under an appointment or engagement terminated for disciplinary reasons prior to its completion.

(*f*) Service terminated on ground of invalidity or on death due to the member's own default during service or arising from a disability present on entry which was not aggravated by service.

(*g*) That portion of service during which a member is not credited with pay for more than 21 consecutive days.

(*h*) Service by an unmarried member who dies during service.

2. Details of other amendments effected from 14th December, 1959, are set out in A.C.N.B. message 204F 1959.

(HPB 47/9/33.)

if an amendment to T.P.I. OK otherwise should be on 267/3.

UNCLASSIFIED.

295.—Naval Dockyard Police—Transfers from Permanent Naval Forces.

Owing to further reduction in the number of Naval Dockyard Police to be employed in all States, transfers to the Naval Dockyard Police remain temporarily suspended in order that numbers may be adjusted to present requirements.

2. Application for transfer may be forwarded in the usual manner but it is not expected that any vacancies will occur prior to July, 1961. All candidates should be qualified in accordance with the conditions laid down in Navy Order 156 of 1960.

3. Navy Order 776 of 1958 is hereby cancelled.

(DNR 302/54/5.)

(*Navy Orders* 776 *of* 1958 *and* 156 of 1960.)

UNCLASSIFIED.

296.—Officers of the Watch.

(*A.F.O.* 27/1960.)

Recent events have brought to attention a certain imprecision in the definition of the relative responsibilities for the safety of the ship of the officers on the bridge and in the operations room. Two main issues arose ; the merits or otherwise of the responsibility for the safety of the ship being exercised anywhere else than on the bridge and, irrespective of this, a requirement to tighten up the regulations so that the officer with the responsibility for the safety of the ship shall always be called the Officer of the Watch, and in so doing abolish a noticeable confusion of thought.

2. Q.R. and A.I., Article **3142**(2) reads " After taking charge of the watch he (the Officer of the Watch) is not to leave the bridge until he is properly relieved ". " Bridge " in this context has not been defined. It is usually understood to mean the compass platform or primary conning position, where the Officer of the Watch is customarily to be found in ships today. The Naval Board consider that the Officer of the Watch should normally be stationed at the primary conning position. They consider, however, that there are occasions when, in the interests of the safety of the ship his presence elsewhere—for example, in a position where a boat's falls can be seen or where the L.O.P. and 3 and 10 centimetre surface warning radars are available—would be more valuable. While these occasions are exceptional the Naval Board would not wish to fetter the discretion of the Captain to judge for himself what is required in particular exceptional circumstances and, if he considers it necessary, to direct the Officer of the Watch to exercise his responsibilities elsewhere than at the primary conning position.

3. It is the intention of the regulations that—

(*a*) only one officer should have the responsibility for the safety of the ship, and he should be called the Officer of the Watch; conversely, whoever is called the Officer of the Watch has the responsibility for the safety of the ship;

(*b*) when an unqualified officer is left in charge of a ship under the supervision of an experienced officer (Q.R. and A.I., Article **2906**(2)) the supervising officer is the Officer of the Watch and the officer under training is his subordinate;

(*c*) when the Captain assigns the responsibility for the safety of the ship to an officer who is doing another duty—for example, the Operations Room Officer—this officer becomes, in name as well as in effect, the Officer of the Watch;

(*d*) the Operations Room Officer's responsibility (if he has not been designated the Officer of the Watch as in (*c*) above) is to provide to the Officer of the Watch information available in the Action Information Organization such as will assist him in the safe navigation and tactical handling of the ship. The Officer of the Watch may accept or reject this advice; in any difference of opinion as to the action to be taken the Captain must, if time permits, be informed, but the Officer of the Watch has the final responsibility for the safety of the ship irrespective of the relative seniority of himself and the Operations Room Officer.

4. A further point on which the regulations are not at present sufficiently explicit is the relationship between the Officer of the Watch and an officer whom the Captain has authorized to act for him (the Captain) temporarily. The Officer of the Watch should report to and take directions from an officer to whom the Captain has thus temporarily delegated his personal responsibilities as though he were the Captain; references to " the Captain " in Articles of Q.R. and A.I. concerning the Officer of the Watch should be read as comprehending such an officer who could, for example, take the ship out of the hands of the Officer of the Watch (Article 3142(4)).

5. Admiralty has advised that Q.R. and A.I. will be amended.

(DTSR 303/1/9.)

UNCLASSIFIED.

297.—Ratings—Communication Branch—Instructions for the Examination of Communication Higher Rates.

Communication ratings (including W.R.A.N.S.) who fail in one or two subjects (excluding practical exercises) at a Petty Officers' qualifying course, Instructors' course or a conversion course may, at the discretion of the examining authority be permitted to be re-examined in that subject/s after a week's further instruction in each subject.

2. Only those ratings who are regarded as being likely to pass after the additional period of instruction are to be permitted re-examination.

3. Ratings who pass a Petty Officers' qualifying course or an L.R.O. (S) conversion course after an additional period of instruction will have their basic dates on the advancement roster adjusted by four months for each subject in which failed. Ratings who obtain the Instructor qualification at re-examination will have their basic date adjusted by a period of four months for each subject in which re-examined. Ratings not recommended prior to commencing the Petty Officers' qualifying course but who are selected for the Instructor course by the Signal School after re-examination will have a basic date of the actual date of finally passing.

4. Navy Order 1082 of 1959, is hereby cancelled.

(HPB 303/24/1.)

(*Navy Order* 1082 *of* 1959.)

UNCLASSIFIED.

298.—Ratings—Seaman Branch—Gunnery Office Writers.

In order to provide a greater quota of experienced men for duty as Gunnery Office Writers, it has been decided from the date of this order, to extend the present regulations whereby ratings qualified S.G.(C) or S.G.(Q) can be trained and paid for Writer duties, to include Able Seaman holding 2nd Class Gunnery Specialist Qualifications.

2. In addition Able Seamen who have qualified as Writers and have later qualified in a 2nd Class Specialist Qualification are eligible to be re-employed as Writers where a Writer is allowed by complement.

3. The employment of a rating on Writer duties is not to be allowed to prejudice his substantive advancement, and Commanding Officers are to ensure that men are available for upper deck experience before passing professionally for Leading Seaman. A Gunnery Office Writer passed for Leading Seaman should be given similar facilities before he is rated Leading Seaman.

4. A.B.R. 10, article 1153 (1) will be amended.

(HPB 303/22/3.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

299.—Danger due to Arcing during Replacement of Fuses in Power Circuits (A.C. and D.C.).

(*A.F.O.* 318/1960.)

A recent fire in one of H.M. ships which resulted in serious damage to electrical equipment was initiated because an electrical power fuse was replaced in a fuse panel which was " alive " and under conditions which made the fuse complete a circuit as the fuse was being replaced. This caused an arc to be produced at the fuse holder contacts and a fire resulted.

2. It is very important that the removal of a fuse does not break an electrical circuit and that the replacement of a fuse does not complete a circuit. The unexpected completion of a circuit when replacing a fuse may be dangerous and neon tester A.P. 32206 should be used for checking that the load circuit has been switched off. It is equally important that arrangements be made to ensure that the load circuit cannot be re-made whilst fuses are being replaced.

3. The tester should first be checked to see that the neon lamp lights by trying it across the output side of a pair of live fuses on another citcuit. It should never be applied to live busbar connections without a fuse in circuit.

4. Before any fuse is replaced the tester should be applied across the terminals of the vacant fuse way. If the neon lamp in the tester does not light this will indicate that there is no complete circuit and the fuse may be inserted; the next fuse position should then be tested in a similar way. This will entail checking the two fuse ways for a D.C. circuit and the three for an A.C. circuit.

5. Some relaxation of the above procedure may be accepted for lighting circuits where it may be impracticable to switch off all the lights connected to a pair of fuses.

6. The extra time taken to carry out the procedure must be accepted in the interest of safety to personnel and protection of valuable equipment. Repair work on an energized circuit involving the removal and replacement of fuses must be performed only by personnel fully aware of the dangers involved and the precautions to be observed.

(DEE 177/51/13.)

UNCLASSIFIED.

300.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE—Amendment.

Navy Order 812 of 1959 is to be amended as follows—

Class List Item No. 97, item (*b*), is to be *deleted* and the following *inserted* in its stead—

"To replace numbers 1, 2, 4, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17 and 18 Zwicky filters on flight deck and numbers 1, 4, 5, 6, 7, 9, 10, 12 and 16 Zwicky filters in the hangar with 2 (two) No. streamline filters type P.M. 55A fitted in parallel at each of these fuelling points".

(DCC 1213/252/4.)

(*Navy Order* 812 *of* 1959.)

UNCLASSIFIED.

301.—Naval Stores—Accounting—Reports of Stocktaking.

An examination of Reports of Stocktaking at Navy Office over a period indicates that in many instances minor investigations in the ships and establishments concerned would have resulted in accounting for items which had been temporarily revealed as discrepant.

2. Attention is directed to A.B.R. 4, Article 1603, which covers the stocktaking procedure for ships and establishments.

3. Particular attention should be given to the following aspects—

(*a*) It should be definitely established that items deficient on muster cannot be traced.

(*b*) Discrepancies disclosed on stocktaking should be fully investigated before preparation of form A.S. 148. Details of the investigations carried out and the conclusions arrived at should be briefly stated on form A.S. 148 or set out in a covering report. The initial check should of course be to establish that all outstanding vouchers are posted and the ledger balances are, in fact, correct.

(*c*) Deficiencies of items on Permanent Loan which cannot be resolved by investigation as indicated in paragraph (*a*) should be dealt with as losses and reported on form A.S. 126, unless definitely attributable to an accounting error or omission in which event form A.S. 148 should be raised.

(*d*) Strict attention to regular stocktaking at the following prescribed periods will assist materially in reducing discrepancies—

(i) Valuable or Attractive items every six months.

(ii) Remaining stocks at least once every eighteen months.

(iii) Part I. of Permanent Loan lists every six months.

(DNAS 400/51/51.)

UNCLASSIFIED.

302.—Naval Stores (Technical) (Class F, Group 1A/1)—Radar—Re-introduction of Test Oscillator, Pattern F1A/54707.

(*A.F.O.* 394/1960.)

Test oscillator, pattern F1A/54707, was reported as obsolete in Navy Order 143 of 1960—(*Naval Stores* (*Technical*) (*Class F, Group* 1*A*/1)—*Radar—Obsolete Stores—Disposal*).

2. Oscillator No. XT381, which will supersede pattern F1A/54707, will not now be available until 1961–62, and ships and services concerned should therefore retain holdings of pattern F1A/54707 pending further notification.

3. Test oscillator, pattern F1A/54707, will be re-introduced under class F, group 1A/1, and the relevant publications will be amended.

(DNAS 518/51/215.)

(*Navy Order* 143 *of* 1960.)

UNCLASSIFIED.

303.—Naval Stores (General)—Tool Kits for Engine Room, Electrical and Ordnance Artificer Ratings.

Consequent upon a review of the composition of ratings tool kits, alterations, as detailed hereunder, will be made to the following tool kits—

Class and Group.	*Pattern No.*	*Description.*
Tool Kit Type E3—		
Delete—		
B11 ..	H1842 ..	Pliers, round nose, 6-in.
B11 ..	2133	Rule, steel, 12-in.
B11 ..	2137	Rule, steel, 2-ft., 2 fold.
B11 ..	H2277	Screwdriver, London pattern, 8-in. x $\frac{1}{2}$-in. point made from $\frac{7}{8}$-in. x $\frac{7}{32}$-in.
B11 ..	2542	Square, 18-in. x 9-in.
Add—		
E12 ..	N.P.	Goggles, oxy-acetylene.
B11 ..	N.P.	Rule, brass, folding, 2-ft., 2 fold.
B11 ..	N.P.	Rule, brass, graduated on four edges, 1-ft.
B11 ..	N.P.	Screwdriver, cabinet handled, 8-in. x $\frac{1}{2}$-in. point.
B11	N.P.	Shears, tinmans, curved, 6-in.
B11 ..	2470	Spanner, open jaw, D.E., $\frac{1}{8}$-in. x $\frac{3}{16}$-in., BSW.

Class and Group.	Pattern No.	Description.
Tool Kit Type E3—continued.		
Add—		
B11 ..	910–6228	Spanner, open jaw, D.E., $\frac{3}{16}$-in. x $\frac{1}{4}$-in., BSW.
B11 ..	2472	Spanner, open jaw, D.E., $\frac{1}{4}$-in. x $\frac{3}{16}$-in. BSW.
B11 ..	910–6229	Spanner, open jaw, D.E., $\frac{5}{16}$-in. x $\frac{3}{8}$-in., BSW.
Tool Kit Type E4—		
Delete—		
B11 ..	H330	Calipers, outside, firm joint, 4-in.
B11 ..	H332	Calipers, outside, firm joint, 8-in.
B11 ..	H336	Calipers, inside, firm joint, 4-in.
B11 ..	H338	Calipers, inside, firm joint ,8-in.
B11 ..	H648	Drill, stock, hand, 0–$\frac{1}{4}$-in.
B11 ..	H1658	Nippers, end cutting, 7-in. approx., toggle jointed.
B11 ..	H1842	Pliers, round nose, 6-in.
B11 ..	H2129	Rule, flexible, steel, 6-ft.
B11 ..	H2132	Rule, steel, 6-in.
B11 ..	H2133	Rule, steel, 12-in.
B11 ..	H2277	Screwdriver, London pattern, 8-in. x $\frac{1}{2}$-in. point, made from $\frac{7}{8}$-in. x $\frac{7}{32}$-in.
B11 ..	H2481A	Spanner, D.E., open jaw, $\frac{3}{4}$-in. x $\frac{7}{8}$-in., B.S.W.
B11 ..	2483	Spanner, D.E., open jaw, $\frac{7}{8}$-in. x 1-in., B.S.W.
B11 ..	H2537	Square, combination, with protractor head, 12-in.
B11 ..	H2962	Vice hand, 5-in.
Add—		
B11 ..	910–4188	Chisel, cold, diamond point, $\frac{1}{8}$-in. x 4-in. long.
B11 ..	910–4202	Chisel, cold, flat, $\frac{3}{8}$-in. x 4-in. long.
B11 ..	N.P.	Chisel, bar, 18-in.
B11 ..	6881	Extractor, " Ezi-Out " No. 1.
B11 ..	6882	Extractor, " Ezi-Out " No. 2.
B11 ..	6883	Extractor, " Ezi-Out " No. 3.
B11 ..	6884	Extractor, " Ezi-Out " No. 4.
B11 ..	6885	Extractor, " Ezi-Out " No. 5.
B11 ..	6886	Extractor, " Ezi-Out " No. 6.
B11 ..	910–4877	File, hand, safe edge, bastard, 6-in.
B11 ..	910–4893	File, hand, safe edge, smooth, 6-in.
B11 ..	910–4923	File, hand, round, bastard, 6-in.
B11 ..	910–4931	File, hand, round, smooth, 6-in.
B11 ..	910–4939	File, hand, square, bastard, 6-in.
B11 ..	910–4947	File, hand, square, smooth, 6-in.
B11 ..	910–4961	File, hand, 3 square, bastard, 6-in.
B11 ..	910–4967	File, hand, 3 square, smooth, 6-in.
B11 ..	N.P.	Shears, tinmans, 6-in.
B11 ..	910–5957	Spanner, adjustable, 11-in.
B11 ..	N.P.	Tool bits, square, 18 per cent. tungsten—set comprising— $\frac{3}{16}$-in. x $\frac{3}{16}$-in. x $2\frac{1}{2}$-in. $\frac{1}{4}$-in. x $\frac{1}{4}$-in. x $2\frac{1}{2}$-in. $\frac{5}{16}$-in. x $\frac{5}{16}$-in. x $2\frac{1}{2}$-in.
F2A ..	54	Torch, electric, 2 cell.
B11 ..	910–6635	Wrench, Stillson, 10-in.

Class and Group.	Pattern. No.	Description.
Tool Kit Type E5—		
Delete—		
B11 ..	648	Drill, stock, hand, 0–$\frac{1}{4}$-in.
D3 ..	C1612	Line, chalk.
B11 ..	H1658	Nippers, endcutting, 7-in. approx., toggle jointed.
B11 ..	H1842	Pliers, round nose, 6-in.
B11 ..	H2111	Reel, carpenters, line, $2\frac{1}{4}$-in. x 2-in.
B11 ..	H2132	Rule, steel, 6-in.
Add—		
E12 ..	N.P.	Goggles, oxy-acetylene.
B11 ..	N.P.	Iron, soldering, 8-oz.
B11 ..	N.P.	Iron, soldering, hatchet, 12-oz.
E2 (*c*)	N.P.	Mallet, rubber.
B11 ..	N.P.	Pliers, adjustable (alligator grip) locking.
B11 ..	N.P.	Shears, tinmans, snip, straight, 6-in.
B11 ..	N.P.	Shears, tinmans, snip, curved, 6-in.
B11 ..	N.P.	Shears, tinmans, snip, curved, 12-in.
Tool Kit Type E6—		
Delete—		
B11 ..	648	Drill, stock, hand, 0–$\frac{1}{4}$-in.
B11 ..	H929	Gauge, boiler plate, graduated $\frac{1}{64}$-in. and 1/100-in., capacity 2-in.
D3 ..	C1612	Line, chalk.
B11 ..	H1842	Pliers, round nose, 6-in.
B11 ..	H2483	Spanner, $\frac{7}{8}$-in. x 1-in., B.S.W.
Add—		
E12 ..	N.P.	Goggles, oxy-acetylene.
B11 ..	N.P.	Shears, tinmans, snip, curved, 6-in.
B11 ..	910–5957	Spanner, adjustable, 11-in.
B11 ..	2470	Spanner, open jaw, D.E., $\frac{1}{8}$-in. x $\frac{3}{16}$-in., B.S.W.
B11 ..	910–6228	Spanner, open jaw, D.E., $\frac{3}{16}$-in. x $\frac{1}{4}$-in., B.S.W.
B11 ..	2472	Spanner, open jaw, D.E., $\frac{1}{4}$-in. x $\frac{5}{16}$-in., B.S.W.
B11 ..	N.P.	Square, marking off, 8-in.
F2A ..	54	Torch, electric, 2 cell.
B11 ..	910–6635	Wrench, Stillson, 10-in.
Tool Kit Type L1—		
Add—		
B11 ..	9429	Mirror, inspection.
B11 ..	N.P.	Spanner, crescent, 10-in.
Tool Kit Type L4—		
Delete—		
B11 ..	H574	Dividers, spring, solid nut, 6-in.
B11 ..	H1208	Hammer, engineers, $1\frac{1}{4}$-lb.
B11 ..	H2230A	Scraper, engineers, $\frac{1}{2}$ round, bent, 3-in.
B11 ..	H2546	Square, steel, 6-in.
B11 ..	H2961	Vice, hand.

Class and Group.	Pattern No.	Description.
Tool Kit Type L4—continued.		
Add—		
B11 ..	9429	Mirror Inspection.
B11 ..	910–7871	Screwdriver, mechanics, set of 4 in box.
B11 ..	2456	Spanner, box, tubular, D.E., $\frac{1}{4}$-in. x $\frac{5}{16}$-in.
B11 ..	N.P.	Spanner, crescent, 10-in.
Tool Kit Type L5—		
Delete—		
B11 ..	H1208	Hammer, engineers, $1\frac{1}{4}$-lb.
B11 ..	H2129	Rules, steel flexible, 6-ft.
B11 ..	H2311	Scriber, fitters, straight, right angle point, 7-in.
B11 ..	3769	Spanner, adjustable, stop, type 13.
B11 ..	H2961	Vice, hand.
Add—		
B11 ..	9429	Mirror, inspection
B11 ..	N.P.	Screwdriver, stubby (e.g., Turner 24).
B11 ..	N.P.	Spanner, crescent, 10-in.
Tool Kit Type L6—		
Delete—		
B11 ..	648	Drill, stock, hand.
B11 ..	1841	Pliers, round nose, 4-in.
B11 ..	1842	Pliers, round nose, 6-in.
B11 ..	1932	Punch, $\frac{1}{16}$-in., tapered point.
B11 ..	1935	Punch, $\frac{1}{8}$-in., tapered point.
B11 ..	2129	Rule, steel, flexible, 6-in.
Section		
10H ..	4331	Spanner " C ", small.
10H ..	4332	Spanner " C ", medium.
10H ..	4333	Spanner " C ", large.
B11 ..	2961	Vice, hand, 4-in.
Add—		
B11 ..	910–5865	Screwdriver, Phillips Head, $\frac{1}{4}$-in. x 4-in. blade.
B11 ..	910–6062	Wrench, Key Allen Head, $\frac{1}{8}$-in. x $2\frac{1}{4}$-in. long.
B11 ..	910–6063	Wrench, Key Allen Head, $\frac{5}{32}$-in. x $2\frac{1}{2}$-in. long.
B11 ..	910–6064	Wrench, Key Allen Head, $\frac{3}{16}$-in. x $2\frac{3}{4}$-in. long.
B11 ..	910–6065	Wrench, Key Allen Head, $\frac{7}{32}$-in. x 3-in. long.
B11 ..	910–6066	Wrench, Key Allen Head, $\frac{1}{4}$-in. x $3\frac{1}{4}$-in. long.
Increase Quantities—		
B11 ..	2470	Spanner, D.E., open jaw, $\frac{1}{8}$-in. x $\frac{3}{16}$-in., B.S.W. — From 1 No. to 2 No.
B11 ..	910–6228	Spanner, D.E., open jaw, $\frac{3}{16}$-in. x $\frac{1}{4}$-in. B.S.W. — From 1 No. to 2 No.
B11 ..	2472	Spanner, D.E., open jaw, $\frac{1}{4}$-in. x $\frac{5}{16}$-in. — From 1 No. to 2 No.
Tool Kit Type O1—		
Delete—		
B11 ..	2287	Screwdriver, ratchet, 5-in.
B11 ..	H2962	Vice, hand, 5-in.
B11 ..	H3021	Wrench, pipe, 9-in. (footprint or similar).
B11 ..	H3023	Wrench, Stillson, 14-in.

Class and Group.	Pattern No.	Description.
Tool Kit Type O1—continued.		
Add—		
B11 ..	N.P.	Chisel, cold, flat, 1-in. x 8-in. long.
B11 ..	N.P.	Keys, Allen, " Unbrako " W.5 set, $\frac{1}{16}$-in. to $\frac{1}{4}$-in. across flats, eight in set mounted on spring holders.
B11 ..	N.P.	Pliers, vice-grip.
B11 ..	N.P.	Screwdriver, stubby (e.g., Turner 24).
B11 ..	N.P.	Screwdriver, right angled, D.E., small and medium.
B11 ..	N.P.	Shears, tinsmith, small, straight.
B11 ..	910–5963	Spanner, crescent, 6-in.
B11 ..	910–5965	Spanner, crescent, 10-in.
B11 ..	910–6185	Spanner, ring, $\frac{3}{16}$-in. to $\frac{5}{8}$-in., B.S.W.
B11 ..	N.P.	Tap wrench, " T ".

2. Existing kits should be adjusted accordingly.

3. Appendix 7 of A.B.R. 4 will be amended accordingly.

(DNAS 506/83/2.)

UNCLASSIFIED.

304.—Stores—All Categories—Purchases from Petty Cash.

A petty cash sales tax exemption form (form A.D. 1261Z/A.S. 3111Z) has been introduced for general use throughout the Department when a sales tax exemption authority is necessary.

2. Supplies of the forms should be demanded, as required, from Superintending Naval and Air Store Officer, Sydney, but, pending availability of supplies, immediate requirements should be met by the roneo, or similar process in accordance with the specimen shown in the appendix to this order.

3. It has been decided that the limit for purchases from petty cash is to be £2. As a general rule all purchases of supplies for amounts of £2 and under should be arranged by the petty cash method. Local Purchase Orders should be not prepared for such purchases unless valid administrative reasons exist for doing so, e.g., delivery by the contractor required.

4. Petty cash advances should be reviewed to adequately cope with any increased expenditure involved and new advances should be made where necessary.

APPENDIX.

Commonwealth of Australia.

DEPARTMENT OF THE NAVY.

PETTY CASH ORDER.

(Sales Tax Exemption.)

To..... From.....

.....

.....

Please supply the undermentioned to bearer.

...../..... ...../19.....

I HEREBY CERTIFY that these goods are free of Sales Tax as they are for the official use of the Department of the Navy and are not for resale. This order is not valid for purchases exceeding a total of £2.

.....
Officer authorized to order.

(DNAS 464/70/81.)

Section 6.

ESTABLISHMENTS.

UNCLASSIFIED.

305.—Drawings for Aircraft and Equipment Issued for Manufacturing Purposes.

All prints of drawings which have been reproduced for quotation and manufacturing purposes are to be stamped with a rubber stamp and signed by the Director of Aircraft Maintenance and Repair, or by either the Naval Air Engineer Overseer, Sydney, or the Naval Resident Technical Officer stationed at Fairey Aviation Co. (A/sia) Pty. Ltd. as his representatives for the Sydney area, before despatch to the authority ultimately placing the order.

2. Prints for manufacturing purposes are to be stamped—

"CERTIFIED COPY. DATE.....

(SIGNATURE).....

Director of Aircraft.

Maintenance and Repair,
Navy Office.

APPLICABLE TO ORDER No.....ONLY."

3. The remaining prints are to be stamped—

"DEPARTMENT OF THE NAVY
DIVISION OF AIRCRAFT MAINTENANCE AND REPAIR
FOR QUOTATION PURPOSES ONLY
NOT TO BE USED FOR MANUFACTURE."

4. The authority ultimately placing the order is—
   (*a*) not to accept prints unless so marked;
   (*b*) to insert the order number in the appropriate space on each "Certified Copy" before issuing for manufacturing purposes;
   (*c*) to return certified copies for re-certification when required for manufacture against subsequent orders.

(DNAS 1311/56/5.)

UNCLASSIFIED.

306.—Pistols—Supply to Civil Paying Officers and Escort Officers in H.M.A. Establishments and Offices.

The .32 Browning automatic is the approved type of pistol for issue to civil paying officers and escort officers.

2. Where supply has been made, the pistols should be taken on charge in the Furniture and Equipment inventory account and issued on loan to the paying officer. The .32 Browning automatic pistol is not a Naval Armament Store item nor is procurement and supply arranged by Naval Armament Depots.

3. When not in use the pistols are to be locked in the paying officer's safe.

4. It is necessary to ensure that—
   (*a*) the pistol is kept registered with the local police authority;
   (*b*) regular maintenance is given and any repairs necessary are effected by a qualified gunsmith;
   (*c*) serviceable ammunition is available. The ammunition is to be frequently examined for signs of deterioration or damage. Dampness causes misfires and hangfires and of the two, the latter is the more dangerous. If the packages show signs of dampness or if the ammunition is discoloured, corroded or in any other way defective, it should not be used and suitable arrangements should be made for its safe disposal.
   (*d*) the paying officer and/or the authorized escort is competent to use the weapon.

5. In the case of loss of a pistol the matter must be reported to the appropriate police authority and a formal inquiry held. A report is also to be made to the Naval Board, through the administrative authority indicating action taken and the result of the inquiry, if completed, otherwise the extent to which it has progressed.

6. Navy Order 428 of 1958 is hereby cancelled.

(DNA 710/51/37.)

(*Navy Order* 428 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

Registrar.

FOR OFFICIAL USE ONLY. C.N.O. 307/60.

COMMONWEALTH NAVY ORDER

C.N.O's

Navy Office, Canberra,
5th May, 1960.

osed order is promulgated for information, necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

2824/60.

UNCLASSIFIED.

Books—Distribution of Non-accountable Publications during February, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications and A.F.O. " S.C." Series contained in the Appendix to this order have been distributed to ships and services during February, 1960. Paragraph 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series Amendments and A.P. amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	27th November, 1959.
Aeroplane	18th December, 1959.
Aeroplane	25th December, 1959.
Aeroplane	1st January, 1960.
Aircraft	Volume 39, No. 5, February, 1960.
D.A.R.D. Technical Circular	No. 215.
Fibres and Plastics	Volume 20, No. 11, December, 1959.
Flight	11th December, 1959.
Flight	18th December, 1959.
Flight	25th December, 1959.
Flight	1st January, 1960.
Flight Index	January–June, 1959.
Instructions for the Fleet Air Arm	Amendment List No. 1.
Joint Services Recognition Journal	Volume 14, No. 11, February, 1960.
Journal of the American Institute of Navigation	Volume 6, No. 6, Summer, 1959.
Journal of the R.N. Medical Service	Volume XLV., No. 3, Summer, 1959.
List of Propellant Lots, 1958	Amendment 6.
Manual of the Audit Act, and Treasury Regulations	Issue No. 15, dated 15th September, 1959
Manual of the Audit Act, and Treasury Regulations	Issue No. 16, dated 23rd September, 1959.
Manual of the Audit Act, and Treasury Regulations	Issue No. 17, dated 18th November, 1959.
Manual of the Audit Act, and Treasury Regulations	Issue No. 18, dated 19th November, 1959.
Manual of the Audit Act, and Treasury Regulations	Issue No. 19, dated 1st December, 1959.
Manual of the Audit Act, and Treasury Regulations	Issue No. 20, dated 1st December, 1959.
Manual of the Audit Act, and Treasury Regulations	Issue No. 21, dated 12th January, 1960.
Manual of the Audit Act, and Treasury Regulations	Issue No. 22, dated 4th January, 1960.
R.N. Navy List	1959.
N.A.M.A.N.	N2029–N2040.

APPENDIX—*continued.*

BOOKS, MAGAZINES, PAMPHLETS, ETC.—*continued.*

Publication.	*Date.*
Post Office Guide	Supplement No. 54, December, 1959.
Regulations and Instructions (Provisional) for the R.A.N.R.	Change No. 2.
United Nations Review	Volume 6, No. 6, December, 1959.
United Nations Review	Volume 6, No. 7, January, 1960.
United States Naval Institute Proceedings	Volume 85, No. 12, December, 1959.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.T.P. 10, British Supplement No. 1	3.
B.R. 226B	1.
B.R. 226C	2.
B.R. 367 (1943)	15.
B.R. 367A	3.
B.R. 810. Illustrations to Section 19	—
B.R. 815 (45)	5.
B.R. 926	1.
B.R. 1159	Amendments 10 and 11.
B.R. 1257	18.
B.R. 1596	9.
B.R. 1671 (2)	9.
B.R. 1717 (1)	17.
B.R. 1736 (44)	4.
B.R. 1736 (48) (1), Volume 1	1.
B.R. 1736 (50) (4)	2.
B.R. 1768 (1) to (5)	16.
B.R. 1771 (20)	1.
B.R. 1822 (1)	16.
B.R. 1837 (7), Division L, Section LL	9.
B.R. 1837 (7), Division L, Section LX	19.
B.R. 1837 (7), Division L, Section LY	18.
B.R. 1917 (1)	41.
B.R. 1917 (2)	43.
B.R. 1917 (2A)	30.
B.R. 1944 (2)	7.
B.R. 1944 (3)	6.
B.R. 2047A (1)	4.
B.R. 2047A (2)	4.
B.R. 2047A (3)	4.
B.R. 2047A (4)	4.
B.R. 2047A (11)	2.
B.R. 2047A (19)	3.
B.R. 2047A (20)	4.
B.R. 2047A (21)	1.
B.R. 2047B (5)	5.
B.R. 2047B (6)	4.
B.R. 2065 (2)	7.
B.R. 2127/56	11.
B.R. 2169	Amendments 2 and 3.
B.R. 3011	1.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
B.R. 1978 (Revised 1958)	S.C. 1/60. Correction No. 7.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 155.
957C, Vol. 1 (2nd Edition)	A.L. 25.
1086, Book 2 (2nd Edition)	A.L. 92.
1086, Book 3, Part 1 (2nd Edition) ..	A.L. 72.
1086, Book 4, Part 2 (2nd Edition) ..	A.L. 39 and 53.
1086, Book 4, Part 3 (2nd Edition) ..	A.L. 80 and 81.
1086, Book 4, Part 4 (2nd Edition) ..	A.L. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 and 19.
1086, Book 5 (2nd Edition)	A.L. 85.
1086, Book 7 (2nd Edition)	A.L. 104 and 106.
1086, Book 9 (2nd Edition)	A.L. 128.
1086, Book 10 (2nd Edition)	A.L. 90 and 91.
1086, Book 11 (2nd Edition)	A.L. 138 (Erratum).
1086, Book 12 (2nd Edition)	A.L. 156, 159 and 160.
1086, Book 12, Part 1 (2nd Edition) ..	A.L. 161, 162, 163, 164, 165, 166, 167 and 168.
1086, Book 13 (2nd Edition)	A.L. 130, 132 and 133.
1086, Book 14 (2nd Edition)	A.L. 37.
1182A, Vol. 2, Part 1	C.37 D.6 (A.L. 2) D.12 (A.L. 1).
1182A, Vol. 6	A.L. 13.
1182C, Vol. 1	A.I.L. 3/59 A.I.L. 4/59 A.I.L. 5/59 A.I.L. 6/59 A.I.L. 7/59 A.I.L. 8/59 A.I.L. 9/59 A.I.L. 10/59 A.I.L. 11/59 A.I.L. 12/59 A.L. 142.
1182C, Vol. 2	(A.L. 78)–F.17.
1182C, Vol. 4, Parts 2 and 6	A.L. 24.
1182E, Vol. 1	A.L. 79.
1275A, Vol. 1, Section 13	A.L. 26.
1275A, Vol. 1, Section 16	A.L. 31, 32 and 33.
1275A, Vol. 1, Section 20	A.L. 49.
1275A, Vol. 6, Section 20	A.L. 5.
1275B, Vol. 1, Section 17	A.L. 5.
1275G, Vol. 2, Part 1	(A.L. 138)–K.13.
1275T, Vol. 2, Part 1	(A.L. 19)–E.2.
1355, Vol. 2, Part 1	(A.L. 129)–C.151 (A.L. 128)–F.103.
1355A, Vol. 1	A.L. 71.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1355H, Vol. 1	A.L. 11.
1374B, Vol. 2, Part 1	(A.L. 70)–A.11.
1492A, Vol. 1	A.L. 86.
1538D, Vol. 6, Parts 2 and 4	A.L. 81.
1661B, Vol. 1 (2nd Edition)	A.L. 94.
1661E, Vol. 1	A.L. 85.
1661F, Vol. 1	A.L. 78 (with Orange Label) A.L. 79, 80, 81, 82 and 83.
1664A, Vol. 1...	A.L. 150.
1664A (2nd Edition), Vol. 1, Book 1 ..	A.L. 13, 14, 15 and 16.
1664A (2nd Edition), Vol. 1, Book 2 ..	A.L. 12.
1664A, Vol. 2, Part 1	A.89 (A.L. 1).
1664A (2nd Edition), Vol. 2, Part 3, Book 1	A.L. 14, 15, 16, 18, 19 and 20.
1664D, Vol. 1, Part 2, and Vol. 5 ..	A.L. 53.
1664E, Vol. 1 and Vol. 5	A.L. 16.
1803, Vol. 2, Part 1	D.152 D.156 E.127 E.128 F.92 F.93 F.95 T.8.
1803C, Vol. 2, Part 2	A.L. 35.
1803D, Vol. 1, Book 4	A.I.L. 1/59 A.L. 84.
1803N, Vol. 1, Book 1	A.L. 29.
1803P, Vol. 1	A.L. 97.
1803P, Vol. 2, Part 3	A.L. 12.
1803R, Vol. 1	A.L. 71.
1803T, Vol. 1	A.L. 83.
2029A/2441A, Vol. 3, Parts 1 and 4, Section 53Y (2nd Edition)	A.L. 3.
2173A, Vol. 1 and Vol. 6, Part 1 ..	A.L. 42.
2240A, Vol. 1, Book 1	A.L. 128.
2306G, Vol. 1 and 6	A.L. 10.
2337, Vol. 2	(A.L. 169)–A.33.
2531L, Vol. 1	A.L. 7.
2533C, Vol. 3	A.L. 3 and 4.
2533H, Vol. 4, Part 6 (N) (Office and Working Copies)	A.L. 2.
2538HA, Vol. 2, Part 1	(A.L. 124)–B.78.
2892F, Vol. 2	(A.L. 82)–B.70 (A.L. 83)–B.71 (A.L. 85)–B.73.
2892F, Vol. 3, Part 1 (2nd Edition) ..	A.L. 9 and 10.
3158, Vol. 2	(A.L. 485)–A.7 (Alt. 4 inc.) (A.L. 487)–B.8 (A.L. 481)–B.11 (Alt. 19) (A.L. 488)–D.9 (A.L. 486)–G.2 (Alt. 14) (A.L. 480)–H.14 (Alt. 1).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet*
4121C, Vol. 3, Part 1	A.L. 23.
4269C, Vol. 1	A.L. 62.
4269C, Vol. 3, Part 1	A.L. 10.
4269C, Vol. 4, Part 3 (N) (Office and Working Copies)	A.L. 10.
4269C, Vol. 5, Part 2 (N), Issue 3 ..	A.L. 6.
4288, Vol. 1, Part 1	A.L. 49, 50 and 51.
4288, Vol. 1, Part 2 and Vol. 5	A.I.L. 17/59
	A.I.L. 18/59
	A.I.L. 19/59
	A.L. 73, 74, 75 and 76.
4288, Vol. 2	(A.L. 331)–B.222 (Alt. 1 inc.)
	(A.L. 332)–B.223 (Alt. 1 inc.)
	(A.L. 333)–B.224
	Ejection Seat/R.A.N. 1 (Dec., 1959).
4303B, Vol. 1, Book 2	A.L. 16.
4303C, Vol. 1	A.L. 114.
4303E, Vol. 1	A.L. 56 and 57.
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	Gannet/RAN. 52 (January, 1960).
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	STI/Miscellaneous/238 (Issue 2) (16/10/59)
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	A.1 (Issue 3) (16/10/59)
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R.A.N.A.M.O. Gannet	STI/RAN. 76 (December, 1959)
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R.A.N.A.M.O. General..	L.60 (December, 1959) (Issue 2)
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	SI/RAN. 2 (Issue 2) (December, 1959).
R.A.N.A.M.O. Leonides	No. 7 (January, 1960).
R.A.N.A.M.O. Sea Venom	A.L. 6
	A.10 (Issue 3) (December, 1959).
R.A.N.A.M.O. Vampire Trainer	C.1 (Issue 3) (December, 1959).
Aviation Studies (International) Ltd. ..	Military Aircraft Data—Replacement Sheets (4 leaves) (September, 1959)
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D.C.A. Aeronautical Information Publications	R.A.C./3 (A.L. 20).
D.C.A. Aviation Safety Digest	No. 20 (December, 1959).
I.C.A.O. Bulletins	Vol. XIV., No. 9—1959.
R.A.F. Flight Information Publications—Terminal Approach Procedure Charts—High and Low Altitudes	A.L. 5.
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	2nd Quarter, 1959.
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A.A.P. 382, Vol. 2	A.L. 3.
R.A.A.F. Crash Critique	No. 61 (17/11/59).
R.A.A.F. Repair and Maintenance General Instructions	A.L. 296, 299, 301, 304, 308, 309, 310 311, 312, 313, 314, 314 (Corrigenda), 315, 316, 317, 317 (Corrigenda) and 318.
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R.A.A.F. Summary of Defects	Airframe and Miscellaneous Equipment Serial No. 2—Issue October, 1959
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	Engine and Accessories Serial No. 20—Period June, 1959 to September, 1959.
	Serial No. 3/1959, Quarter ending 31/8/59.

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	S.R. 1253/N.B.
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	S.R. 1415/N.B.

(DNAS 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

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C.N.O.'s 308-327/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
10th May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Ross P. Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

2825/60.

CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED.

308.—Allotments for Life Assurance Premiums—Commission Charge.

Treasury instructions provide for a commission charge to be made against life assurance companies for the collection of amounts paid to them as premiums on life assurance policies. Where the amounts are for purposes other than life assurance, no charge is made.

2. It is necessary to distinguish between the two types of payment; hence when an allotment is declared in favour of a life assurance company for a purpose other than life assurance, e.g., repayment of loan, this purpose is to be shown in the column provided for the name and address of the allottee.

3. Navy Order 353 of 1958 is hereby cancelled.

(DNA 271/53/8.)

(*Navy Order* 353 *of* 1958.)

UNCLASSIFIED.

309.—Films and Filmstrips—Instructional—Titles—" Radio and Electronic Faultfinding " (Serial No. A 1060)—Revised Classification.

(*A.F.O.* 21/1960.)

The classification of the Admiralty instructional film " Radio and Electronic Faultfinding " (Serial No. A 1060) was promulgated in Navy Order 108 of 1960 as Restricted.

2. As this film is unclassified, the following *amendment* is to be made to Navy Order 108 of 1960.—

Paragraph 4—*Delete* " The classification is Restricted ".

(DNAS 519/56/67.)

(*Navy Order* 108 *of* 1960.)

UNCLASSIFIED.

310.—Ratings—Qualifications of Electrical Branch (Air) Ratings to Sign Form A 700 as Supervisory Ratings.

In view of the continuing shortage of Supervisory Electrical Branch (Air) ratings, it has been decided that for a temporary period selected Acting Leading Electrical Mechanics (Air) and Acting Leading Radio Electrical Mechanics (Air) may be authorized to sign column 9 of the Change of Serviceability, Periodic Inspection and Repair Log of form A 700 as supervisory ratings for work in their own trade. The authorization is to be given at the discretion of the Captain of the ship or station at which the rating is serving, subject to the following restrictions—

(*a*) Ratings selected must have qualified for Leading Rate.

(*b*) The number of ratings so authorized is to be limited to that essential to carry out the current task.

(*c*) The authorization is only to be given for the time the rating is serving in the particular ship, station, group or squadron concerned.

2. A central record of ratings so authorized is to be kept at each ship or station.

3. The authorization is not to be recorded on History Sheets.

(DEE 1213/201/5.)

incorrect

UNCLASSIFIED.

311.—Specialist Treatment—Procedure for Application and Payment of Accounts.

Accounts for specialist examination and/or treatment by medical and dental practitioners may be authorized and paid locally if the fees are in accordance with those promulgated from time to time in Navy Orders titled " Fees payable to medical practitioners " and " Fees payable to dental practitioners ".

2. With reference to N.F.R. & I., article 186, clause 8, liability for a charge in excess of the approved scale is not to be incurred without prior approval from Navy Office. Only in urgent cases may approval be anticipated and covering approval is then to be obtained without delay.

3. C.O.R. article 552 is cancelled.

(MDG 327/54/16.)

UNCLASSIFIED.

312.—Training—Ratings—Course Programme, July, 1960 to June, 1961.

The programme of courses for ratings training during the period July, 1960, to June, 1961, is as follows—

Course.	*Duration.* (In weeks.)	*Starts.*
A.—Seaman Branch—		
P.R.I.	16	8th August, 1960.
R.P.I.	20	1st August, 1960. 6th February, 1961.
R.P. 2	14	15th August, 1960. 16th January, 1961. 24th April, 1961.
Coxswain	10	4th July, 1960. 30th January, 1961.
Nav. Yeo.	6	31st October, 1960. 27th February, 1961.
TAS.I. (Ex U.C.1)	17	20th February, 1961.
U.C.1	17	27th February, 1961.
U.C.2	15	15th August, 1960 29th August, 1960 30th January, 1961 13th March, 1961.
U.W.1	15	8th August, 1960.
U.W.2	12	22nd August, 1960.
TAS.O.W.	8	20th March, 1961.
C.D.1	12	30th January, 1961.
C.D.2	13	8th August, 1960. 20th February, 1961.
C.D.3	20	1st August, 1960 30th January, 1961.
G.I.	28	8th August, 1960. 6th February, 1961.
F.C.1	12	29th August, 1960. 6th March, 1961.

Course.	*Duration.* (In weeks.)	*Starts.*
A.—Seaman Branch—continued.		
G.A.1	11	15th August, 1960. 6th February, 1961. 20th March, 1961.
Q.A.1	8	5th September, 1960. 6th February, 1961.
F.C.2	13	8th August, 1960. 5th September, 1960. 13th February, 1961. 13th March, 1961.
G.A.2	16	8th August, 1960. 22nd August, 1960. 6th February, 1961. 27th February, 1961.
Q.A.2	14	8th August, 1960. 5th September, 1960. 13th February, 1961. 13th March, 1961.
G.O.W.	11	8th August, 1960. 26th September, 1960. 6th February, 1961. 3rd April, 1961.
P.T.1	12	8th August, 1960.
P.T.2	20	8th August, 1960. 9th January, 1961.
Recruits (Seaman)—		
Part 1	8	2nd August, 1960. 30th August, 1960. 27th September, 1960 25th October, 1960. 22nd November, 1960. 17th January, 1961. 14th February, 1961. 14th March, 1961. 11th April, 1961. 9th May, 1961. 6th June, 1961.
Part 2 A	3	22nd August, 1960. 29th August, 1960. 26th September, 1960. 24th October, 1960. 28th November, 1960. 9th January, 1961. 6th February, 1961. 13th March, 1961. 10th April, 1961. 8th May, 1961. 5th June, 1961.

Course.	Duration. (In weeks.)	Starts.
A.—Seaman Branch—continued.		
Recruits (Seaman)—continued.		
S.G.	8	15th August, 1960. 12th September, 1960. 19th September, 1960. 17th October, 1960. 14th November, 1960. 9th January, 1961. 30th January, 1961. 4th April, 1961. 17th April, 1961. 1st May, 1961. 29th May, 1961.
R.P.3	8	1st August, 1960. 29th August, 1960. 19th September, 1960. 26th September, 1960. 24th October, 1960. 21st November, 1960. 9th January, 1961. 6th February, 1961. 6th March, 1961. 10th April, 1961. 24th April, 1961. 8th May, 1961. 5th June, 1961.
U.C.3	12	29th August, 1960. 19th September, 1960. 30th January, 1961. 20th March, 1961. 3rd April, 1961.
U.W.3	8	8th August, 1960. 16th January, 1961. 13th March, 1961.
B.—Communication Branch—		
R.S. and R.C.I.	27	8th August, 1960. 16th January, 1961.
R.S.(S) and R.(S)I.	19	8th August, 1960.
C.Y. and T.C.I.	17	8th August, 1960. 16th January, 1961.
R.O.(S) Conversion	17	8th August, 1960.
C.—Regulating Branch—		
M.A.A.	5	8th August, 1960.
R.P.O.	7	8th May, 1961.
L.P.M.	8	12th September, 1960. 20th March, 1961.
D.—Musician Branch—		
Ldg. Musician	14	8th August, 1960. 16th January, 1961.

Course.	Duration. (In weeks.)	Starts.
E.—Supply and Secretariat Branch—		
Flinders Naval Depot—		
P.O. Ck. (S) and (O)	4	8th August, 1960. 26th September, 1960. 21st November, 1960. 6th February, 1961. 3rd April, 1961. 29th May, 1961.
Ldg. Ck. (S) and (O)	4	29th August, 1960. 24th October, 1960. 9th January, 1961 6th March, 1961. 1st May, 1961.
H.M.A.S. WATSON—		
P.O. Ck. (O) and (S), and Ldg. Ck. (O) and (S)	4	29th July, 1960. 2nd September, 1960. 7th October, 1960. 11th November, 1960. 10th February, 1961. 28th April, 1961. 2nd June, 1961.
F.—Ordnance Branch—		
C.O.A. at F.N.D.	10	1st August, 1960.
at WATSON	11	10th October, 1960.
O.A.3 at WATSON	14	1st August, 1960.
at F.N.D.	30	7th November, 1960.
O.A.3 at WATSON	14	9th January, 1961.
at F.N.D.	30	17th April, 1961.
G.—Electrical Branch—		
E.A.	65	1st August, 1960. 9th January, 1961.
P.O. El.(E)	35	8th August, 1960.
P.O. R.El.	34	9th January, 1961.
P.O. R.El.(A)	29	9th January, 1961.
P.O. El.(P)	21	3rd April, 1961.
L.O.W.	9	8th August, 1960. 16th January, 1961.
Junior Teletype	7	8th August, 1960. 16th January, 1961.
H.—Engineering Branch—		
C.E.R.A. & Ch. Mech.	18	8th August, 1960.
Mechanician	104	8th August, 1960.
M.T.C.	16	8th August, 1960. 16th January, 1961.
E.O.W.	16	8th August, 1960. 16th January, 1961.
Bricklaying and Lagging	4	10th October, 1960. 10th April, 1961.

Course.	Duration. (In weeks.)	Starts.
H.—Engineering Branch—continued.		
M.T. Drivers at F.N.D.	6	15th August, 1960. 10th October, 1960. 23rd January, 1961. 10th April, 1961.
Long Welding	16	13th March, 1961.
I.—Fleet Air Arm—		
A.H.2	11	15th August, 1960.
L.A.M.(A)	9	5th September, 1960.
L.A.M.(E)	9	5th September, 1960.
J.—General Courses—		
P.O. Leadership—		
Course No. 118	6	8th August, 1960.
Course No. 119		5th September, 1960.
Course No. 120		3rd October, 1960.
Course No. 121		31st October, 1960.
Course No. 122		16th January, 1961.
Course No. 123		20th February, 1961.
Course No. 124		20th March, 1961.
Course No. 125		17th April, 1961.
Course No. 126		15th May, 1961.
Instructional Technique—		
Flinders Naval Depot	1	8th August, 1960. 29th August, 1960. 26th September, 1960. 24th October, 1960. 16th January, 1961 6th March, 1961. 3rd April, 1961. 1st May, 1961. 2nd June, 1961.
H.M.A.S. WATSON	1	8th August, 1960. 21st November, 1960. 23rd January, 1961. 22nd May, 1961.
A.B.C.D.—		
Junior A.B.C.D. (PENGUIN)	1	4th July, 1960. 22nd August, 1960. 5th September, 1960. 26th September, 1960. 5th October, 1960. 21st November, 1960. 16th January, 1961. 20th February, 1961. 13th March, 1961. 4th April, 1961. 10th April, 1961. 29th May, 1961. 26th June, 1961.

Course.	Duration. (In weeks.)	Starts.
J.—General Courses—continued.		
A.B.C.D.—continued.		
Junior A.B.C.D. (F.N.D.)	1	8th August, 1960. 19th September, 1960 24th October, 1960. 21st November, 1960. 9th January, 1961. 13th February, 1961. 13th March, 1961. 17th April, 1961. 29th May, 1961. 26th June, 1961.
Standard D.C. (PENGUIN)	1	8th August, 1960. 15th August, 1960. 10th October, 1960. 31st October, 1960. 7th November, 1960. 28th November, 1960. 5th December, 1960. 12th December, 1960. 31st January, 1961. 27th February, 1961. 6th March, 1961. 24th April, 1961. 1st May, 1961. 8th May, 1961. 15th May, 1961. 22nd May, 1961. 12th June, 1961. 19th June, 1961.
Standard A.B.C. (PENGUIN)	1	8th August, 1960. 15th August, 1960. 4th October, 1960. 31st October, 1960. 7th November, 1960. 28th November, 1960. 5th December, 1960. 6th February, 1961. 27th February, 1961. 6th March, 1961. 17th April, 1961. 24th April, 1961. 15th May, 1961. 22nd May, 1961. 12th June, 1961. 19th June, 1961.
A.B.C.D. Instructors (PENGUIN)	5	29th August, 1960. 23rd January, 1961.

(DMT 312/21/13.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

313.—Cleaning Fluid for Maintenance of Electrical Equipment in R.A.N. Ships and Establishments. " Turco-Solv "—Introduction.

As a result of comprehensive trials on various cleaning fluids, it has been decided to standardize on the use of Turco-Solv cleaning fluid for general cleaning of electrical equipment in lieu of carbontetrachloride, trichlorethylene and white spirit.

2. Like all solvents, Turco-Solv will tend to soften electrical varnishes if insulated coils and windings are immersed in the fluid, but no harm will result if it is applied with a brush or cloth and then allowed to dry in air or in an air blast.

3. Turco-Solv is non-toxic and is non-inflammable, having a flash point higher than 200°F. Arrangements are being made to hold stocks in Naval Store Depots at Sydney, Melbourne and Fremantle. It is to be accounted for as a consumable store under class E, group 8.

4. The use of other approved cleaning fluids for specialized purposes such as " Servisol " for electrical contacts in Automatic Telegraphy equipment where a combined cleaning and lubricating action is required and " D-Carbel " for cleaning type 507 Aircraft Generators as specified in R.A.N.A.M.O./General/L.53 is not affected by this order. Use for the services specified is to continue in the R.A.N.

(DEE 512/76/2.)

UNCLASSIFIED.

314.—Electronic Valve Tester, Type C.T. 160 (A.P. 61761)—Precautions in Use of.

Information has been received which indicates that the Valve Tester type C.T. 160 is not entirely suitable for testing the cathode to heater insulation resistance of indirectly heated electronic valves wherein the heater is not internally connected to the cathode. Due to its inherent design, the method of measuring the cathode to heater insulation resistance of an electronic valve in the type C.T. 160 valve tester is not compatible with the method of acceptance testing of electronic valves in accordance with Joint Service Specification K1001, Issue 5, dated June, 1958. Due to the difference in design, the type C.T. 160 valve tester is an instrument which is not of sufficient accuracy in respect to the measurement of cathode to heater insulation resistance of indirectly heated electronic valves, to determine entirely the serviceability of an electronic valve without other reference.

2. In all cases where a type C.T. 160 (A.P. 61761) valve tester indicates that the cathode to heater insulation resistance of electronic valves of the indirectly heated type, (in which the heater is not internally connected to the cathode) is not in accordance with the minimum values stated in B.R. 1771 (13A), the electronic valves are to be tested for serviceability in the actual equipment in which they are to be used before being finally rejected as unserviceable.

3. It should be noted that the above precautions to be observed in the use of valve tester type C.T. 160, refer only to the measurement of cathode to heater insulation of electronic valves and that the reliability of the measurement of other electronic valve characteristics in type C.T. 160 valve tester is unaffected.

(DEE 519/54/39.)

RESTRICTED.

315.—Radar Type 262 P/Q—B.R. 1917 Modifications.

B.R. 1917, modifications nos. 23, 24, 27, 29 and 30—Radar Type 262 P/Q are not to be implemented in Radar Type 262 P Outfits associated with S.T.A.A.G. mountings and C.R.B.F.D. mk. 2M fitted in the R.A.N.

(DEE 518/251/69.)

UNCLASSIFIED.

316.—U.C.S.F. 1 and M.C.S. 10 T.A.S.C.O. Panel (All Sections)—Target Data and Plotting Fuse Panel, Torpedo Control Fuse Panel, 220C D.C. and 200V 1100 c.p.s. Indications.

It has been found in service that lamps, inter service, pattern X962108 are being overrun, where fitted in the equipment listed below, and that the failure rate of these lamps is unacceptably high in consequence. Cases have also occurred of the perspex " windows " becoming discoloured for the same reason.

2. To ensure normal life for these lamps, a resistor 39K inter service, pattern Z219228 is to be wired in series. This resistor is to be inserted in the circuit so that the lamp and series resistor together are in parallel with the existing 51K resistor, inter services, pattern Z219237.

3. Items of equipment affected are as follows—

(*a*) D.E.E. Drg. No. 19194, Sht. 2—T.A.S.C.O. Panel (Mortar Section).
(*b*) T.C. 1028—T.A.S.C.O. Panel (Torpedo Section), Mark 1, Mod. O.
(*c*) T.C. 1036—T.A.S.C.O. Panel (Torpedo Section), Mark 3, Mod. O.
(*d*) T.C. 1039—T.A.S.C.O. Panel (Data Selection Section).
(*e*) T.C. 1045—Composit Fuse Panel.
(*f*) T.C. 1049—Composite Fuse Panel.

4. In ships in commission and establishments the above modification is to be treated as a defect, and the work is to be done by ship's staff. Resistors are to be demanded from the appropriate (S) N.S.O.

5. Separate action is being taken for ships building or refitting, but on commissioning a check should be made by ship's staff to ascertain whether it has been possible for the installing authority to effect the modification and action taken accordingly.

(DEE 737/66/3.)

UNCLASSIFIED.

317.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 589/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest Naval Armament Depot as early as practicable. H.M.A. ships which are unable to comply within three months from the date of this order are to report the fact to Navy Office for instructions.

Propellant Lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 2111XH	SC 048	Q.F. 4.7-in.; Q.F. 4-in.
RNC 989XA RNC 1006XA	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1126XB RNC 1134XB RNC 1584XE	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 883 RNC 893	SC 109	Q.F. 4.7-in.
RNC 881 RNC 892 RNC 1123XB	SC 140	Q.F. 5.25-in.; Impulse torpedo.
RNC 891 RNC 2556XJ	SC 150	Impulse torpedo.
KA 734 KA 736 KA 737 KA 740 KA 741 KA 743 KA 744 KA 745 KA 746 KA 747 KA 749 KA 750 KA 751 KA 752 KA 753 KA 754 KA 755 KA 756 KA 757 KA 808 KA 810 KA 811 KA 812 KA 814 KA 815 KA 817 KA 818 KA 820 KA 822 KA 824 KA 825 KA 827 KA 830	FNHP 022	Q.F. 40/60.

Propellant Lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 3981 SPDN 3987 SPDN 4003 SPDN 4004 SPDN 4009 SPDN 4017 SPDN 4019 SPDN 4031 SPDN 4032 SPDN 4034 SPDN 4039 SPDN 4040 SPDN 4043 SPDN 4045 SPDN 4047 SPDN 4048 SPDN 4051 SPDN 4053 SPDN 4054 SPDN 4066 SPDN 4068 SPDN 4069 SPDN 4086 SPDN 4087 SPDN 4091 SPDN 4092 SPDN 4093 SPDN 4095 SPDN 4126 SPDN 4128 SPDN 4129 SPDN 4131 SPDN 4140 SPDN 4142 SPDN 4143 SPDN 4144 SPDN 4145 SPDN 4148 SPDN 4150 SPDN 4151 SPDN 4153 SPDN 4158 SPDN 4159 SPDN 4163 SPDN 4167 SPDN 4178 SPDN 4179 SPDN 4182 SPDN 4183 SPDN 4184 SPDN 4213	FNHP 019–021	Q.F. 40/60.

Propellant Lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 4214 ..		
SPDN 4215 ..		
SPDN 4216 ..		
SPDN 4217 ..		
SPDN 4258 ..		
SPDN 4260 ..		
SPDN 4263 ..		
SPDN 4265 ..		
SPDN 4266 ..		
SPDN 4267 ..		
SPDN 4268 ..		
SPDN 4276 ..		
SPDN 4278 ..		
SPDN 4279 ..		
SPDN 4280 ..		
SPDN 4281 ..		
SPDN 4290 ..		
SPDN 4292 ..		
SPDN 4293 ..		
SPDN 4296 ..		
SPDN 4297 ..		
SPDN 4304 ..		
SPDN 4305 ..		
SPDN 4307 ..		
SPDN 4308 ..		
SPDN 4309 ..	FNHP 019–021 ..	Q.F. 40/60.
SPDN 4311 ..		
SPDN 4312 ..		
SPDN 4314 ..		
SPDN 4334 ..		
SPDN 4337 ..		
SPDN 4345 ..		
SPDN 4360 ..		
SPDN 4361 ..		
SPDN 4362 ..		
SPDN 4372 ..		
SPDN 4373 ..		
SPDN 4376 ..		
SPDN 4378 ..		
SPDN 4380 ..		
SPDN 4383 ..		
SPDN 4386 ..		
SPDN 4388 ..		
SPDN 4395 ..		
SPDN 4397 ..		
SPDN 4398 ..		
SPDN 4439 ..		
SPDN 4440 ..		
SPDN 4441 ..		
SPDN 4442 ..		
SPDN 4443 ..		

Propellant Lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 4445 ..		
SPDN 4446 ..		
SPDN 4447 ..		
SPDN 4449 ..		
SPDN 4454 ..		
SPDN 4457 ..		
SPDN 4458 ..		
SPDN 4461 ..		
SPDN 4462 ..		
SPDN 4463 ..		
SPDN 4464 ..		
SPDN 4465 ..		
SPDN 4468 ..		
SPDN 4469 ..		
SPDN 4470 ..		
SPDN 4471 ..		
SPDN 4472 ..		
SPDN 4473 ..		
SPDN 4474 ..		
SPDN 4476 ..		
SPDN 4477 ..		
SPDN 4478 ..		
SPDN 4479 ..		
SPDN 4480 ..		
SPDN 4486 ..		
SPDN 4487 ..	FNHP 019–021 ..	Q.F. 40/60.
SPDN 4488 ..		
SPDN 4489 ..		
SPDN 4493 ..		
SPDN 4494 ..		
SPDN 4495 ..		
SPDN 4496 ..		
SPDN 4497 ..		
SPDN 4498 ..		
SPDN 4499 ..		
SPDN 4500 ..		
SPDN 4507 ..		
SPDN 4508 ..		
SPDN 4509 ..		
SPDN 4510 ..		
SPDN 4511 ..		
SPDN 4512 ..		
SPDN 4527 ..		
SPDN 4528 ..		
SPDN 4529 ..		
SPDN 4535 ..		
SPDN 4552 ..		
SPDN 4571 ..		
SPDN 4572 ..		
SPDN 4573 ..		
SPDN 4602 ..		

Propellant Lot of sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 4603 ..		
SPDN 4604 ..		
SPDN 4605 ..		
SPDN 4606 ..		
SPDN 4607 ..		
SPDN 4608 ..		
SPDN 4609 ..		
SPDN 4610 ..		
SPDN 4611 ..		
SPDN 4612 ..		
SPDN 4614 ..		
SPDN 4615 ..		
SPDN 4618 ..		
SPDN 4619 ..		
SPDN 4620 ..		
SPDN 4621 ..		
SPDN 4622 ..		
SPDN 4623 ..		
SPDN 4624 ..		
SPDN 4673 ..		
SPDN 4674 ..		
SPDN 4676 ..		
SPDN 4677 ..		
SPDN 4679 ..	FNHP 019.–021 ..	Q.F. 40/60.
SPDN 4681 ..		
SPDN 4682 ..		
SPDN 4683 ..		
SPDN 4684 ..		
SPDN 4685 ..		
SPDN 4686 ..		
SPDN 4687 ..		
SPDN 4688 ..		
SPDN 4690 ..		
SPDN 4691 ..		
SPDN 4693 ..		
SPDN 4703 ..		
SPDN 4704 ..		
SPDN 4737 ..		
SPDN 4739 ..		
SPDN 4751 ..		
SPDN 4652 ..		
SPDN 4753 ..		
SPDN 4754 ..		
SPDN 4755 ..		
SPDN 4756 ..		
SPDN 4758 ..		
SPDN 4759 ..		

2. Attention is drawn to article 211 of Naval Magazine and Explosive Regulations, B.R. 862 and paragraphs 6, 7 and 9 of article 53 of Naval Cordite Regulations, B.R. 862A.

3. Separate instructions have been issued to R.A.N. Armament Depots.

(DW 729/57/42.)

UNCLASSIFIED.

318.—Annual Allowance of Naval Armament Stores for Passive Defence Training.

It has been approved for the following stores to be supplied to establishments as an annual allowance for passive defence training—

Item.	*Allowance.* Establishments with complements of— 200 or less.	More than 200.
LM 004—Capsules, lachrymatory	50	100 (For testing respirators)
LH 055—Flares, practice, incendiary ..	50	100
LM 041—Generators, lachrymatory No. 2, Mk. 4	25	50
LP 001—Generators, smoke, No. Y4 .. or LP 014—Generators, smoke, No. 5 ..	20	40
LH 005—Matches, fuzee	40	80
LH 022—Thunderflashes, Mk. 1, large, packed with striker; or LH 035—Thunderflashes, Mk. 4, packed with striker	50	75
LH 008—Strikers, thunderflash	5	8

2. Demands should be made on the nearest R.A.N. Armament Depot. Establishments which have no approved storage for explosives should confine demands to the minimum quantities necessary to meet immediate requirements.

3. The stores must be kept under cool dry storage conditions as far removed from combustible materials and occupied buildings as practicable and secure against unauthorized interference. Matches, fuzee, should be stored alone and thunderflashes should also be stowed alone.

4. Attention is drawn to the fact that lachrymatory generators No. 2 are mainly intended for use in the open and should not be used in small confined spaces.

5. Navy Orders 403 and 964 of 1958 and 729 of 1959 are hereby cancelled.

(DW 700/55/1.)

(*Navy Orders* 403 *and* 964 *of* 1958 *and* 729 *of* 1959.)

RESTRICTED.

319.—A/S Weapons—A/S Mortar Mk. 10—Loading Equipment for Type 15 Frigates—Splash Tight Scuttles.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and gunnery equipment depots.
(*b*) *Type of equipment* ..	A/S mortar mk. 10 loading equipment for type 15 Frigates.
(*c*) *Part of equipment affected*	Splash tight scuttles.
(*d*) *Purpose of modification* ..	To prevent warping of the strips, securing, rubber joint, due to build-up of rust between the strips and main plate.

(*e*) *Nature of modification* ..	Remove the existing securing strips and rubber joints. Remove all paint and rust from scuttles and fit new mild steel strips secured by $\frac{3}{16}$-in. dia. C'S'K rivets. The finished door without rubber joint to be galvanized. Replace rubber joint.
(*f*) *Drawings*	U.C.W. 19815/27. *Note:* Scuttles on type 15 loading equipments are made from $\frac{3}{16}$-in. thick plate and the rubber jointing is $\frac{1}{4}$-in. thickness.
(*g*) *By whom to be done* ..	Dockyard. As a defect.
(*h*) *When to be done* ..	At earliest opportunity.
(*i*) *Modification No.* ..	Mod. AN.7 to type 15 Frigates loading Equipment and associated ships fittings.

2. Navy Order 1033 of 1959, section (*m*), should be noted accordingly.

(DW 707/251/10.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

320.—A/S Weapons—A/S Mortar, Mk. 10—Stabilizer A/S 854.

(*A.F.O.* 48/1960.)

(*a*) *Ships, establishments and authorities concerned.*	Ships and establishments so fitted; Gunnery Equipment Depots.
(*b*) *Type of equipment affected*	Stabilizer A/S 854.
(*c*) *Parts of equipment affected*	Warning plate. New transport wedges for tilt table.
(*d*) *Purpose of modification* ..	To fit a more permanent warning label and to provide a means of securing the tilt table to prevent damage to the stabilizer mechanism during transport.
(*e*) *Nature of modification* ..	To remove existing cloth warning label and fit a new warning plate, drawing 1304/418.7, to starboard pedestal side cover. To hold transport wedges in spare gear when stabilizer is installed or to fit transport wedges in accordance with instruction on the warning plate before transporting stabilizer.
(*f*) *Drawings and Navy Order Diagrams*	1304/418.7 dated 20.5.57. 1304/418.4. Navy Order Diagram issue 8/60.
(*g*) *Stabilizers affected* ..	All stabilizers A/S 854 are to be examined and, where necessary, modified.
(*h*) *Modification number* ..	Stabilizer modification No. 4.
(*i*) *By whom to be done* ..	Ship's staff and dockyard. As a defect.
(*j*) *When to be done* ..	At the earliest opportunity.

(DW 714/51/66.)

UNCLASSIFIED.

321.—Naval Stores (Air) Ejection Seats Servicing Tools.

(*A.F.O.* 54/1960.)

The following tool has been added to the list promulgated in Navy Order 1108 of 1958—

Ref. No.	*Description.*	*No. Off.*
27L/1395 ..	Release Tool—Top Latch Plunger ..	1

2. This tool is applicable to Ejection Seats, Mark 3B (Vampire Aircraft). Supply will be effected to R.A.N.A.S. Nowra, without demand, to complete allowances.

(DNAS 603/77/173.)

(*Navy Order* 1108 *of* 1958.)

UNCLASSIFIED.

322.—Naval Stores—General Electrical (Class F, Groups 30)—Diamond H-Type Switch A.P. 205673—Introduction.

(*A.F.O.* 63/1960.)

To enable replacement, in the event of failure, of the control switch of portable 4-in. fans, 440V A.C. pattern F1C/33003, in ships so fitted ("Daring" Destroyers and Frigates Types 12), the switch has been introduced into service as a separate item and added to the Rate Book and Authorized List of Naval Stores as follows—

Class/ Group.	*N.A.T.O. Supply Classn. Group.*	*Pattern.*	*Description.*	*Ship's Accounting Classification.*
F30 ..	5930	205673	Switch, Diamond H type, 3-pole ON/OFF A.C. (Cat. No. 76 AC/238C/AD)	Consumable.

2. The Switch has been added to the first outfit of consumable stores on the basis of one for each ship concerned and demands from ships in commission should be forwarded to storing yards. Supply to ships under construction or completely restoring will be arranged in the normal manner.

(DNAS 519/80/6.)

UNCLASSIFIED.

323.—Naval Stores (Air) R.A.F. Vocabulary Sections 28F, 28M, 28S and 28W—Introduction of Joint Service Catalogue Numbers.

(*A.F.O.* 474/1960.)

The undermentioned reference numbers under Sections 28F, 28M, 28S and 28W are changed as shown. No changes of Vocabulary section, part number or description are involved.

2. H.M.A. ships and establishments are to adjust their ledgers in accordance with A.B.R. 4, article 1812 (*g*).

3. The relevant publications will be amended.

Old Stores Ref. No.	*New Stores Ref. No.*
Section 28F—	*Section* 28F—
12086	8016813
Section 28*M*—	*Section* 28*M*—
17016	9435563
Section 28*S*—	*Section* 28*S*—
6779	1200109
Section 28*W*—	*Section* 28*W*—
6721	9439456

(DNAS 603/78/91.)

UNCLASSIFIED.

324.—Naval Stores (General) (Class E, Group 12)—Polythene Bags for Radiac Instruments.

Navy Order 655 of 1959 is to be amended as follows—

Paragraph 3—

After " ships in commission " *insert* " and A.B.C.D. Schools at PENGUIN, CERBERUS and LEEUWIN ".

Paragraph 4—

After " ships in commission " *insert* " and Commanding Officers A.B.C.D. Schools ".

(DNAS 514/62/2.)

(*Navy Order* 655 *of* 1959.)

RESTRICTED.

325.—Naval Stores (Technical)—Radio and Electrical—Capacitors, Electrolytic—Deterioration and Reforming—Reports.

(*A.F.O.* 264/1960.)

Electrolytic capacitors slowly deteriorate when not being used due to gradual decomposition of the anodic film covering the positive electrode.

2. H.M.A. Naval Dockyards are equipped with reforming apparatus and carry out periodical reforming operations on electrolytic capacitors.

3. The date of manufacture or the date of reforming is stamped on the side of all electrolytic capacitors and issues from Naval Stores to ships and establishments are to be made from stocks up to twelve months from the dates on the capacitors.

4. Over-aged stocks of electrolytic capacitors held as spares by ships and establishments should be returned to the nearest (S)N.S.O. and new or reformed items demanded according to requirements. A.B.R. 4 will be amended.

5. The existing arrangements whereby (S)N.S.O.'s forward over-aged electrolytic capacitors to H.M.A. Naval Dockyards for reforming processes are to continue. Detailed records of quantities and types reformed are to be kept and forwarded to the Naval Board annually from the date of this order. This report is to include a separate column against each type showing the quantities, if any, where attempts to reform have not been successful.

6. Navy Order 654 of 1958 is hereby cancelled.

(DEE 519/65/13.)

(*Navy Order* 654 *of* 1958.)

UNCLASSIFIED.

326.—Naval Stores (Technical)—Underwater Detection Equipment—Revision of Maintenance Spares Allowances.

(*A.F.O.* 2916/1960.)

Consequent upon the introduction of the latest types of Underwater Detection Equipment, it has been decided that a system based on allowance of maintenance spares to be carried in selected ships for the support of Underwater Detection Equipment fitted in all ships of a squadron, is unsatisfactory when ships are deployed independently.

2. Establishment Lists for Underwater Detection Equipment will in future include—

(*a*) A ship's maintenance allowance which will specifically cater for—
(i) Vulnerable electronic components; and
(ii) Selected components, which, though not vulnerable, are essential to the running of the equipment.

(*b*) Additional maintenance allowances which may be necessary for ships proceeding on detached duties away from the vicinity of a Naval Base. These allowances will be indicated in the lists by the symbol " V ", and should be demanded by Commanding Officers of ships, proceeding on such duties, who consider supply of these additional allowances are essential.

3. A.B.R. 4, Naval Storekeeping Manual will be amended.

(DNAS 519/67/4.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

327.—Books—Textbooks and Instruments for Educational Purposes—Establishment.

The approved establishment of textbooks and instruments for use in preparation for educational tests and similar examinations is shown in the appendices to this order.

2. Demands for textbooks and instruments within the limits of this establishment, are to be placed with S.N.A.S.O., Sydney. Demands, in excess of this establishment, including special requirements for the instruction of regular classes in connection with technical training, are to be forwarded through administrative channels for the consideration of the Naval Board under cover of a ~~letter~~ FORM AS 130 stating the reasons for the demand.

3. Demands for hydrographic publications required for instructional purposes are to be forwarded to the Hydrographer, R.A.N. Hydrographic Office, Garden Island, Sydney.

4. Textbooks and instruments held in excess of establishment, together with any others which are held but for which no further use is foreseen in the ship or establishment to which they have been issued, are to be returned to S.N.A.S.O., Sydney.

5. Textbooks and instruments are to be issued to the Instructor Officer (or Education Officer where no Instructor Officer is borne), the textbooks and such of the instruments as are classified as permanent being recorded in the permanent loan list. The Instructor Officer, or Education Officer, is to keep a record of items loaned to and returned by ratings.

6. The Supply Officer will demand replacements for textbooks and instruments which are lost or returned unserviceable.

7. Superseded textbooks will continue to be issued in satisfaction of demands until existing stocks are exhausted. H.M.A.S. LEEUWIN, however, will be supplied with textbooks as listed in the revised establishments.

Appendix A.

TEXTBOOKS.

Ref. No.	Description.	CERBERUS.	WATSON. ALBATROSS.	NIRIMBA.	LEEUWIN.	Other Shore Establishments.	Carriers.	Destroyers.	Frigates. Sloops. River M/s.
B.R. 45 (1) ..	Admiralty Manual of Navigation, Vol. I.	20	15	5	60	2	5	2	2
B.R. 45 (2) ..	Admiralty Manual of Navigation, Vol. II.	5	3	1	2	0	1	1	1
B.R. 45 (3) ..	Admiralty Manual of Navigation, Vol. III.	5	3	1	2	0	1	1	1
B.R. 158 ..	Examples in Electrical Calculations	10	15	10	50	5	10	3	2
B.R. 451 ..	Concise Oxford Dictionary	2	1	1	1	0	2	0	0
A.B.R. 5030 ..	Pocket Oxford Dictionary	20	20	20	320	2	10	2	2
B.R. 454 ..	Notes on Navigation	40	20	20	50	5	15	5	4
B.R. 455 ..	Arithmetical Notes and Examples	60	30	25	50	10	30	10	5
A.B.R. 457 ..	Oxford Australian Atlas. (Replacing "New School Atlas of Comparative Geography")	20	20	20	220	5	20	5	3
A.B.R. 458 ..	Intermediate English (Aughterson). (Replacing "English for Technical Students")	30	20	10	320	5	20	5	4
B.R. 463 ..	Wall Map—The World	1	1	1	3	1	1	0	0
	Wall Map—Australasia and East Indies	1	1	1	1	1	1	0	0
B.R. 551 ..	School Arithmetic (Workman)	30	20	20	0	5	10	5	4
B.R. 552 ..	National Certificate Mathematics, Vol. I.	100	40	25	0	5	25	5	4
B.R. 552 ..	National Certificate Mathematics, Vol. II.	25	10	10	50	2	10	2	2
A.B.R. 5031 ..	Third Year Mathematics (Turner)	0	0	0	200	0	0	0	0
A.B.R. 5032 ..	Trigonometry (Hall and Knight)	20	20	10	0	2	10	2	2
A.B.R. 553 ..	Teach Yourself Mechanics (Abbot). (Replacing "Elementary Applied Mechanics")	20	10	10	100	2	10	2	2
A.B.R. 554 ..	Telecommunications Principles (Renton). (Replacing "Electricity and Magnetism, Part I")	10	5	5	30	1	5	1	1

APPENDIX A—*continued.*

Ref. No.	*Description.*	*CERBERUS.*	*WATSON. ALBATROSS.*	*NIRIMBA.*	*LEEUWIN.*	*Other Shore Establishments.*	*Carriers.*	*Destroyers.*	*Frigates, Sloops, Fleet M/S.*
B.R. 557 ..	Four Figure Tables (Turner)	70	40	30	320	10	20	5	5
B.R. 560 ..	Right Angled Triangle Tables	40	20	10	50	5	10	3	3
B.R. 561 ..	The New Groundword of British History—Section IV. (Warner and Marten)	20	15	10	105	2	10	2	2
B.R. 563 ..	Naval Side of British History (Callander)	20	15	10	105	2	10	2	2
A.B.R. 5034 ..	Short History of Australia (Scott)	20	15	10	105	2	10	2	2
A.B.R. 5033 ..	New Intermediate Geography (Browne, Herbert and James) ..	20	15	10	105	2	10	2	2
B.R. 564 ..	The World—A General Regional Geography (Stembridge) ..	20	15	10	105	2	10	2	2
B.R. 570 ..	Examples in Applied Mechanics	20	10	10	0	2	10	2	2
B.R. 572 ..	World's Wealth (Brooker)	20	15	10	0	2	10	2	2
A.B.R. 573 ..	A Handbook of English (Aughterson and Stirling). (Replacing "A New English Course—Stage III.")	30	20	10	320	5	20	5	4
B.R. 605 ..	Elementary Algebra (Baker and Bourne)	20	20	10	0	2	10	2	2

APPENDIX B.

MATHEMATICAL AND DRAWING INSTRUMENTS.

Patt. No.	*Description.*	*CERBERUS.*	*WATSON. ALBATROSS.*	*NIRIMBA.*	*LEEUWIN.*	*Other Shore Establishments.*	*Carriers.*	*Destroyers.*	*Frigates, Sloops, Fleet M/S.*
3718	Set Square, transparent, 45°, 6-in.	25	20	20	150	10	15	5	4
3721	Set Square, transparent, 60°, 8-in.	25	20	20	150	10	15	5	4
489G	Compasses, pencil, "Helix"	25	30	20	300	10	15	5	4
489B	Dividers, Compass, 5-in.	25	30	20	75	10	15	5	4
3724	Protractor, celluloid, 6-in.	30	30	20	150	10	20	5	4
	Rulers, parallel, roller	20	20	10	50	5	12	4	2
490	Rulers, boxwood, 12-in. (Graduated cms. and tenths ins.) ..	40	30	30	300	20	25	10	10

(DNES 451/51/9.)

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C.N.O.'s 328-332/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
13th May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos. Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

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CONTENTS.

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Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

328.—A.B.C.D.—Nuclear Explosions—Shelter from Radiation Effects.

(*A.F.O.* 227/1960.)

Introduction.

Experience gained in the R.N. during tests of nuclear weapons and trials simulating radiation effects from nuclear weapons have shown that men can obtain considerable protection by taking shelter within the ship. The degree of protection varies according to the type of radiation, the influence of contamination on, or within, the ship, and the shielding effect of structure, internal fittings, armour, &c. It should be borne in mind that shielding from radiation effects is only one aspect of a wider problem of operating under fall-out conditions.

2. *Initial Radiation.*—(*a*) On detonation, a nuclear weapon emits some radiations for a relatively short time. These initial radiations include heat, light, neutrons and gamma radiation. The term " initial radiation " is normally used by definition to refer to all radiation emitted during the first minute after burst. The duration of the heat and light radiation will be for about three seconds for a megaton explosion but significant gamma radiation will continue for about 20 seconds. The neutron dose, however, will be virtually complete after one-tenth of a second for weapons of all yields. In the case of megaton weapons the effective range of the heat and blast is greater than that of the gamma radiation, but with kiloton weapons these ranges are of the same order. As the yield of the weapon decreases, the neutron dose becomes relatively more significant. In the unfortunate circumstance of anyone looking directly towards the point of burst, the heat and light flash will produce permanent blindness at a range greater than any other effect. More probably, the observer will not be looking directly at the weapon and the blindness will be only temporary, though a permanent blindness patch may develop within the field of view.

(*b*) In all cases, sheltering under cover or below decks will give a measure of protection from all initial radiation effects. In the case of gamma radiation, which can penetrate structure to a considerable extent, men in positions towards the burst are likely to receive more radiation than those in parts of the ship remote from the burst. The penetrating powers of neutrons through steel are even greater than those of gamma rays but a water barrier shields against them, and therefore maximum protection against all penetrating radiation will be found below the water line. However, since little time is available to seek shelter, the protection given may be largely a matter of good fortune.

(*c*) Personnel caught in the open must take immediate action to obtain any nearby shelter that is available, i.e., they should take advantage of any convenient bulkhead, turret or screen to interpose as much shielding as possible between themselves and the source of radiation. They should lie down as flat as possible and should protect their heads by placing the hands on the back of the neck and shielding the head and face with the inside of the arms. The eyes must be kept closed. This position should be maintained until the blast wave has passed. *On no account should any man look into the sky or attempt to follow the course of a falling object.* The results of such misguided action have been mentioned in paragraph 2 (*a*) above. Speed is essential and no time should be wasted in attempting to gain shelter at a distance. Ships companies are to be exercised in this procedure as part of the normal training.

3. *Residual Radiation.*—(*a*) A nuclear weapon detonated high in the air raises no contamination problem in ships. Bursts on or near the surface of the land or sea will, however, result in the production of a great number of radio-active substances whose nature and intensity will depend on the type of material drawn into the explosion. The radio-active material resulting may be so fine as to be invisible, or large enough to appear in the form of radioactive dust, mist or rain and may be scattered over wide areas or concentrated in a local cloud or base surge. It may be air borne or sea borne.

(*b*) Radiation from fresh fall-out contamination may be as great as, or greater than, that from the initial radiation. At great distances from very large yield surface burst weapons which are well outside the range of initial radiation, considerable radiation may be received from fall-out contamination. Such radiation, unlike the initial radiation, continues for a relatively long time.

(*c*) The greatest short-term hazard from the residual radiation is from its gamma radiation component. This, like the initial radiation, can penetrate the ship's structure to a considerable extent. Protection from it can also be obtained in the same way by sheltering below decks or by interposing as much shielding as possible. However, the residual radiation, unlike the initial radiation, can be reduced in so far as it arises from a deposit on the ship, by decontamination. It should be noted, however, that the gamma radiation may not be due solely to the fall-out deposit upon the ship, as a considerable amount may also be received from the fall-out cloud, particularly during the period shortly after a near burst of a weapon on or below the sea.

(*d*) Even if the external gamma radiation dose be reduced either by decontamination or by seeking shelter, a hazard may still exist from any fall-out material which has been allowed to remain upon, or close to the skin. This hazard will arise from the poorly penetrating beta radiation and in cases of heavy contamination upon the bare skin or upon light weight clothing covering the skin, incapacitation due to superficial beta burns may develop without any other observable effects of radiation. The beta effects on the skin alone will not be lethal and may cause only mild discomfort. Protective clothing, e.g., oilskins, overalls and foul weather clothing, provides good protection against the skin burns from fall-out contamination by both acting as shielding against the poorly penetrating beta radiation and by preventing contamination itself from adhering to the skin; where the skin is contaminated it should be washed clear of fall-out material. These items will shortly be supplemented by water/grease repellant barrier skin creams which, although ineffective as shielding material, will enable the contamination to be more easily removed. It must be remembered that pre-wetting provides major protection by preventing the fall-out material from adhering to the ship.

(*e*) No significant increase in the short term hazard is likely to arise from inhaling or ingesting radioactive fall-out material. However, since radioactive materials in the body may produce ill effects in the course of time, care should be taken to avoid swallowing fall-out material and breathing air laden with radioactive materials, but complete protection from inhalation (and indirectly from ingestion) is given by the Service respirator which should be worn by exposed personnel during fall-out. It should be stressed that inhalation and ingestion of fall-out are unlikely to produce immediate effects.

(*f*) Protective clothing and respirators should not be worn inside the ship citadel, because the latter provides complete protection against all these hazards except against that caused by penetrating external gamma and neutron radiation.

(*g*) In general, the nature of the fall-out is such that any measures which exclude dust or rain will be equally effective against fall-out material. However, it should be noted that radioactive fall-out can, under certain circumstances, take the form of fine mist or aerosol and, as such, may achieve a similar degree of penetration to that of C.W. agents.

4. *Factors effecting selection of shelter stations.*—The following factors must be considered when selecting positions to be used as shelter stations:—

(*a*) *Shipboard contamination.*—Residual contamination may be trapped in pockets in the ship and form local " hot-spots " for example, fall-out material entering boilers through the air supply and accumulating on the combustion surfaces. Similar contamination may build up in filters. When shelter positions are being determined therefore, likely " hot spots " must be avoided as far as possible.

(*b*) *Shielding effect of structure.*—The shielding afforded by ship's structure will vary according to the position of contamination on the exposed surfaces, and the direction of any radiation received from the radio-active cloud. The calculations are extremely complex but it can be safely stated that the shielding effect will be better than the figure obtained by a simple calculation based on considerations of bulkhead or deck thickness only.

(*c*) *Dose rate.*—The dose rate arising from fall-out received at a point upon the open deck of a ship at sea will be considerably less than the dose rate in similar contaminating circumstances on land, since very little contribution will be received from the fall-out which has fallen into the sea.

(*d*) *Pre-wetting.*—A further factor relating to the selection of shelter stations will be the effectiveness of pre-wetting rigs, and, particularly in ships with improvised rigs, positions should be avoided below parts of decks known to be inadequately covered.

(*e*) *Warning of Fall-out.*—Since some warning of the onset of fall-out can be expected before the arrival of heavy contamination, although in some cases this may only be a matter of minutes, a shelter procedure must be organized.

(*f*) *Communications.*—The necessity for an effective recall organization will restrict the choice of positions for shelter stations to those to which orders may be passed from Command or H.Q.I. by main broadcast, armament broadcast or telephones. Special communications to shelter stations will not be provided; ships will, therefore, have to make full use of the existing internal communications provided, or rig up such temporary field telephones as may be required.

Position of Shelter Stations.

5. Ideally, men should take shelter low down in the ship and as near the centre line as possible. In practice, it is necessary to have as many decks and bulkheads between men and the source of the gamma radiation as will reduce the dose received under shelter to safe limits. However, it is essential that the selected positions are readily accessible without unduly compromising the water-tight integrity of the ship and that control of the ship's company is maintained while at shelter stations, so that men can be recalled to man essential fighting positions if necessary.

6. It may be that the degree of shelter obtained at a man's action station or watchkeeping position differs only slightly from that obtainable at a shelter station, particularly in small ships. Consideration must therefore be given to the degree of shelter available at hand before planning remote shelter positions. In new designs

the ship's layout will provide for a maximum amount of protection to be afforded to action and watchkeeping quarters by so arranging their positions that shielding is obtained, wherever possible, without the need for going to shelter stations.

7. While it is not feasible in this order to lay down the exact compartments to be used for each kind of ship, the following guide is intended to assist Commanding Officers when preparing their organization:—

(*a*) *Aircraft Carriers.*—The hangars are usually outside the citadel and are not gas tight. Compartments, e.g., mess decks and flats, one or two decks below the hangars should normally be chosen, but it may be necessary if aircraft have to be operated at short notice, for flight deck parties to shelter in the hangars, &c. In carriers the use of aircraft lifts as a rapid means of getting men below should be considered.

(*b*) *Destroyers and Frigates.*—Lower mess decks and flats on 3-deck below the superstructure will be of value as shelter positions.

Organization.

8. In general it is not possible to allocate a shelter station to each individual. Each quarter should be allocated its shelter position, for use when at action stations, but allowances must be made for shelter procedure to be instituted at other times, when men, not closed up, must proceed to the nearest shelter position.

9. The ship's organization should aim at getting all hands, except those required for special duties, into some shelter as quickly as possible with the least possible effect on the water-tight integrity of the ship, and to get openings which affect the citadel closed. Shelter routes must be planned accordingly and should be clearly marked although this may not be necessary in small ships.

10. When warning time permits, a pre-shelter party should be detailed to prepare the shelter routes by removing all clips, except one, on selected doors and hatches. Arrangements must be made to ensure that such doors and hatches are properly closed when the men have gone through to shelter.

Assuming Shelter Stations.

11. In deciding when to order shelter stations, the Command must consider both the operational requirement and the principal effects of radiation on the ship's company, not all of whom will necessarily be dangerously exposed. The maximum number of men should be under cover at the time any fall-out hazard is significant, but this may not always be practicable.

(*Note.*—The effects of radiation are given in appendices I. and II. to this order.) If the decision has been made to retain all, or a part of, the ship's company at their action stations during fall-out, it may be necessary to amend this decision as monitoring reports are made. The interpretation made of these reports in relation to the table of radiation effects must be related to the tactical threat existing at the time.

12. Where it is necessary for certain quarters to remain manned, accepting a radiological hazard, officers and men at such stations may need to be relieved so that they do not receive a dangerously high radiation dose. Alternatively, it may be possible to arrange for these quarters to be visited on a sortie basis, to make adjustments to machinery or to re-load armament. Care must be taken that the integrity of the citadel is not unduly compromised.

Stay-time Tables.

13. Calculations as to the safe length of stay in any position could be made by using the Radiac Slide Rule or Stay-time Tables in conjunction with readings of survey meters. The Stay-time Tables are shown in Navy Order 329 of 1960. In isolated positions, e.g., directors, gun crews shelters, &c., selected men should be issued with quartz fibre dosimeters and instructed to report the total dose occasionally, so that an estimate of their degree of safety may be obtained.

14. This method is more accurate than the use of Radiac Slide Rule or Stay-time Tables, which are necessarily approximate. These tables do, however, give a useful guide to the limits of exposure in widely differing circumstances.

15. As reports of their radiation dosages are received from selected officers and men, Navy Order 329 of 1960, paragraphs 8–10, it can be seen whether further protection is required. If dangerous doses are received at shelter stations, men can be sent into compartments with a higher degree of protection, lower down in the ship, but this will probably lead to loss of control. If this should become necessary and the ship has been subjected to shock, it is essential to test for flooding before opening up a compartment. Although this may mean a short delay, the risk of major flooding cannot be accepted.

Machinery Spaces.

16. The problem in machinery spaces is complicated by the very large quantities of air which are required for combustion and ventilation. The action to be taken is dealt with in Navy Order 332 of 1960 (*A.B.C.D.—Nuclear explosions—Radiation problems in machinery spaces*).

Breaking out of Shelter Stations.

17. Orders for shelter procedure must also include an organization for recalling hands to man positions as required. The procedure to be followed will depend on the circumstances. If, for example, shelter has been taken from gamma radiation from an air borne radioactive cloud at some distance, there will be no residual contamination. If the ship has been contaminated, decontamination and washing down should be carried out as soon as operational circumstances allow. The monitoring organization will be required to assess the hazard and to follow progress of decontamination. Cleansing procedure will be required for those men who may be contaminated.

Available data upon which this order is based.

18. It is important to remember that the underlying assumption throughout this order is that the fall-out is encountered at considerable distances. In such cases, time will be available to carry out the procedures described. If fall-out is received from a nearby kiloton burst then some modification may be necessary. At the present time information on this type of burst is meagre. When further information on nuclear effects generally is available, the procedure to counter the effects of a nearby kiloton burst will require further examination and consideration. The common sense procedure described in paragraph 2 (*c*) should be, however, followed by those personnel caught in the open.

Summary.

19. (*a*) Adequate shelter can be obtained in existing ships from the radiation effects of kiloton and megaton weapons outside the range at which the destruction of ships is to be expected.

(*b*) The numbers of men allowed near exposed positions must be kept to a minimum when nuclear attack is probable.

(*c*) An organization should be included in the ships' orders for taking shelter and for manning (even on a reduced or sortie basis) essential quarters,

(*d*) The monitoring organization must be used to determine the degree of danger.

(*e*) Full use must be made of pre-wetting.

(*f*) Decontamination and cleansing measures will later be required as operational circumstances allow.

Appendix I.

ACUTE EFFECTS OF WHOLE BODY PENETRATING IONIZING RADIATION ON HUMAN BEINGS.

Effects of Radiation Doses.—No hard and fast rules can be laid down for estimating casualties from radiation. There are so many variable factors which influence the incidence of casualties, such as wide variation in human response to radiation, time over which the dose is accumulated and variation in shielding, that the most that can be attempted is to give the Command some idea of the immediate operational effect.

2. Recovery of the body, *in any period less than a week*, is so small that a total dose received in such a period must be looked on as a straightforward accumulated dose without recovery or, in other words an *acute* dose. On the other hand, the time which will lapse before particular symptoms make themselves apparent will increase with the length of time over which the dose is accumulated. For instance, a dose of 300 rad taken in 1 hour will probably cause nausea and vomiting in about 4 hours. If the same dose is taken over about 3 days, the onset of the symptoms will obviously be delayed. In the table which follows, therefore, the times of onset of the various effects must be adjusted according to the time over which the dose is received, from an hour or two up to one week, although the effects themselves, when they do show, will be substantially the same.

3. The table is intended to help in forming an opinion on the effects of doses on the operational position in the immediate future. No attempt has been made to predict the proportion of casualties or deaths in the different ranges. The only guidance on this point which can safely be given is that with an acute dosage of somewhere between 300 and 500 rad it is likely that up to about half those so affected will die, and with an acute dose of over 600 rad it is probable that most will die. Individuals vary considerably in their susceptibility to this type of injury. On the other hand, with a dose of up to 250 rad although there will be a number of casualties there should be no early deaths and, unless there are complications, probably few deaths at all. Any attempt at more accurate prediction is valueless and may be misleading, and even the foregoing must be treated with reserve because of the variations mentioned above.

4. With regard to long term effects, it is obvious that all radiation is harmful but that the long term hazard increases with increasing dose.

Appendix I.—*continued.*

Acute Dose (up to 1 week).	*Effects.*
Up to 150 rad ..	No acute effects or incapacitation ; some long term hazard increasingly serious with increasing dose.
150–250 rad ..	Nausea and vomiting within 24 hours; little incapacitation after 2 days.
250–350 rad ..	Nausea and vomiting in under 4 hours; some will die within 2–4 weeks after a symptom-free period of 2 days–2 weeks; survivors will be ill for some weeks.
350–600 rad ..	Nausea and vomiting in under 2 hours; majority of deaths in 2–4 weeks; survivors will be incapacitated for about 4 months.
600 rad upwards	Nausea and vomiting almost immediately; most will die within 1 week.

Notes: (i) *Explanation of term "rad".*—For the purpose of this order a Rad may be defined as the absorbed dose of any nuclear radiation which is accompanied by the liberation of 100 ergs of energy per gram of absorbing material.

(ii) *Instruments.*—Future instruments will be calibrated to read in rads/hr. In the meantime, on existing instruments the roentgen reading may be assumed to have the same effects as the equivalent in Rads, as the numerical differences will be within the limits of accuracy of the instrument.

Appendix II.

BETA TABLE.

Acute Effects of Ionizing Radiation on Skin.

Estimated Dose required in 1 week.	*Effects.*
0– 600 rad ..	No acute effects.
600– 2,000 rad ..	Moderate early erythema.
2,000– 4,000 rad ..	Early erythema under 24 hours. Skin breakdown in 2 weeks.
4,000– 10,000 rad ..	Severe erythema in 24 hours. Severe skin breakdown in 1–2 weeks.
10,000– 30,000 rad ..	Severe erythema in 4 hours. Severe skin breakdown in 1–2 weeks.
30,000–100,000 rad ..	Immediate skin blistering (less than 1 day).

APPENDIX II—*continued.*

Note: This table has no immediate value as Beta measuring instruments have not yet been introduced. When these instruments are introduced this table should be used to relate the total dose to the resulting effects on human skin.

(DTSR 1623/1/7.)

(*Navy Orders* 329 *and* 332 *of* 1960.)

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329.—A.B.C.D.—Radiological Monitoring Organization and Techniques.

(*A.F.O.* 228/1960.)

Experience gained in trials has shown that the organization for monitoring laid down in B.R. 2170 (Ship A.B.C.D. Manual) requires some amendment. Appendix I to this order sets out the new organization, and the opportunity has also been taken to give additional guidance on methods of monitoring, so far as present knowledge allows, which will be incorporated in B.R. 2171, part 4.

2. This order is to be regarded as cancelling the instructions on monitoring organization contained in B.R. 2170 (Preliminary Edition, 1956). As the final edition of B.R. 2170 is already in print, it has not been possible to incorporate all the new information. Where this order conflicts with the new edition of B.R. 2170, the former should be followed. Admiralty has advised that amendments to B.R. 2170 will be issued in due course.

APPENDIX I.

Monitoring Organization.

Following a nuclear explosion, the A.B.C.D. monitoring organization will be called upon to provide any or all of the following—

(*a*) Assessment of the effect on personnel of the initial radiations.
(*b*) Warning of the arrival of contamination from fall-out.
(*c*) A record of the build-up and an assessment of the effects of the Transit Dose.
(*d*) Survey to assess contamination on completion of fall-out.
(*e*) Checking on the progress of decontamination.
(*f*) Monitoring of personnel for contamination of body or clothing.

The requirements for fulfilling each of these tasks are given in detail in succeeding paragraphs.

2. *Assessment of Initial Radiations.*—In the high states of readiness, Quartz-Fibre Dosimeters should be distributed to key personnel whose action stations will ensure that readings can be obtained from as many positions in the ship as possible. Officers and men whose action stations are in the more exposed positions should be issued with dosimeters of the higher ranges.

3. When ordered after the explosion, these key personnel should pass the readings of their Q.F. Dosimeters to H.Q.1. These readings will enable the Monitoring Officer to make an approximate initial assessment of the doses received by personnel in various parts of the ship. This information will assist the Command in estimating the effects of the explosion on fighting efficiency.

4. It is inadvisable to make the passing of dosimeter readings an automatic procedure after an explosion, since this may impede communications on more immediate hazards such as blast or fire.

APPENDIX I.—*continued.*

5. When individual (Phosphate Glass) dosimeters are available, an organization must be framed to cater for these to be read and the doses recorded at the first opportunity after the explosion. Since the reader instruments are relatively bulky and dependent on power supplies, it will be necessary for men to report to the reader positions, being relieved from their stations as the situation permits. When this has been done a complete picture of the " radiological health " of the ship's company can be produced for the Command by the Monitoring Officer and the Medical Officer.

6. *Warning of Arrival of Fall-out.*—In high states of A.B.C. readiness and pending the general introduction of the Ship Installed Radiac Systems (SIRS) in the Fleet, a contamination meter No. 1, mark 2, should be placed with its probe in an exposed position high in the ship (e.g., on the compass platform in ships with an open bridge). The instrument should be switched on and kept on and kept under observation at all times when contamination is likely. Any increase in the reading above the normal background will indicate the approach or onset of fall-out. In siting the probe care must be taken to avoid unnecessary background from the radioactive luminous paint used on instruments and telephone control boxes in the vicinity. Similarly, unnecessary alarm will be caused unless care is taken that men wearing luminous watches do not approach the probe too closely.

7. After the ship has been contaminated by fall-out, it will be necessary to ensure that warning is received of any renewed deposition, either from the same explosion or another burst. Due to the varying intensities of contamination encountered in different parts of the ship, monitors employed on survey may not be aware that an increase in reading is due to fresh contamination. As soon as possible after the initial deposition has ceased, therefore, a contamination meter or a survey meter (depending on the intensity encountered) should be placed in a *fixed* position high in the ship and kept under observation for any increase in reading.

8. *Recording Transit Dose.*—During the period of deposition of fall-out, the dose-rate will fluctuate, gradually increasing to a peak and then falling off as decay predominates over any further deposition. During this period the build-up of the Transit Dose must be assessed by calling for readings of Q.F. Dosimeters from personnel in selected positions throughout the ship. These personnel will be those issued with Q.F. Dosimeters for recording the dose from initial radiations (*see* paragraph 2 above), and care is therefore necessary in selecting them to ensure that adequate coverage of both action stations and shelter stations is obtained. Monitors should be included since the dosimeters will afterwards be required by them during survey (paragraph 12).

9. The frequency of reporting readings will depend on the situation. In the early stages it is advisable to call for reports at fairly short intervals until the situation is clearer. The intervals can either be expressed in terms of time or as increases in dose (e.g., " Report every two minutes " or " Report every increase of 5r ").

10. As these reports are received it will be possible to judge the adequacy of shelter positions, and men can be ordered to positions lower in the ship if necessary. Similarly, the relief of men manning essential positions can be organized. Care must be taken to differentiate between the Transit Dose and any previous dose (e.g., from initial radiations) the sum of which will appear on the dosimeter.

11. Throughout the transit period a constant check must be kept on the dose-rate so that a steady fall in average reading denoting the approach of the end of fall-out will be noticed. The average reading is important as quite large fluctuations in fall-out intensity may be recorded. This is best achieved by reading a survey

APPENDIX I.—*continued.*

meter in H.Q.1, but in conditions of light fall-out, or where H.Q.1 is well shielded, a more exposed position must be chosen and the readings reported to H.Q.1. Whichever is decided, the readings must all be taken from the same position.

Survey after Cessation of Fall-out.

12. The primary requirement after fall-out has ceased is to obtain dose-rate readings in positions which must be manned for fighting the ship according to the tactical situation at the time. These may include both exposed positions (e.g., A.A. armament, A/S armament, or Flight Deck) and positions between decks (e.g., Operations Room, A.B.C.D. positions, or shelter stations). The Command must inform the Monitoring Officer of the requirements in the light of the tactical situation, and the Monitoring Officer must then order monitoring of the required positions.

13. This is best achieved by considering beforehand the stations which will have to be monitored for fighting the ship under, say, two or three different conditions which will depend on the type of ship (e.g., A.A. Action Stations, A/S Action Stations, Flying Stations, &c.). The number of monitoring parties will depend on the number of survey meters available, but should be as many as possible to reduce the time taken and keep the exposure of each party to the minimum. A route must be laid down for each party under each set of chosen conditions which will allow them to obtain the required readings in the shortest time with the least risk of compromising the citadel.

14. Dose-rate readings must be taken in the positions which men are actually required to occupy (e.g., at a gun in the breechworker's position, at the aimers' seats, &c.) the survey meter being held at about waist height to record the dose-rate which will be of greatest significance to the man occupying the position. The initial reports should give only the highest reading encountered at any station.

15. From these reports the Monitoring Officer will be able to advise the Command on the subsequent action to be taken (i.e., the implications of immediate remanning of these stations or remaining in shelter, or the need for decontamination, either selective or general, before remanning).

16. As soon as the operational situation permits, a detailed survey of the whole ship must be made, priority being given to those positions most likely to be used. In many positions this detailed survey may have to be combined with monitoring in support of decontamination.

17. *Checking Progress of Decontamination.*—When decontamination is ordered in any position, dose-rate readings must be made before, during and after the operation. Monitors should accompany decontamination parties, not only to advise on their personal protection, but to locate hot-spots and direct decontamination on them. The readings taken during decontamination will enable the Monitoring Officer to assess its effectiveness, taking into account radioactive decay. Where necessary, fresh procedures can be ordered, or effort transferred to more profitable areas.

18. *Monitoring of Personnel.*—It is unlikely, in the early stages after contamination, that the present contamination meters will be of any value, as they will be swamped by the high gamma background. Every man likely to have been contaminated should therefore undergo the complete cleansing routine, and men should not be monitored at the cleansing stations until the background permits the use of the contamination meter.

APPENDIX I.—*continued.*

19. Instructions for the use of the contamination meter for personnel monitoring are contained in the instrument handbook. It is emphasized that only when the instrument is used in the way described can any value be placed on its readings to decide whether a man is " dirty " or " clean ". The use of the probe for " frisking " is of value *only* in providing an idea of the location of contamination.

Monitoring Techniques.

20. *Location of Contamination.*—Contamination from fall-out can be expected to collect on the upperworks, in open machinery spaces, in open ventilation systems, and on the underwater surface of the hull and in saltwater systems. In general, contamination of the weather surfaces and machinery spaces will present the most immediate hazard, the hazard from other sources presenting more of a long-term habitability problem which is likely to be slight by operational standards.

21. Contamination of the upperworks is likely to be irregular and unpredictable depending on the air stream over the surface, the effectiveness of pre-wetting, and the type of contamination. Intensities may vary by as much as a factor of 100 between different positions. Hot-spots (areas of more than average intensity) are likely where:—

(*a*) Pre-wetting has been ineffective.
(*b*) Poor drainage exists.
(*c*) Debris has collected.
(*d*) The surface is absorbent (e.g., rusty, greasy or scorched).
(*e*) Damage has occurred.

22. In machinery spaces contamination is likely to collect in places in the way of the air stream and just out of it, where the air velocity is reduced and settling can occur. Greasy surfaces and lagging are likely to retain contamination. (*See* Navy Order 332 of 1960).

Methods of Survey.

23. The method of making the initial survey of predetermined positions has already been described in paragraph 14. As soon as the situation allows, a more detailed survey must be made. On large external areas (e.g., the flight deck), readings should be taken about every 25 feet. In smaller areas the distance should be decreased, and particular attention paid to possible hot-spots and irregular shaped objects and structure, such as hatches, gunmountngs, and canvas covers. It is important that the distance of the survey meter from the object being monitored should be constant for all readings, and all monitors must be instructed in a common drill.

24. The location of a hot-spot is best achieved by holding the survey meter close to the body and turning round slowly. If the reading drops by about 25 per cent. or more, the hot-spot is probably behind the monitor. The instrument should then be moved in the direction indicated; the reading should be more than doubled if a hot-spot exists. In the later stages of decontamination when the survey meter beta window flap may be opened without risk of contaminating the instrument or the operator's hands, the beta indicating facilities may be used to locate the position of hot-spot with greater precision than is possible using the body-shield method described above.

25. When monitoring compartments, readings should first be taken in the watch-keeping positions. In large spaces or unmanned compartments readings should then be taken in the centre and in each corner to obtain an average figure.

APPENDIX I.—*continued.*

26. The detailed survey of the interior of the ship must include a search for contamination which may have penetrated the citadel. Priority should be given to the citadel boundaries, especially near damage, at cleansing stations, at the entrances to machinery spaces, &c. Here it is important to distinguish between a positive reading due to gamma radiation emanating from contamination outside the compartment and one due to contamination actually within the compartment. Readings should therefore be taken with the survey meter beta window closed and open, with the instrument held close to the surface being monitored. Any increase in reading when the window is open will denote that contamination is present within a short distance (i.e., on the surface being investigated). This survey to detect, and if possible prevent, the tracking of contamination into the citadel must continue at intervals until final clearance of the ship can be given.

27. *Composition.*—Monitoring teams for survey should consist basically of two men—one, the monitor, to take readings, and the other, his assistant, to record and report, and to mark off hot-spots, &c. Personnel should be selected from A.B.C.D. parties, quarters crews, and engine room personnel, the general principle being that a team should be primarily responsible for their own " part of ship ", although this will not always be possible because of the operational situation. As many teams as possible should be trained to allow frequent reliefs if the situation permits, thus spreading exposure evenly over the majority of the ship's company.

28. *Personal Protection.*—Monitoring teams, and all personnel in contaminated areas must protect themselves against the internal radiation hazard. Unless special instructions are given to the contrary, protective clothing and respirators must be worn, and men must pass through the cleansing routine before entering the citadel.

29. Protection from unnecessary exposure to external radiation can only be achieved by preliminary training designed to ensure that monitors remain exposed only for the minimum time necessary to complete their work. Each monitor must carry a Q.F. Dosimeter, and the Monitoring Officer must specify the dose which is not to be exceeded during a sortie, basing this on the acceptable figure laid down by the Command for the particular situation. During the initial monitoring a maximum permissible dose-rate should also be given to the monitors to ensure that they do not hazard themselves unnecessarily. This figure will vary according to the circumstances, but, as a guide, it should be safe to allow monitors to work up to a dose-rate figure of twice the allowable total dose for periods of up to 30 minutes.

30. *Monitoring Reports.*—Reports from monitors employed on the initial survey must be passed in standard form—

" Time—Position—Dose-rate—Total dose—Remarks ".

Unnecessary words must be omitted, but to avoid possible confusion a distinction must be retained between reports of total dose and dose-rate. A typical report might be as follows—

" 1645—Y Turret—Dose rate 65—My dose 20—Moving to STAAG ".

31. During the detailed survey more lengthy reports will probably be necessary. It will be of assistance in surveying large areas if the monitoring team are supplied with a deck plan with certain positions at which readings are to be taken marked and tallied by letter or number. It is imperative that reports be brief and concise if the Monitoring Plotter and the communications system are to cope with the traffic.

APPENDIX I.—*continued.*

32. *Machinery Spaces.*—The Engineer Officer is responsible for the machinery spaces, including the evacuation or re-entry of these compartments, seeking the advice of the Monitoring Officer as necessary. Reports from machinery space monitors must therefore be made direct to the Engineer Officer in H.Q.2, and from there relayed to the Monitoring Plotter in H.Q.1. Some modification may be needed if a M.C.R. is in a space other than H.Q.2. In either case ship's orders must make provision for passing reports and information to a responsible officer when the E.O. is absent from H.Q.2. In other respects the monitoring of machinery spaces will follow the same principles as other positions; an initial survey of places at which watchkeepers must be stationed, followed by a detailed survey later.

33. *Monitoring Calculations.*—As stated in paragraph 8, the deposition of fall-out is shown as a gradual rise in dose-rate to a peak, followed by a steady fall after deposition has diminished to the extent that radioactive decay has become predominant. Theoretically, the intensity of radiation at any time of undisturbed fall-out material is proportional to $T^{-1.2}$ or $T^{-1.3}$, where " T " is the time since the burst. In practice, the decay rate as measured on board will be affected by many factors, such as—

(*a*) The operation of pre-wetting.

(*b*) Fresh deposition of fall-out, either from the same or another explosion.

(*c*) The mixture of fission products being different from that anticipated.

(*d*) Removal of the fall-out material by decontamination, or by wind or weather, and its dispersion in the sea.

It is therefore desirable that dose-rate readings from one particular position (say H.Q.1) should be plotted against time after burst as a graph, preferably using logarithmic scales on both axes. This will afford a useful check on the decay rate, and will provide a fairly reliable indication of the deposition of further fall-out.

34. The Radiac Slide Rule has been designed to enable calculations of dose and dose-rates to be made for decay rates according to $T^{-1.2}$ and $T^{-1.3}$ laws. Instructions for its use are contained in B.R. 2171, Part I.

35. In order to allow simple and rapid calculation of the time taken to accumulate certain doses under varying conditions of intensity and time after burst, a table has been prepared according to the $T^{-1.2}$ law. This " Stay Time " table, with instructions for its use, has been printed in appendix II. to this order. For use on board it is recommended, to avoid confusion and error, that separate tables are produced for each total dose, the appropriate table being brought out when the maximum permissible dose has been decided.

36. In action it may be found more effective to make use of mental calculations to produce a rough but rapid answer which can be checked with instrument readings later. The rough rules which follow will normally give a conservative (" safe ") estimate at sea. It should be stressed that they refer to contamination resulting from a single explosion only.

37. Use is made in these rules of the term " Apparent Half-life ". This is defined as the time taken for the intensity of radiation from contamination to decay to one-half of its original value. The term " Apparent " is use because the contamination actually consists of a large number of radioactive elements, each with its own Half-Life, and because the apparent Half-Life changes according to the age of the contamination.

APPENDIX I.—*continued.*

38. The approximate rules relating to *Total Dose* are as follows—

(*a*) Decay rate .. .. Doubling the time since the burst will halve the intensity.

(*b*) Apparent Half-Life .. Equals time since detonation, hence—

(*c*) Time of burst .. Find the apparent half-life by two readings of intensity. The time of burst equals one apparent half-life before the first reading.

(*d*) Total dose .. .. Dose received during a period less than one-half of an apparent half-life equals the intensity at time of entry × length of stay in hours.

39. Approximate rules relating to Dose Rate may conveniently be given as a " Seven-fold rule ", i.e., an increase in time by a factor of seven reduces the dose rate by a fraction of 10. This is shown in the following table:—

Time after burst.	*Dose rate in r/hr. Seven-fold rule.*	*$t^{-1.2}$ rule.*
1 hour	10,000	10,000
7 hours	1,000	970
49 hours (i.e., approx. 2 days)	100	97
2 weeks (approx.)	10	9.3
3 months (approx.)	1	1.1

40. *Radiac Graph* (Form S.1650).—The Radiac Graph was produced from information gained from the underwater burst at Bikini in 1946 (Test BAKER). It is now known that these results are not typical of all types of contaminating burst, and in view of the complexity of shielding calculations, serious errors may be made if the graph is used. Form S.1650 is being withdrawn, and all reference to the Radiac Graph should be deleted from the relevant publications.

41. *Application to Small Ships.*—The organization and procedures described in the preceding paragraphs can be applied directly in small ships, disregarding references to those positions (e.g., H.Q.2) which apply solely to larger ships, and simplifying the organization as necessary.

42. *Training.*—It will be apparent from the foregoing that training of monitoring teams in ships should be concentrated on practising each team in its role of initial monitoring under various conditions, to ensure that all necessary positions are covered in the shortest time, and in training monitors and communication numbers in the passing of monitoring reports.

43. It is also essential, if the Monitoring Officer is to advise the Command correctly on the action which should be taken under varying circumstances, that he should have available certain basic data applicable to the ship. These figures can be obtained during A.B.C.D. exercises, and every opportunity should be taken of exercising these procedures and correcting the figures obtained from them. Examples of the figures required are—

(*a*) Time taken to reman A.A/A/S/Flying Stations, &c., from Shelter Stations.

(*b*) Time taken to carry out initial monitoring of these stations or of the whole ship.

APPENDIX I.—*continued.*

(*c*) Number of men required to carry out an initial hosing down of these stations or of the whole ship, making use of the maximum number of hoses which can be used without losing pressure.

(*d*) Time taken to carry out the initial hosing down under varying conditions. Pending further trials on decontamination procedures, calculations should be based on a rate of progress of 100 square-feet/minute per hose.

Note: Although hosing down is a part of decontamination procedure it must be borne in mind that this only reduces contamination by a small factor if pre-wetting has worked efficiently, and that bodily removal of contaminated items such as cordage, timber, &c., may more effectively reduce the readings on the upper deck.

(*e*) Time taken to pass the number of men exposed for (*b*) and (*c*) through the complete cleansing routine.

APPENDIX II.

STAY-TIME TABLE.

The Stay-Time Table presents in tabular form the times for which men can remain exposed in a contaminated area without exceeding doses of 25r, 50r, 100r, 150r and 250r, under varying conditions of intensity and time after burst. The times have been rounded off to the nearest (safe) 5 minutes for short periods of " stay-time " and 15 minutes for longer periods.

Directions for Use.

Enter the top of the table with the measured dose-rate opposite the dose which is not to be exceeded. Go down the column, and opposite the time after burst at which the measurement was made will be found the " stay-time ".

Example—

Dose-rate at H . 1 hour: 60r/hr. Dose not to exceed: 50r.
Time of stay: 1 hr. 20 min.

STAY-TIME TABLE.

Exposure Dose	Dose Rate (R/Hr.) 2.5	5	6	7.5	10	12	20	25	30	35	50	60	75	120	250
25 r.	2.5	5	6	7.5	10	12	20	25	30	35	50	60	75	120	250
50 r.	5	10	12	15	20	24	40	50	60	70	100	120	150	240	500
100 r.	10	20	24	30	40	48	80	100	120	140	200	240	300	480	1,000
150 r.	15	30	36	45	60	72	120	150	180	210	300	360	450	720	1,500
250 r.	25	50	60	75	100	120	200	250	300	350	500	600	750	1,200	2,500

Stay Times (w = week, d = day, other values hrs.–mins.)

Time After Burst															
10 mins.															0–05
15 mins															0–05
20 mins.															0–05
25 mins.															0–05
30 mins.															0–05
40 mins.															0–05
50 mins.															0–05
60 mins.															0–05
80 mins.															0–05
100 mins.															0–05
2 hrs.															0–05
2½ hrs.															0–05
3 hrs.															0–05
4 hrs.															0–05
6 hrs.															0–05
12 hrs.															0–05
1 day															0–05
1 week															0–05
	∞	∞	∞	∞	∞	∞	∞	∞	∞	16w	16	5	1–50	0–30	
								4w	2½d	17	2¾	1–30	0–55	0–20	
						2w	1½d	1¼d	10¼	5	1–30	1–00	0–40	0–15	
						1½d	15½	10¼	4¾	2¾	1–10	0–50	0–35	0–15	
					∞	23w	5¼	5¼	3¼	2	1–00	0–45	0–30	0–15	
				∞	4w	3½d	6¼	3¼	2	1–30	0–50	0–35	0–25	0–15	
			∞	15w	3½d	1d	4	2¼	1–40	1–10	0–45	0–35	0–25	0–15	
			46w	1w	1½d	13¾	3	2	1–20	1–10	0–40	0–30	0–25	0–10	
		∞	1w	1½d	12½	7¼	2¼	1–40	1–10	1–00	0–35	0–30	0–20	0–10	
		8w	1w	19½	8¼	5¼	2	1–20	1–00	0–55	0–35	0–25	0–20	0–10	
		6½d	2d	13	6¼	4¼	1–50	1–20	1–00	0–50	0–35	0–25	0–20	0–10	
	∞	2½d	1d	9¼	5	3¼	1–40	1–10	1–00	0–50	0–30	0–25	0–20	0–10	
	46w	1d	16	7¼	4¼	3¼	1–30	1–10	1–00	0–50	0–30	0–25	0–20	0–10	
	4w	19¼	12	5¾	3¾	2¾	1–30	1–10	0–55	0–45	0–30	0–25	0–20	0–10	
	5d	12½	8¾	4¾	3¼	2½	1–20	1–00	0–50	0–45	0–30	0–25	0–20	0–10	
	1½d	8¾	6¼	3¾	2¾	2¼	1–20	1–00	0–50	0–40	0–30	0–25	0–20	0–10	
	17¼	6¼	5	3¼	2¼	2¼	1–20	1–00	0–50	0–40	0–30	0–25	0–20	0–10	
	13	5¼	4½	3¼	2½	2	1–10	1–00	0–50	0–40	0–30	0–25	0–20	0–10	
	10	5	4	3¼	2½	2	1–10	1–00	0–50	0–40	0–25	0–20	0–10	0–10	

(DTSR 1606/3/18.)

(*Navy Order* 332 *of* 1960.)

RESTRICTED.

330.—A.B.C.D.—Radiation Hazards—Protection Afforded in Ships from Residual Radiation

(*A.F.O.* 229/1960.)

The protection afforded to a man in any particular ship will depend upon the position of the man concerned and the pattern of the residual contamination. In particular the extent to which contamination adheres to exposed vertical surfaces will influence the protection factor to a considerable extent, especially in the larger ships. The occurrence of hot-spots will also be important for positions near the weather surfaces, especially in the smaller ships.

2. Definite information on the extent to which contamination will adhere to vertical surfaces is meagre, but it is believed that in the majority of cases this will be small. The one exception may be contamination from an underwater weapon burst in shallow water which distributes considerable amounts of bottom material. Serious contamination of the vertical surfaces in such circumstances is likely to be plainly visible to the eye, but is likely to be confined to the windward surfaces.

3. In the majority of cases of distant fall-out from land surface-burst megaton weapons it may be assumed that the residual contamination on vertical surfaces will be unimportant. In such cases the protection factors, estimated from the results of trials carried out in representative ships in which contamination of the weather surfaces was simulated, are as follow—

Aircraft Carrier without Armoured Flight Deck—

Island Structure { Upper	5–10
Island Structure { Lower	10–20
No. 2 Deck	10–20
No. 3 Deck	50–70
No. 4 Deck	70–90
No. 5 Deck	100–150
No. 6 Deck	200–300

Destroyer or Frigate—

Compass Platform (01 Deck)	2–3
Operations Room (1 Deck)	3–10
No. 2 Deck (below superstructure)	15–30
No. 3 Deck (below superstructure)	50–100
No. 4 Deck (below superstructure)	100–300

4. In the rare circumstances of contamination by fall-out material which also adheres to the side of the ship, the above figures will remain unchanged except for the following positions for which the protection factors given above should be divided by two—

Aircraft Carrier	Lower Island structure only.
Destroyer or Frigate	All positions except 01 and 1 Deck.

5. These shielding factors should be used for planning purposes in lieu of those given in B.R. 2170, chapter 26, paragraph 13, but must only be regarded as giving an indication of the order of magnitude of the shielding factor. They are, in fact, valuable for the selection of shelter positions and for realistic planning of exercises, but reliance should not be placed on them for the calculation of doses or dose-rates from instrument readings obtained in other positions.

(DTSR 1623/1/6.)

UNCLASSIFIED.

331.—A.B.C.D.—Radiation Hazards—Guidance on the Institution of Radiological Countermeasures.

(*A.F.O.* 230/1960.)

The measures to reduce the radiation hazard during and after a contaminating attack, i.e.—

Closing Down (including shutting down machinery);
Pre-wetting;
Shelter Procedure;
Decontamination;

involve the reduction of the fighting efficiency of the ship to a greater or lesser degree. The extent to which any of the above countermeasures can be implemented must be decided by the Command in the light of the operational situation and a knowledge of the individual ship's capabilities and requirements. In arriving at this decision the Command must balance the need to maintain operational efficiency against the likelihood of radiation casualties at once or in the near future.

2. Acute radiation doses of less than 150r are unlikely to cause operational casualties, while doses much in excess of 150r will probably incapacitate within a short period. Thus a ship may be forced to break off an action if doses of 350r or more are received by key personnel, or forced to withdraw from a longer operation if 150r is exceeded.

3. The concept of a "War Working Dose" hitherto accepted is liable to be misleading, since circumstances vary so widely that no dose can be laid down until the radiation hazard has been ascertained and balanced against operational demands.

4. During and immediately after the deposition of contamination, which is referred to as the "action phase", when the radiation hazard cannot be accurately foretold, no upper limit of dose can be set. The prime object of the Command and the Monitoring Officer must be to keep the radiation dosage as low as possible under the circumstances (e.g., by ordering men to lower positions or arranging reliefs).

5. The subsequent phase of "operational recovery" begins when the hazard has been measured, the dose received to date by the various sections of the ship's company is known, and decontamination is being progressed. It is during this phase that the Command, bearing in mind the requirements of the ship in the near future, can lay down for the Monitoring Officer's guidance a "planning dose" which should not be exceeded over the period under consideration. Under some circumstances, it might be necessary to specify different Planning Doses for different sections of the ship's company (e.g., armament or machinery space personnel). This Planning Dose must be revised in the light of subsequent attacks or changes in the operational situation.

(DTSR 1623/1/5.)

RESTRICTED.

332.—A.B.C.D.—Nuclear Explosions—Radiation Problems in Machinery Spaces.

(*A.F.O.* 231/1960.)

The radioactive hazard in machinery spaces is complicated by the very large quantities of air which are required for combustion and for ventilation. If the ship is subjected to fall-out, contaminated material is likely to be drawn in and will be deposited in the air systems and in the compartments themselves. The resultant level of contamination will depend on the radiation intensity and the duration of

fall-out. The Command will probably endeavour to steam out of the fall-out area as quickly as possible and to this end, maximum power may be required. It is therefore possible that crash-stopping and closing down of one unit to avoid contamination may be unacceptable. The action which should be taken will vary according to the arrangement of the machinery and recommended procedures are set forth below.

2. *Open Stokeholds.*

(*a*) In ships with open stokeholds and trunked air to boilers, the problem is relatively simple. Provided the ventilation for habitability purposes is stopped no contamination should enter the compartment, except a small amount from unavoidable casing leakage. The boiler air system will be contaminated and some gamma radiation must be expected from it. Strict monitoring will be necessary to establish whether the compartment should be evacuated or times on watch limited.

(*b*) Shutting down the habitability ventilation will result in an immediate rise in temperature in the compartment. Depending on the ambient temperature outside, on the sea water temperature and on the steam conditions and geometry of the machinery, conditions may soon become very unpleasant. From trials so far carried out, it seems probable that this will happen after about 30 minutes in temperate climates and less than 15 minutes in the tropics. Human endurance under such conditions depends largely on the wet bulb temperature so that it is of the greatest importance to eliminate steam leaks. Some relief can be obtained by getting as low down in the compartment as possible and watchkeepers should be instructed accordingly. Re-circulation of the air does more harm than good by distributing the hotter air from the upper levels, but gentle air movement from table or D.B. fans may be found helpful.

(*c*) Because of the strictly limited endurance under closed down conditions, it is important that habitability ventilation to machinery compartments is not shut down until the last possible moment.

(*d*) In arranging reliefs for watchkeepers after closing down it must be remembered that reliefs will be going below into very hot conditions and will have a lesser endurance than the men they are relieving. The area inside the access will be one of the hottest positions and men must be instructed to get low down as quickly as possible. All metal parts will be very hot and men must be fully covered by overalls and must wear gloves. As it is unlikely that boiler air casings will be completely airtight, respirators should be worn until monitoring shows them to be unnecessary.

Engine Rooms and Auxiliary Machinery Compartments.

3. The situation in engine rooms and auxiliary machinery compartments is similar to that in open stokeholds and the same instructions should apply. Respirators will not normally be required unless the space has become inadvertently contaminated. Conditions in general should be less severe than in open stokeholds owing to the presence of cool masses such as condensers, main inlets. Before remaining in them for long periods, such positions must be monitored to ensure that contaminated sea water has not produced a gamma radiation hazard in the vicinity.

Other Machinery.

4. Any machinery in open stokeholds or in main or auxiliary machinery compartments which uses air and which must be run in action or for steaming, should have a trunked air supply. If this is not the case, the compartment cannot be closed down and must be treated as a closed stokehold (*see* paragraph 5). Even if fitted with trunked air supplies, these machines may constitute a gamma radiation hazard when contaminated and watchkeepers should keep as far away from them as possible.

5. *Closed Stokeholds.*

(*a*) In ships with closed stokeholds, contamination of the entire stokehold together with the forced draught fans and associated trunking and the boiler air systems is inevitable in most types of fall-out. If the radiation intensity of the fall-out is high or the quantity large, as it may be in positions just outside the radius of serious damage, the hazard in the boiler rooms may be very serious. It may be necessary to set the controls and evacuate the compartment, only visiting it for a few minutes at a time to make vital adjustments. Anyone entering the compartment or remaining must wear full protective clothing and respirator.

(*b*) The deposition of most of the contamination entering the boiler room will depend on the geometry of the machinery and ventilation layout. Fans and fan chambers, positions in the direct air stream and the furnace itself are likely to be most heavily contaminated. After heavy fall-out, levels of radiation will preclude normal watchkeeping for a considerable time and a rigidly controlled system of short watches and visits must be introduced to keep the accumulated doses of watchkeepers as low as possible. The number of men on watch must be reduced to a minimum. It must be remembered that until the ship is decontaminated, men off watch may still receive some radiation from deposits on the weather deck and permissible watchkeeping dosages must allow for this. Because of the necessity for frequent changes of watches the organization should cater for the early reading of the personal dosimeters of engine room personnel.

6. *Access to Machinery Spaces.*

(*a*) In ships where access to closed stokeholds is from the citadel, arrangements must be made to prevent the spread of contamination by men coming off watch. In some small ships, access to some machinery spaces is from the weather deck and men coming off watch can enter the citadel through the normal citadel access. Men going on watch may take contamination into the compartment with them, but this will not matter in closed stokeholds which will already be contaminated.

(*b*) However, in open stokeholds and other machinery compartments, spreading of contamination from the outside must be avoided. The best use should be made of lobbies and other cover for improvised cleansing; overshoes and other simple coverings, which can be discarded before entering the clean area, should be improvised if not already available.

Evaporators.

7. Distilling plant should be shut down while in an area of fall-out or in waters known to be contaminated. There is unlikely to be any direct danger in distilling to make up feed, but the distilling plant will become contaminated and will require decontamination. Under no circumstances should water be distilled for ship's tanks under conditions of fall-out or when the ship is in contaminated sea water.

New Construction.

8. All new construction ships are being provided with trunked air to boilers, diesels and gas turbines and with remote control of main and auxiliary machinery and boilers from a position in the citadel. In such ships, machinery spaces can be closed down and should remain contamination free. Visits need only be limited by thermal conditions and by possible gamma radiation hazards from furnace air systems, &c.

Ingestion Hazard.

9. Eating, drinking and smoking must be strictly prohibited in any compartment known to be even slightly contaminated.

(DTSR 1623/1/4.)

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C.N.O.'s 333–357/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
19th May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

3013/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

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333.—A.C.N.B.—General Messages.

In accordance with Navy Order 336 of 1959, the state of A.C.N.B. general messages as at the 1st April, 1960, is shown in the appendix to this order.

APPENDIX.

The following F messages may now be withdrawn—

1959—	1960—
144 *see* C.N.O. 926/59	010
167 *see* C.N.O. 269/60	021
175 *see* A.T.P. 10	022.
183 *see* C.N.O. 4/60	
199 *see* C.N.O. 217/60	
200 *see* C.N.O. 168/60	
208 *see* C.N.O. 127/60.	

2. As at 0001Z, 1st April, 1960 the following F messages are still in force—

1959—

052	106	130	134	141	142	156
168	172	176	182	202	204	211

1960—

003	004	016	018	020	029	030	031	034	038
040	043	044	045	047	050	051	056	057	058
060	061	063	064	065	066	067	068	069.	

3. The following RF messages may now be withdrawn—

1959—

024 *see* S.I.	038 *see* S.F.I.	053
031	046 *see* S.T.I.	057
037 *see* RANAMO	049 *see* S.I.	059.

1960—

001
002
003
007.

4. As at 0001Z, 1st April, 1960, the following RF messages are still in force—

1959—060
1960—004
005
006.

(HNB 77/5/8.)

(*Navy Order* 336 *of* 1959.)

UNCLASSIFIED.

334.—Form of Reference to H.M.A. Ships.

(*A.F.O.* 556/1960.)

In accordance with traditional naval usage, the names of Her Majesty's Australian ships, when mentioned in correspondence, are to be prefixed by the letters H.M.A.S. Ships' names should not be placed in quotation marks or quoted without the prefix. The only exceptions to this rule are—

(*a*) when repeated references are made to a ship the prefix H.M.A.S. may be replaced by the definite article;

(*b*) in signals, no prefix is to be used except where necessary to avoid ambiguity.

2. Thus, in formal correspondence, the correct procedure is to refer to, say, H.M.A.S. ANZAC and subsequently to either H.M.A.S. ANZAC or the ANZAC. In signals, the reference should be ANZAC.

3. This ruling applies equally to naval vessels of the Commonwealth and foreign countries.

(HNB 18/3/28.)

UNCLASSIFIED.

335.—Office of Senior Naval Officer, Point Cook—Date of Closure.

The office of Senior Naval Officer, Point Cook, was closed on 11th March, 1960.

(HNB 2/4/26.)

RESTRICTED.

336.—Security of Telephone Lines.

The following considerations govern the security of the various types of telephone connections. *They do not apply to radio-telephone conversations, which are always dangerous and insecure.*

General.

2. All telephone lines, service and public alike, are routed over one general cabling network. This network is subject to constant maintenance by engineering staff, and individual circuits, whether service or public, are always liable to a measure of technical supervision, especially where faulty or inefficient lines have been reported. Any line may, therefore, be deliberately and legitimately " tapped " for such purposes. The tapping of any particular line by an unauthorized person outside the P.M.G. Department would, however, generally be a difficult task, except in cases of isolated local circuits or where lines are carried on overhead routes.

Private Wires (including Direct or Point-to-Point).

3. The direct telephone circuits provided for Navy Office and some naval establishments are usually known as " Private Wires " (abbreviation P.W.). These lines whilst giving direct access to the distant terminal do not connect at either end with the public system, but since they are routed through it they are liable to tapping to the extent indicated in paragraph 2. A private wire may terminate at one or both ends either on an individual instrument or on a service " Private Automatic Branch Exchange " (P.A.B.X.). When terminating at both ends on an instrument, the private wire is generally known as a " direct " or " point-to-point " circuit.

4. The security situation may therefore be summed up as follows—

(*a*) No telephone line can be regarded as " safe ".

(*b*) A " direct " or " point-to-point " line may be regarded as slightly less liable to overhearing than one that passes through a switchboard.

Conversations on the Telephone or Messages passed by Telephone.

5. In conformity with the above, therefore, the following instructions apply—

(*a*) In telephone conversation generally, great care should be exercised when discussing Confidential matters. Secret matters should not normally be referred to at all on the telephone, but should it be imperative, for reasons of urgency, to do so, every effort must be made to conceal their significance from a possible listener.

(*b*) Top Secret matter is never to be discussed over any telephone circuit.

6. Confidential Navy Order 69 of 1958 is hereby cancelled.

(DSD 1617/206/20.)

(*Confidential Navy Order* 69 *of* 1958.)

UNCLASSIFIED.

337.—Use of Duplicating Machine for Reproduction of Classified Information.

A case has occurred recently where the imprint of classified information has appeared on the back of an unclassified document reproduced on a duplicating machine. An impression of the classified information was left on the roller of the machine from the previous duplicating job.

2. When a classified document is reproduced on a duplicating machine, care is to be exercised to ensure that no impression of classified information remains on the roller after completion of the job.

(DNI 1617/201/2.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

338.—Herbert Lott Trust Fund.

With reference to Navy Order 478 of 1959 the grant of £80 sterling for 1958 made by the Herbert Lott Trust Fund has been awarded as follows—

	£
H.M.A.S. MELBOURNE	40
H.M.A.S. VOYAGER	24
H.M.A.S. QUIBERON	16

(DMT 211/51/7.)

(*Navy Order* 478 *of* 1959.)

UNCLASSIFIED.

339.—Prizes—Herbert Lott Naval Trust Fund.

The following awards have been made from the allocation to the Far-East Station for 1959 from the Herbert Lott Naval Trust Fund—

	Amount. (In sterling.)
H.M.A.S. TOBRUK—	
Acting Petty Officer J. H. Leith, R.41623, for outstanding efficiency as Captain of B turret; a position for which he was not qualified by specialist qualification	£2
Petty Officer C. S. H. Souter-Robertson, R.29368, for the efficient manner in which he has carried out the duties of Transmitting Station Officer, a position normally held by a Sub-Lieutenant (S.D.) G (*g*)	£3
Petty Officer Electrician V. de P. O'Regan, R.41691, for the valuable and diligent work carried out in connection with the maintenance of radar sets	£2
Petty Officer Electrician (E) R. E. Evans, R.36281, for the hard and able work carried out as Flyplane Maintainer	£2
Chief Communications Yeoman K. I. McMaster, R.27961, for his tireless and efficient work in operations and training	£2
Chief Ordnance Artificer H. J. Watson, R.36829, for the able administration of his department, and the special duties carried out in connection with armament stores	£2
Able Seaman R. J. Finch, R.52386, for his efficiency in carrying out armourer duties when his S.Q. qualification was S.G. (C) ..	£2
Able Seaman K. B. Brown, R.41671, for his efficiency in carrying out the duties of a Q.A.2 when his specialist qualification was QA2(U)	£2
Chief Electrician S. C. Sherwood, R.88098, for his untiring work in the electronics section of the ship's armament	£2
H.M.A.S. ANZAC—	
Petty Officer Electrician (E) H. B. Short, R.36821, for his diligent and efficient work in the Flyplane section	£2
Acting Petty Officer Electrician (E) T. C. Eather, R.47191, for his diligent and efficient work in the Flyplane Section	£2
Petty Officer Radio Electrician A. I. Lehman, R.37292, for his valuable and diligent work carried out in connection with the maintenance of radar sets	£2
Chief Ordnance Artificer J. M. Thornton, R.36827, for his efficiency as Chief O.A. and for having kept responsibility for the Ordnance Department, without the benefit of the guidance of a qualified Ordnance Engineer Officer, in a most satisfactory manner ..	£3
Petty Officer J. W. Gosch, R.28216, for having acted as the Transmitting Station Officer in the absence of the officer responsible and for having made a most creditable showing as second-in-command of the Gunnery Department	£3
Petty Officer T. J. Bilbe, R.35461, for having acted, in a most competent manner, as a fully qualified O.A. with only a first class gunnery rate. He has been wholly responsible for "A" turret and has been very successful	£3

(DMT 211/51/7.)

UNCLASSIFIED.

340.—Higher Rates Training.

The table printed as an appendix to this Navy Order shows the number of ratings who qualified professionally for higher rate during the period 1st June to 31st December, 1959.

2. Although these figures show a distinct improvement on the preceding six months there is a continuing shortage of leading rates in almost every branch. During the period July, 1960, to December, 1961, the engagements of a large number of senior ratings are due to expire, which requires that the greatest importance should continue to be attached to higher rates training.

APPENDIX.

RATINGS PASSED PROFESSIONALLY FOR HIGHER RATING, 1ST JUNE TO 31ST DECEMBER, 1959.

—	Seaman.		Electrical (P).		Electrical (E).		Radio Electrical.		Electrical (Air).		Radio Electrical (Air).		Engineering.		
	P.O.	L.S.	POEl (P).	LEM (P).	POEl (E).	LEM (E).	POREl	LREM.	POEl (Air).	LEM (Air).	POREl (Air).	LREM (Air).	CMe.	POMe.	LMe.
MELBOURNE ..	1	9	—	3	—	—	1	2	—	5	3	8	1	—	13
VOYAGER	1	5	—	—	1	1	—	1	—	—	—	—	—	3	4
VENDETTA	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
VAMPIRE	3	3	—	—	—	—	—	—	—	—	—	—	—	3	1
ANZAC	4	6	—	1	—	—	—	2	—	—	—	—	1	—	2
TOBRUK	—	—	—	—	—	1	—	1	—	—	—	—	2	—	—
QUEENBOROUGH ..	2	2	—	1	—	—	—	—	—	—	—	—	1	1	—
QUICKMATCH ..	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1
QUIBERON	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
WARRAMUNGA ..	—	1	—	—	—	—	—	—	—	—	—	—	1	—	1
SWAN	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
FREMANTLE ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
COOTAMUNDRA ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KIMBLA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WARREGO	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
PALUMA	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
WOOMERA	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
GASCOYNE	—	2	—	—	—	—	—	—	—	—	—	—	—	—	2
DIAMANTINA ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ALBATROSS	—	—	—	—	—	—	—	—	3	4	—	7	—	1	1
CERBERUS	1	6	—	—	—	2	—	—	—	—	—	—	—	2	6
HARMAN	—	—	—	—	—	—	—	9	—	—	—	—	—	—	1
KUTTABUL	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
MELVILLE	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
NIRIMBA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PENGUIN	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
TARANGAU	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WATSON	—	3	—	—	—	—	—	3	—	—	—	—	—	—	—
CRESWELL	—	3	—	1	—	—	—	—	—	—	—	—	—	—	1
TOTAL	12	46	Nil	6	1	4	1	18	3	9	3	15	7	15	36

(DMT 311/201/4.)

UNCLASSIFIED.

341.—Illness, Injuries and Deaths—Notification of Next-of-Kin.

Navy Order 556 of 1958 is to be amended by inserting the following new paragraph 17A—

" 17A. As casualties in the service are frequently reported in the Press and become the subject of public interest, it is important that the procedure in paragraphs 17 and 18 should be followed without delay, and that the Naval Board should become immediately aware that the next-of-kin have been informed so that the release to the Press may be made. To facilitate this action, when appropriate, the report of the Chaplain or officer who informs next-of-kin should be immediately telephoned to his Administrative Authority."

(HPB 341/1/3.)

(*Navy Order* 556 *of* 1958.)

UNCLASSIFIED.

342.—Ratings—Communication Branch—Fleet Board Examinations for Leading Tactical or Leading Radio Communication Operator.

It has been decided to waive the provision whereby Tactical or Radio Communication Operators are limited to three attempts at a Leading Rates Fleet Board examination.

2. A.B.R. 10, article 1329, clause 18, will be amended.

(HPB 312/24/3.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

343.—Gyro-Compass Pattern 5005 and A.G.M. Compass, Type 6—Amplifier, Pattern 8165—Replacement of Defective Capacitors, Pattern F15/011-5511 by Pattern F15/011-7820 (N.A.T.O. Group 5910).

(*A.F.O.* 467/1960.)

Amplifiers, pattern F3/8165 are fitted with capacitors, pattern F15/011-5511 (N.A.T.O. Group 5910) (circuit diagram reference C2 and C4, plate 8 in B.R. 8, plate VII. in B.R. 109). These capacitors are in temperature category H2 and reports from sea indicate that they are likely to prove unreliable if the amplifier is sited where high ambient temperature prevails.

2. Capacitors, pattern F15/011-7820 (N.A.T.O. Group 5910) in temperature category H1 are now available and should be used to replace pattern F15/011-5511 capacitors, if the latter become defective, in amplifiers, pattern F3/8165.

3. Admiralty has advised that the relevant handbooks will be amended.

(DEE 519/53/80.)

UNCLASSIFIED.

344.—Ammunition—Detonators, Electric, No. 82, Mark N2—Withdrawal of Lot 16 Filled ICI/A 8/52.

Consequent upon failures at proof, it has been decided to withdraw from Naval Service all detonators, electric, No. 82, mk. N2, lot 16 filled ICI/A 8/52.

2. Accordingly, any such detonators held should be returned to R.A.N. Armament Depots for exchange. These detonators come under category (ff) of B.R. 862 (N.M.E.R.), article 304.

3. R.A.N. Armament Depots only—separate instructions have been issued.

(DW 715/51/104.)

UNCLASSIFIED.

345.—Ammunition—Primers, Electric, No. 17, Mark 2, Lot 9, PL 1939 W—Withdrawal from Service.

(*A.F.O.* 588/1960.)

Primers, electric, No. 17, mark 2, PL lot 9 filled 1939W are to be withdrawn from service use—

Reason	Deterioration of magazines due to age—with a risk of splitting on firing.
Ships and establishments affected	Those carrying ammunition fitted with No. 17 electric primers, and/or loose No. 17 primers for testing purposes.
Action required	Scrutinize the ammunition or labels and land any primers and cartridges fitted with primers, of the above description. Replacements as necessary are to be demanded in lieu.
Category (*N.M.E.R. Article* 304)	(dd) i.e., dangerous if fired.
N.A. Depots	Separate instructions have been issued.

(DW 729/56/29.)

UNCLASSIFIED.

346.—Ammunition—Shell, Q.F. 4.5-in., S.A.P. and S.A.P. " AK "—Use for Practice.

(*A.F.O.* 47/1960.)

A quantity of shell, Q.F. 4.5-in. S.A.P. and S.A.P. " AK " is being plugged in the United Kingdom for use as SU practice and will shortly be available for supply to the R.N. for Fleet practices. These shell will not be supplied to ships on the Australia station, but may be supplied to R.A.N. ships on the Strategic Reserve.

2. The " AK " shell will retain their existing colours. When demanding SU practice ammunition, ships will specify the amount of each type of shell required. Up to 50 per cent. of the annual allowance may consist of S.A.P. or S.A.P. " AK " shell plugged for practice. The remaining 50 per cent. will consist of SU(D) projectiles. The S.A.P. shell will be issued in lieu of Practice Projectiles AK and Practice Weighted Inert Projectiles.

3. The shell when plugged will be accounted for and supplied under the following headings—

JD 546 Shell, 4.5-in. Prac. S.A.P. ..	Filled and plugged.
JD 585 Shell, 4.5-in. Prac. S.A.P. ..	Filled and plugged, No. 9 tracer or plug rep. No. 9 tcr.
JD 611 Shell, 4.5-in. Prac. " AK " S.A.P.	Filled and plugged, No. 9 tracer or plug rep. No. 9 tcr. RED.
JD 637 Shell, 4.5-in. Prac. " AK " S.A.P.	Filled and plugged, No. 9 tracer or plug rep. No. 9 tcr. GREEN.
JD 663 Shell, 4.5-in. Prac. " AK " S.A.P.	Filled and plugged, No. 9 tracer or plug rep. No. 9 tcr. YELLOW.
JD 676 Shell, 4.5-in. Prac. " AK " S.A.P.	Filled and plugged, No. 9 tracer or plug rep. No. 9 tcr. WHITE.

4. 4.5-in. shell filled and plugged will not be supplied for use for shore-mounted weapons at gunnery ranges. Inert practice will continue in supply to these establishments.

5. The S.A.P. and S.A.P. " AK " shell will be classified as follows for stowage and transport—

When boxed	Group 6, Category X.
When unboxed	Group 5, Category Z.

(DW 726/56/34.)

UNCLASSIFIED.

347.—C.R.B.F. Directors, Marks 2 M, 7 & 7, Mod. 3 Boxes—Modification.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted, Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	C.R.B.F. Directors, Mks. 2 M and 7 series.
(*c*) *Part of equipment affected*	Tachometric boxes.
(*d*) *Purpose of modification* ..	To obviate damage to the wiring insulation by preventing oil vapour passing from the main case into the terminal chamber.
(*e*) *Nature of modification* ..	A brass plate is to be sweated to section " J " so that it effectively blanks off the large ports in sections " J " and " K " through which the wiring passes. A Niphan socket patt. No. 665 is to be attached to the plate by 3 No. 2 BA screws to line up with a 1-in. dia. hole bored in the plate. The opposite end of the Niphan socket is to protrude into section " K ". The wiring is to pass through the socket.
(*f*) *Drawings*	W.D.O. 201. DNO 7103.G. DNO 5349.G.
(*g*) *By whom to be done* ..	Dockyard.
(*h*) *When to be done* ..	As Tachometric boxes are landed for repair.
(*i*) *How to be recorded* ..	As MOD. AN 1 to C.R.B.F. Directors, Mks. 2 M, 7 & 7, Mod. 3.

(DW 737/56/13.)

UNCLASSIFIED.

348.—Guns—Aircraft—Change in Admiralty Store References.

(*A.F.O.* 203/1960.)

The Store references of the undermentioned items have been changed, to facilitate storage and accounting in R.A.N. Armament Depots, and are as indicated—

Old S.R. and Remainder of Nomenclature.	*New S.R. No.*
ES 651—Box, steel B.F.M., mark 5	EQ 209
ES 677—Box, steel B.F.M., mark 7	EQ 990
ES 353—Carton, No. 2, buffer assembly	EP 587
ES 457—Chest, barrel	EP 704
ES 548—Chest, No. 2 gun	EP 717
ES 561—Chest, No. 3 gun	EP 730
ES 121—Gun, machine, Hispano, 20-mm. No. 2, Assembly (Drill)	EZ 212
ES 134—Gun, machine, Hispano, 20-mm. No. 3, Assembly (Drill)	EZ 225
ES 173—Gun, machine, Hispano, 20-mm., mark 5, Assembly (Sectioned training model hand operated) ..	EZ 238
ES 186—Gun, machine, Hispano, 20-mm., mark 5, Assembly (Sectioned training model power operated) ..	EZ 251
ES 160—Gun, machine, Hispano, 20-mm. No. 2, Assembly (Sectioned)	EZ 264
ES 189—Mechanism, mark 5, belt feed, 20-mm., right hand, Assembly (Sectioned)	EZ 202

2. Arrangements are to be made for existing stocks of these items to be held on charge under the revised supply nomenclature. Ledger headings should be amended at the same time.

3. Re-stamping of any items bearing the original store reference, is to be carried out by R.A.N. Armament Depots as convenient.

4. Vocabulary of Naval Armament Stores, Naval Proportion Books and Warrants of Naval Armament Stores are being amended.

(DW 709/51/20.)

UNCLASSIFIED.

349.—R.P.C. Gun Mountings, 4.5-in., Mark 6*, Mod. 1—Resetter Boxes, Mark 8, Mods. 2, 3 and 4—Inspection of Assembly of Input Pinions.

(*A.F.O.* 253/1960.)

Cases have occurred where the 52 tooth bakelite input pinion, supplied loose with each mark 8, mod. 2, 3 and 4 Resetter Box has been incorrectly assembled on the input shaft.

2. These have arisen because the input pinion has been fitted to the input shaft in the manner normal to the mark 8, *mod. O* Resetter Box. Fig. 2, Navy Order diagram issue 9/60. This results in only partial meshing of the 25-tooth anti-backlash gear wheel on the Fine Magslip drive, permitting between 20 and 30 minutes of backlash on the fine resetter magslip in each case.

3. The correct method of assembly is shown in Fig. 1, Navy Order diagram issue 9/60, and on M.V.'s Drawing No. X1621382, Sheet 2, in " Part Section showing position of input drive " for " MV 34/1 and MV 34/2 ".

4. All mountings fitted with Resetter Boxes, mark 8, mods. 2, 3 or 4 should be examined at the earliest opportunity to check the correctness of the assembly.

5. If the assembly is found to be incorrect, it should be treated as a defect and remedial action taken by ship's staff with dockyard assistance, as soon as this is available.

6. Pinions issued in future will be marked to indicate the correct method of offering up to the input shaft. Relevant drawings should be annotated accordingly *vide* Navy Order diagram issue 9/60.

(DW 736/53/10.)

RESTRICTED.

350.—Ocean Passage Observations by H.M.A. Ships during 1959.

In accordance with Navy Order 859 of 1959, the ocean passage observations by H.M.A. ships during 1959 are set out as an appendix to this order.

2. Operational authorities when sailing H.M.A. ships on ocean passage are to quote Navy Order 859 of 1959 in the sailing instructions, and passages are to be planned to allow sufficient time for these observations to be made, where this does not conflict with specific exercises.

3. Navy Order 860 of 1959 is hereby cancelled.

APPENDIX.

Ship.	*Oceanic-Sdgs.* 1959.	*B.T.-Slides* 1959.	*Magnetic-Vn.* 1959.	*Hydro-Notes* 1959.
COOTAMUNDRA ..	1	—	—	1
DIAMANTINA ..	1	62	—	1
EMU	—	—	—	1
FREMANTLE	—	—	—	1
GASCOYNE	—	22	—	5
KIMBLA	1	48	—	—
MELBOURNE.. ..	1	—	—	1
QUEENBOROUGH ..	2	18	—	5
QUIBERON	1	29	—	—
QUICKMATCH ..	—	65	—	1
SWAN	—	41	—	13*
TOBRUK	—	108	—	—
VAMPIRE	—	46	—	—
VENDETTA	1	59	1	1
VOYAGER	—	37	—	—
WARRAMUNGA ..	—	29	—	1
WARREGO	—	23	1	—
WATSON	—	—	—	1

* Also 4 Reports on Survey.

(DOD 161/1/13.)

(*Navy Orders* 859 *and* 860 *of* 1959.)

UNCLASSIFIED.

351.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 127. *Classification* " *A* ".

Item: To fit one in number 16 way T.C.B. in the E.P. 2. This board to be interconnected with the present one and in the following additional direct lines run—

(*a*) One of each generator space (5 in No.).
(*b*) One to L.R.R. for C.W.S. change-over control.
(*c*) One to each Breaker Room (9 in No.).

Remarks:

Compensating weight of 1,210 lb. is required before this A and A can be carried out.

Proposed items for weight surrender are to be forwarded to Navy Office and Naval Board approval obtained before this item is taken in hand.

References:

H.M.A.S. MELBOURNE proposed alteration and addition Item. T.D.L. " CC ".
Navy Office letter No. C.1031 of 31st August, 1959.
F.O.I.C.E.A. memorandum No. N.20/14/77 of 23rd December, 1959.

(DCC 1213/52/45.)

UNCLASSIFIED.

352.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 35. *Classification* " *A* ".

Item: " To fit a urinal in the officer's forward bathroom ".

References:

(i) F.O.C.A.F. memorandum A.F. 1931/19 (3659) of 4th July, 1959.
(ii) Navy Office letter 69689 of 11th August, 1959.
(iii) F.O.I.C.E.A. memorandum N20/23/123 of 18th September, 1959.

(DCC 1215/55/5.)

UNCLASSIFIED.

353.—Naval Stores (Technical) (Class F, Group 1A/1)—Radar—Obsolete Stores—Disposal.

Navy Order 143 of 1960 is to be amended as follows—

Appendix—delete: Pattern " 75397 ".
insert: Pattern " 57397 ".

(DNAS 518/51/115.)

(*Navy Order* 143 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

RESTRICTED.

354.—Books—Libraries—Central Reference Libraries—Additions.

A list of books added in the quarter ending 31st March, 1960, to the Central Reference Libraries, in H.M.A. ships ALBATROSS, CERBERUS and WATSON, is shown in the appendix to this order.

2. Officers and ratings who wish to borrow books from the Central Reference Libraries should apply to the Instructor Officer (or Education Officer) of the ship or establishment in which they are serving. This officer holds a complete catalogue of the Central Reference Libraries.

3. This order will be reprinted for posting on Notice Boards.

APPENDIX.

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Philosophy—		
Various	My Philosophy of Life	A.C.W.
National Research Council	Psychology for the Fighting Man	W.
Religion—		
Pritchard	Archaeology and the Old Testament	A.
Graves	Greek Myths	W.
Social Science—Economics—		
Lion and Lukas	The Prague Ghetto	A.
Kissinger	Nuclear Weapons and Foreign Policy	C.
Kirkpatrick	The Inner Circle	C.
Kennan	Russia, The Atom and The West	A.
Kennan	American Diplomacy 1900–1950	C.
Laquer	Communism and Nationalism in The Middle East	W.
Stonier and Hague	A Textbook of Economic Theory	C.
Machlup	The Political Economy of Monoply	C.
Naval Customs and History—		
McCandless	Service Etiquette—Correct Social Usage for Servicemen on Official and Unofficial Occasions (U.S.N.)	C.
Macintyre	The Thunder of the Guns—A Century of Battleships	C.W.
Bradford	The Mighty Hood	A.C.
Communications—		
—	Stanley Gibbons Simplified Stamp Catalogue 1960	A.

APPENDIX—*continued.*

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Foreign Languages—		
Lemaitre	French—How to Speak and Write It	A.
Mathew	Chinese-English Dictionary	W.
Mathew	Revised English Index to Chinese-English Dictionary	W.
Peking University	Modern Chinese Reader, Part I.	W.
Peking University	Modern Chinese Reader, Part II.	W.
Katsumata	Kenkyuscha's New Japanese-English Dictionary	A.
Iwasaki and Kawamura	Kenkyuscha's New English-Japanese Dictionary	A.
Lewis	Teach Yourself Malay	C.
Mathematics—		
Cotton and Parry	Solutions of Problems in Electrical Technology	A.
Wannan	Descriptive Geometry and Drawing	C.
Rule and Watts	Engineering Graphics	C.
Hoelscher, Arnold and Pierce	Graphic Aids in Engineering Computation	C.
Kearsey	Sound, Heat and Light	C.
Kearsey	Mechanics and Hydrostatics	A.
Lambe	Applied Mathematics for Engineers and Scientists	A.
Stephens and Ward	Applied Mechanics	W.
Physics—		
Hechet and Rabinowitch	Explaining the Atom	C.
Belchem	A Guide to Nuclear Energy	A.
Geology—Weather—		
Bowen	The Exploration of Time	W.
Medicine—		
Morgan	Doctors to the World	A.C.W.
Engineering—		
Levell	Pulse and Time Base Generators	A.
Gottlieb	Basic Pulses	A.
Waters	The Art of Navigation in England in Elizabethan and Early Stuart Times	W.
Oudet	Radar and Collision	A.W.
Desoutter	Aircraft and Missiles—What They Are, What They Do, How They Work	A.
Judge	Gas Turbines for Aircraft	C.
Ley	Rockets, Missiles and Space Travel	W.
—	Soviet Writings on Earth Satellites and Space Travel	W.
Shternfeld	Soviet Space Science	A.C.W.

APPENDIX—*continued.*

Classification and Author.	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Business—		
Kozmetsky and Kircher	Electronic Computers and Management Control	C.
Rydge	The Australian Businessman's Handbook ..	W.
Coleman ..	The Practice of Successful Advertising ..	C.
Amusements—		
Bloomfield ..	Know-How in the Surf	W.
Various ..	The Complete Manual of Free Diving ..	A.C.W.
Parrott	Sea Anglers' Fishes of Australia	W.
History in General—		
Lewis	The History of the British Navy	W.
Strong	The Later Modern World (1776–1800) ..	A.
Maitland ..	Task for Giants..	A.
Strong	The Twentieth Century and the Contemporary World	C.
Agar	The Unquiet Years—U.S.A.—1945–1955 ..	W.
Geography—		
Hance	African Economic Development	C.
Ginsburg ..	The Pattern of Asia (Political and Economic Geography)	W.
Dobby	South-east Asia	W.
Gillett and McNeill	The Great Barrier Reef and Adjacent Islands	C.
Biography—Heraldry—		
Eden	The Memoirs of Sir Anthony Eden ..	A.C.W.
Connell ..	Auchinleck—A Critical Biography ..	A.C.
Modern History—		
Macintyre ..	Narvik	A.
Strachey ..	The End of Empire	A.
Mattingly ..	The Defeat of the Spanish Armada ..	W.
Cole	The Postwar Condition of Britain	C.
Royal Institute of International Affairs	Britain in Western Europe	W.
Grosser ..	Western Germany—From Defeat to Rearmament	A.
Stead	Second Bureau	C.
Sansom ..	A History of Japan to 1334	W.
Inoguchi and Nakajima	The Divine Wind	A.C.W.
Kirk	A Short History of the Middle East ..	C.
O'Ballance ..	The Sinai Campaign—1956	A.
Morris	The Hashemite Kings	A.C.
Attiwill.. ..	The Singapore Story	A.
Chesterton ..	A History of the United States	W.
Fischer	The Story of Indonesia	W.

(DNES 451/51/1.)

UNCLASSIFIED.

355.—Form S217—Quarterly Replenishment at Sea Report—Abolition.

Form S.217—Quarterly Replenishment at Sea Report has been abolished.

2. A manuscript report should be rendered to F.O.C.A.F. through the Administrative Authority by ships only if a replenishment operation is of special interest (e.g.)—

(*a*) Difficult operations in adverse weather.
(*b*) Accidents to gear or personnel.
(*c*) Use of non-standard rigs.
(*d*) Suggestions of improvement to gear or method.
(*e*) Very large quantities of stores, fuel or ammunition transferred.

(DNAS 464/54/110).

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

356.—Naval Stores—Accounting—Materials Received from Department of Works and Taken in to Direct Use.

The procedure detailed in article 1847, of A.B.R. 4, Naval Storekeeping Manual, whereby sundry consumable Naval Stores not held on board for which no recurring requirement can be foreseen and which are issued to the department of the ship requiring supply immediately on receipt are not brought to account may be extended to materials of a similar nature received from the Department of Works on form A.S. 549 *vide* article 3203 of A.B.R. 4.

2. On receipt of the materials, all copies of the form A.S. 549 are to be notated that they are to be taken into direct use. On issue, the stamp referred to in A.B.R. 4, article 1847, paragraph 3 (ii) is to be inserted on all copies of the forms, on the back thereof if necessary, and the signatures of the person drawing the stores and the departmental officer concerned obtained thereon.

3. It is stressed that this procedure is only to be used for items not held at the establishment and for which no recurring requirements can be foreseen. If there is any possibility that the items concerned may become a recurring requirement, normal accounting procedure is to be followed.

4. A.B.R. 4 will be amended.

(DNAS 501/51/13.)

UNCLASSIFIED.

357.—V.H.F. Transmitter, Type 87M, Tuning and Adjustment.

Investigation into the operation of type 87M V.H.F. transmitters has shown that improved performance in the form of higher average and more constant level power output over the tunable frequency range of the transmitter may be obtained by the following adjustment and tuning procedure—

(*a*) Set the earth tap on the aerial coupling coil on the same turn as, and spaced ⅜ inch from, the aerial connection tapping position.

(*b*) Ensure that the transmitter has been accurately neutralized in accordance with B.R. 1399.

(*c*) Ensure that the R.F. power output leads from the aerial coupling coil are run as closely as possible together throughout their length and placed symmetrically with respect to earth.

(*d*) Tune the transmitter in accordance with B.R. 1399 bearing in mind that the relevant transmitter meter readings may vary slightly from those shown in appendix B, page 15 of B.R. 1399, due to the new tapping position of the earth lead on the aerial coupling coil detailed above.

(*e*) Use Test Set type C.T. 214 to ensure that optimum power output of the transmitter is being obtained over the full frequency range without exceeding the maximum power rating.

2. All H.M.A. ships and establishments fitted with type 87M transmitter are to adopt the procedure detailed above when setting up type 87M transmitters. Any instances of abnormal operation or inferior communicating performance of the type 87M transmitter which may be attributed to the above tuning and adjustment procedures are to be reported immediately through the appropriate Administrative Authority to the Naval Board.

(DEE 1213/252/5.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

FOR OFFICIAL USE ONLY. C.N.O. 358/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
24th May, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

3382/60

UNCLASSIFIED.

358.—Vaccination and Immunization.

The following order is subject to the provisions of Q.R. & A.I., Articles 4264 and 4265, as adapted by C.O.R., Article 577. Where requirements relating to civilians are given hereunder it is to be understood that these are included for guidance only and do not imply any responsibility of this Department for vaccinations or immunizations at public expense. Dependants of Naval personnel proceeding overseas at **Departmental expense** may, within the provisions of this order, be vaccinated, or immunized free of charge at Naval Medical Establishments and certificate issued. When such persons elect to be immunized by a civilian medical practitioner, they will do so at **their own expense.**

2. As it is not practicable to promulgate by Navy Order the frequent changes in international regulations for air travel, travellers leaving Australia by air will be informed of their requirements in passage instructions issued by the Naval authorities sponsoring the flight.

R.A.N. Certificates of Vaccination and Immunization.

R.A.N. Personnel—International Certificates.

3. International certificates may be required in the following circumstances in conformity with the regulations of the World Health Organization. They require stamping with an approved stamp for authentication and stamps have been distributed as necessary. Vaccination certificates are to be signed by a Medical Officer only, never by a Sick Berth rating or other unqualified person. The correct type of International Certificate is to be used as no other type will receive international recognition and may cause difficulty between the traveller and foreign officials.

(*a*) International Certificates are always required when travelling by air.

(*b*) International Certificates may be required by personnel travelling overland or by sea in other than H.M.A. ships.

4. In order to avoid an unnecessary amount of paper work, the following rules are to be observed—

(*a*) *Smallpox, Cholera.*—International Certificates need only be given when an immediate requirement exists. This will generally be for those travelling by air or proceeding individually by private ship. If an officer or rating, who, by virtue of his position, or for any other reason, believes that he may be travelling by air or proceeding by private ship within the period for which the vaccination protection is valid, he is to be given the required International Certificates on demand. If an individual requires an International Certificate, not having been given one originally, he can only obtain it from the Medical Officer who carried out the vaccinations. If this Medical Officer is not available, the required vaccination or immunization will need to be done again, as the World Health Organization will not accept a certificate unless it is signed by the Medical Officer who actually did the work.

(*b*) *Yellow Fever.*—Every officer and rating is to be given an International Certificate after immunization against yellow fever, whether an immediate requirement exists or not.

(*c*) *Typhoid Group of Fevers.*—These are not quarantine diseases and International Certificates are not required.

(*d*) *Plague and Typhus.*—Immunization is no longer required by International Sanitary Regulations but certain countries may intermittently require such vaccination before entry would be permitted. These occasions will be advised by signal. Certificates are to be made on page 10 or 11 of the certificate after immunization.

Wives and Families of Naval Personnel.

5. Individual International Certificates are to be completed for each vaccination except for the typhoid group of fevers for which an ordinary medical certificate stating that the required vaccination has been carried out will suffice. Until further notice dependants proceeding directly from Australia to the New Guinea Area do not require any vaccination.

Naval Civilian Employees, Wives and Families.

6. Similar rules to those in force for wives and families of Naval personnel, apply.

Counter-stamping and counter-signing.

7. All International Certificates issued by other than Service medical officers require to be counter-stamped and counter-signed by a Naval Medical Officer or by the local Medical Officer of Health. In cases of difficulty in Australia, such certificates may be sent to the Medical Director-General, Department of the Navy, Victoria Barracks, Melbourne, for counter-signature. As yellow fever certificates are issued only by recognized centres, they do not require such counter-signature. *See* paragraph 62.

Method of Dating.

8. The following extract from the *Weekly Epidemiological Record*, No. 245 (5th September, 1951), issued by the World Health Organization, Geneva, is promulgated for information and is to be followed in the Royal Australian Navy—

> " It has been reported that a number of misunderstandings have occurred concerning the date of issue, and hence, the duration of the period of validity, of International Certificates of Vaccination, due to differences in national practice of recording the date. For example, 10th August, 1958, may be written in the following manner:
>
> 10 Aug. 1958; Aug. 10th, 1958: 10.8.1958: 8.10.1958.
>
> In order to reduce to the minimum the number of such misunderstandings it is suggested that when completing the International Certificates of Vaccination in English or French, the following method of recording the date should be adopted. The day should be written in Arabic numerals and should appear first; the month should be written in Roman numerals and should appear second; the year should be written in Arabic numerals and should appear last. In the example quoted above, the date would appear as 10.VIII.1958.
>
> The suggestion made in this extract would of course apply equally when the *authentication* of a certificate is dated."

9. The International Sanitary Regulations which operate generally from 1st October, 1952, include under the term " Vaccination " all the methods of protection hitherto referred to as " Inoculation ". The term inoculation should therefore not be used.

Corrections, Blotches, on International Certificates.

10. It is of paramount importance that blotches, corrections, &c., on International Certificates be avoided, as these blemishes may be regarded as forgeries by some foreign officials and may result in delay and inconvenience to travellers.

11. In accordance with an agreement signed by Sweden, Denmark and Norway, which came into force on 1st April, 1955, these countries are from that date regarded as a single unit in respect of the application of quarantine regulations.

Recording.

12. All vaccinations and immunizations are to be recorded in the medical envelope (A.F. Med.4) at the time of the vaccination. (The method of dating shown in paragraph 8 is to be used in form A.F. Med.4.) Other manuscript records of vaccination for internal Service purposes are to be considered of secondary importance to the A.F. Med.4.

Arrangements for Supply of International Certificates.

13. Printed International Certificates of Vaccination are supplied to all H.M.A. ships and establishments. Civilians requiring certificates may procure them in each capital city, through the office of the Commonwealth Department of Health in the State concerned.

14. Strict adherence to the intervals between doses of T.A.B., T.P.T., and cholera vaccine is to be observed wherever possible. Only in very exceptional circumstances are these intervals to be shortened.

Smallpox (Compulsory at All Locations.)

15. All officers and ratings entering the Service are to be vaccinated, or, if considered desirable by the Medical Officer, re-vaccinated; re-vaccination of active Service personnel is to be carried out every three years, or at more frequent intervals when circumstances demand. The multiple pressure method of vaccination is to be used. The estimated incidence of smallpox in the native population of the Arabian Peninsula is such that it is strongly advised that all passengers to and through Aden and Bahrein should have been vaccinated during the twelve months before landing there.

Method of Vaccination.

16. The area to be vaccinated should be well cleansed with soap and water and must be thoroughly dry before the lymph is applied. Care should be taken not to rub the skin so vigorously as to damage the epidermis and thus encourage the development of secondary vesicle. (Methylated spirit, alcohol or other agents should not be applied.)

17. A small drop of vaccine lymph covering an area about one-eighth of an inch in diameter is placed on the skin at the prepared site, usually on the left arm. A flat sided needle—straight Hagedorn—which should be of relatively large size, in good condition, sharp and sterile, is held parallel or tangential to the arm with the forefinger and middle finger above and the thumb below. The side of the needle point is then pressed firmly and rapidly into the drop 30 times as a routine, taking about ten seconds. The number of pressures to be employed in making the insertion varies according to the vaccination history of the individual being vaccinated. In making the pressure, the needle is lifted clear of the skin each time. Suitable needles may

be obtained from R.A.N. Medical Store, No. 24 Shed, Bundock Street, Randwick, New South Wales. This rapid up and down motion of the needle is in a plane perpendicular to the skin. The needle point is not driven into the skin but at each pressure the elasticity of the skin pulls a little of the epidermis over the point of the needle so that the lymph is carried into the deeper epidermal layers. If the skin has not been unduly irritated by a preliminary cleansing procedure and the needle has been properly aligned no pain or bleeding should occur. As soon as the pressures have been completed the excess lymph should be wiped off with cotton wool, the remainder being allowed to dry.

18. The immediate application of a dressing is unnecessary. At the stage of maximum reaction, however, a piece of sterile gauze may be placed over the lesion if considered desirable.

19. First vaccination after entry should be done by means of an insertion about one-eighth of an inch in diameter. If there is a definite scar of previous vaccination, 30 pressures are to be employed in making this insertion. If there is no evidence of previous vaccination, ten pressures only need be employed.

20. Routine re-vaccination is to be done by an insertion with 30 pressures.

21. When re-vaccination is undertaken in the presence of an epidemic or undue prevalence of smallpox, there should be at least two separate areas of insertion with 30 pressures in each.

22. When primary vaccination is performed on infants, the multiple pressure technique using 30 pressures should be employed. The best age for vaccination in a thriving infant is from three to four months.

Assessment of Results.

23. Accurate reading of the results of vaccination depends both on the period of time after insertion at which the maximum local reaction occurs and on the degree of reaction. Maximum reaction may occur at any time within 2–10 days after vaccination. At least two inspections should be carried out, the first after 48 hours and the second on the sixth day, the latter to assess the result which is to be recorded as follows—

(*a*) Where vesicle formation is absent, a second attempt is to be made. If a similar result is obtained, it should be recorded as "Reaction of Immunity" (R.I.V.). This insusceptibility should not be considered a final life-long categorization. Such persons are to be re-vaccinated at the usual intervals required for those who have been successfully vaccinated.

(*b*) Where vesicle formation is present—

(i) Where vesicle formation is moderate and is judged to have reached or passed its maximum at the time of inspection (on the sixth day) it should be recorded as "Accelerated Reaction (Vaccinoid)". (A.R.(V).)

(ii) Where vesicle formation is more marked than in (i) and is still developing it should be recorded as "Typical Primary Vaccinia". (T.P.V.)

(iii) If in doubt whether the reaction has reached its maximum at the sixth day, a further inspection is to be made two days later.

(*c*) *Insusceptible to Vaccination.*—A local reaction reaching maximum size on the second or third day and accompanied by elevation and itchiness of the site but without a vesicle should be recorded as " Reaction of Immunity ". (R.I.V.)

(*d*) *Pregnancy.*—Vaccination of pregnant women against smallpox should be avoided as far as possible, specially during the first three months of pregnancy. It should only be performed in urgent circumstances.

Precautions with Regard to Simultaneous Use of Other Immunizing Agents.

24. If yellow fever immunization is necessary, it should precede primary vaccination against smallpox, a period of four days intervening.

25. If circumstances demand that primary vaccination against smallpox be done first, there should be an interval of 21 days from the date of vaccination before the yellow fever immunization is given.

26. When infants under the age of nine months are to be vaccinated against both yellow fever and smallpox, there should be an interval of 21 days between the two vaccinations, no matter which is performed first. Under no circumstances is the interval to be shortened.

27. Where there is evidence of previous successful vaccination against smallpox, yellow fever immunization and re-vaccination against smallpox may be carried out at the same session but if time permits yellow fever immunization should always precede re-vaccination by at least four days.

28. Immunization for other than yellow fever may be given at the same time as vaccination but in the other arm.

Vaccination Record.

29. All ships and establishments are to keep a vaccination book in which are to be entered the following details of all vaccinations and re-vaccinations carried out—

Origin and Batch No. of Lymph Used.	*Date.*	*Name.*	*Rank or Rating.*	*Official No.*	*Primary or Re-vaccination.*	*Result and Date.*	*Initials of M.O.*

30. Particulars of all cowpox vaccination and re-vaccinations are to be included in Table V. of the journals of medical officers.

31. Use one of the following terms in stating the result, viz.—
" Reaction of Immunity ",
" Accelerated Reaction (Vaccinoid) ",
" Typical Primary Vaccinia ".

A certificate of " Reaction of Immunity " is required by the International Regulations instead of " Insusceptible to Vaccination ", or " No reaction ", these terms are unacceptable under the regulations.

32. The International Certificate, column 5, requires an indication of the result of primary vaccination only.

Lymph—Supply and Use of.

33. The medical officer can obtain supplies of lymph by demand on the Medical and Dental Store Officer, R.A.N. Medical Store, No. 24 Shed, Bundock Street, Randwick, New South Wales. or in accordance with C.O.R., article 579, in the following sizes—

Code Word.	*Size.*
(Commonwealth Serum Laboratories.)	
ORION	Single dose capillary tube.
OFFAL	10 dose phial.
OPERA	25 dose phial.
OXIDE	50 dose phial.
OCEAN	100 dose phial.

To exercise economy, use is to be made of multiple dose containers and, when ordering supplies, medical officers are to indicate the number and size of the container required as well as the total number of doses.

34. On foreign stations, supplies are to be obtained locally from recognized sources, but if this is impossible, application is to be made by signal to the Medical Director-General.

35. Lymph must be carefully stored in the coolest available place and must be used within seven days of its " date of manufacture " and, subject to the following, is to be discarded and considered expended—

(*a*) The " date of manufacture " has been accepted as the date of issue of the vaccine from the supplier's refrigerated storage. If the lymph can be stored continuously at a temperature between 0°C. and 10°C. the period may be extended to fourteen days.

(*b*) If the whole of the contents of a multiple-dose container are not expended on one day, the remainder is to be discarded.

Requirements.

36. All Naval personnel and Naval civilian employees and the wives and families of both, require an international certificate of vaccination before leaving Australia.

Certificates.

37. Certificates are valid for three years from the eighth day after a successful primary vaccination, or in the event of a re-vaccination, on the date of that re-vaccination.

Age of Person Vaccinated.

38. Three months and over; in face of special risk may be done at any age.

Typhoid Group of Fevers (Immunization Compulsory at All Locations).

39. All officers and ratings are to be immunized against the enteric group of fevers and re-immunized every year. Immunization is to be carried out on all officers and ratings before they join one of H.M.A. ships or proceed abroad by any means.

40. Recent research has shown that a higher degree of immunity is produced when the interval between the first and second doses of certain vaccines is increased. In future, the interval between the initial dose and the second dose of T.A.B. vaccine is to be from 21 to 28 days.

Dosage.

41. The vaccines now being supplied may vary in strength from time to time. It is therefore important that the dosage as prescribed on the label is strictly adhered to. Proportionately smaller amounts are to be used for the protection of women and children. T.A.B. vaccine normally supplied for Service use comprises—

1 cc. { 1,000 million B. typhosus.
500 million B. paratyphosus A.
500 million B. paratyphosus B. }

At the above strength the recommended adult dosage is one-half cc. first dose, and one cc. second dose.

42. On foreign stations where typhoid and paratyphoid fevers are prevalent, a " booster " dose of the same amount as the initial dose may be given, when considered advisable, to all persons on arrival on the station, irrespective of their previous immunization history, with the object of increasing their immunity.

43. The immunogenic properties of bacterial vaccines are best preserved at or just below 39°F. (4°C.) and such vaccines deteriorate in protective power when kept for long periods at or above " room " temperatures. *All bacterial vaccines should, when possible, be kept in a cool room or refrigerator but should not be actually frozen.*

44. T.A.B. vaccine can be obtained in the same manner as explained in paragraphs 33 and 34. Demands should be economical and limited to the quantities required.

45. In order to reduce reactions, attention is drawn to the importance of giving the injections subcutaneously. Intra-muscular injections, because of their rapid absorption, tend to give general reactions and a lower degree of immunity.

46. It is considered undesirable to exercise the injected arm unduly after immunization with T.A.B. in accordance with Medical Officers' Instructions.

International Requirements.

47. No international requirement exists at present, but all Naval personnel and Naval civilian employees and the wives and families of both are strongly advised to have T.A.B. vaccinations carried out before leaving Australia.

Certificates.

48. Certificates are valid immediately on completion of vaccinations for a period of one year.

Age of Person Vaccinated.

49. One year and over.

Tetanus (Compulsory at All Locations).

50. All officers and ratings are to be protected against tetanus by vaccination with tetanus prophylactic (formalinized) toxoid (T.P.T.), dosage 1.0 cc. first, 1.0 cc. second, 1.0 cc. third, with intervals of six to twelve weeks between first and second doses and six to twelve months between second and third doses. A re-immunizing dose of 1.0 cc. is required every five years.

51. This confers an immunity considered to be five years' duration, which, however, takes some weeks to develop. Where indicated by their nature, injuries received prior to commencement or completion of T.P.T. course should be treated by the administration of Tetanus Anti Toxin up to one month after the third dose of T.P.T. has been administered. Thereafter, the medical officer must be guided by the nature and severity of the injuries sustained, when deciding whether the omission of Tetanus Anti Toxin is justified.

Warning.—T.P.T. is not at any time to be admixed with other prophylactic agents for administration and must always be injected subcutaneously only.

International Requirement.

52. No international requirement exists at present.

Certificates.

53. Certificates are not required, but are valid for five years if given one month after the third injection of T.P.T.

Age of Person Immunized.

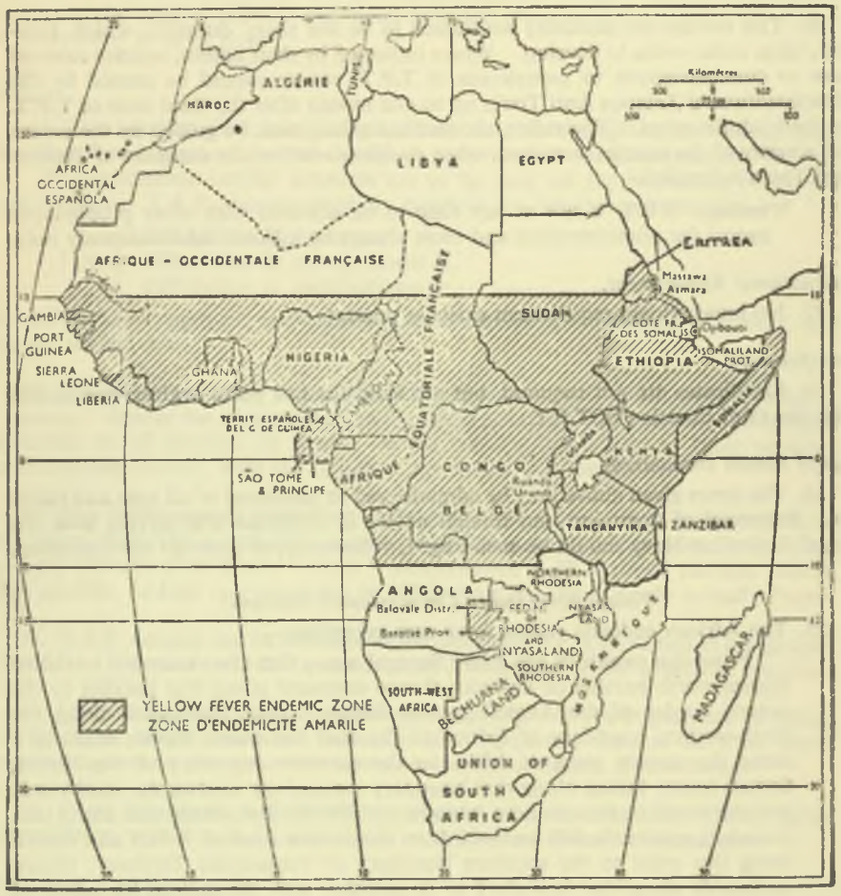
54. The doses given above may be administered to personnel of all ages and either sex. Personnel of dominion and foreign navies in Australia and serving with the Royal Australian Navy should be encouraged, voluntarily, to undergo immunization.

Yellow Fever (when Circumstances Demand).

55. The African endemic yellow fever area comprises—

" From the mouth of the River Senegal along that river eastward to the 15 degrees north parallel of latitude; thence eastward along that parallel to the eastern border of the Anglo-Egyptian Sudan; thence northward along the north-western boundary of Eritrea to the Red Sea coast; thence southward along the eastern coast of Africa to the northern boundary of the French Somali coast; thence along that boundary successively westwards, southwards and eastwards to the southern boundary of British Somaliland and along that boundary eastwards and northwards to the eastern coast of Africa and thence along this coast to the southern boundary of Tanganyika Territory; thence westwards along that boundary to its junction with the eastern boundary of the Belgian Congo; thence westwards and southwards along the boundary of the Belgian Congo to the 10 degrees south parallel of latitude; thence westward along that parellel to the west coast of Africa; thence northward along the west coast of Africa to the mouth of the River Senegal; including the islands of the Gulf of Guinea. The Baratse Province and the Balovale District in the Western Province of Northern Rhodesia are also included in the endemic area. The port of Massawa in Eritrea and an area of 10 kilometres in radius from the centre of the town of Asmara in Eritrea, as well as the Territory of the French Somali Coast including the port of Jibuti, and the territory of British Somaliland are excluded from the endemic area. The continued exclusion of these areas is, however, contingent on their maintenance of an **Aedes aegypti** index not exceeding 1 per cent. in the port of Massawa,

in and around Asmara, in the port of Jibuti and in the British Somali ports of Berbera, Hergeisa and Zeilah, as reported quarterly to the World Health Health Organization ".



56. The South American endemic yellow fever area comprises—

" That area bounded by a line beginning on the Pacific Coast of Colombia at the 5 degree north parallel of latitude and extending east along that parallel of latitude to the eastern slopes of the central Cordillera to an elevation of 2,000 metres; thence southward along the eastern slopes to the Central Cordillera and the Andes Mountains, at the same elevation to the boundaries of Argentina and Bolivia; thence eastward and northward along the southern and eastern boundaries of Bolivia to the 15 degrees south parallel of latitude; thence eastward along that parallel of latitude to the western boundary of

the State of Goiaz; thence northward along that boundary and the western boundary of the State of Maranhao to the Atlantic coast; thence along the Atlantic and Caribbean coasts of South America to the eastern boundary of Costa Rica; thence along that boundary to the Pacific coast and thence along the Pacific coast of Panama and Colombia to the 5 degree north parallel of latitude. In addition the Ilheus and Itabuna Districts in the State of Bahia in Brazil bounded on the north by the River Contas, on the west by the 40 degrees west meridian of longitude, on the south by the River Pardo and on the east by the Atlantic Ocean are included in the yellow fever endemic zone. The ports of Belem and Manaos in Brazil, Cayenne in French Guiana, Georgetown in British Guiana, the Caribbean ports of Colombia and Venezuela, the city of Bototá in Colombia, together with the ports of the Republic of Panama and the Panama Canal zone, are excluded from the yellow fever endemic zone. The continued exclusion of these ports and cities is, however, contingent on their maintenance of an **Aedes aegypti** index not exceeding 1 per cent. as reported quarterly to World Health Organization ".

Precautions with Regard to Simultaneous Use of Other Immunizing Agents.

57. (*a*) *See* paragraphs 24 to 28.

(*b*) Vaccination against diseases other than smallpox may be given at the same time but in the other arm.

58. Stocks of yellow fever vaccine are not maintained in the Royal Australian Navy nor is the vaccine made in Australia. Paragraphs 59 and 60 are for information only.

59. The attention of medical officers is drawn to the rapidity with which this vaccine becomes inert if not stored at a temperature of 4°C. or under.

60. Deterioration of yellow fever vaccine even under optimum storage conditions is rapid. After twelve months' storage the vaccine should be discarded.

Certificates.

61. Yellow fever certificates are not valid—

(*a*) unless the vaccine and the method employed have been approved by the World Health Organization;

(*b*) until ten days after the date of the vaccination except in the case of persons re-vaccinated within six years;

(*c*) for more than six years from the date of the last immunization.

62. Immunization against yellow fever can only be given at authorized centres by the Commonwealth Medical Officer, Department of Health, of the State concerned and by appointment. As much notice as possible is to be given to this officer, who endeavours to vaccinate in groups of ten if practicable.

International Requirement.

63. All Naval personnel and Naval civilian employees and the wives and families of both require an international certificate of vaccination against yellow fever before leaving Australia, when—

(*a*) proceeding to West or East Africa by air;

(*b*) proceeding to West or East Africa by sea, or in ships calling at any ports in these countries;

(*c*) proceeding to or through the South American yellow fever endemic area by whatever route;

(*d*) proceeding for service afloat on the South Atlantic Station;

(*e*) proceeding through Pakistan if unvaccinated subject has been in a yellow fever endemic zone within twelve days prior to arrival in Pakistan;

(*f*) proceeding for service on the Arabian Seas and Persian Gulf Station (including those destined for shore establishments).

Certificates.

64. Certificates are valid for six years from the tenth day after vaccination or from the date of re-vaccination. Travellers to or through India or Pakistan should not arrive there less than twelve days after vaccination. This is a local requirement.

Age of Person Vaccinated.

65. No lower limit to the age of persons immunized; however,

(*a*) no child under two months of age will be vaccinated against yellow fever, except in circumstances of great urgency where the actual risk of incurring yellow fever is considered to be greater than that of incurring encephalitis, when considered in relation to both the likelihood of occurrence and the seriousness of the disease;

(*b*) vaccination of children aged two or six months will be avoided as far as possible;

(*c*) while it is to be preferred that children between six and nine months of age should not be vaccinated against yellow fever, such vaccination may be carried out without serious risk if delay would impose hardship or grave inconvenience;

(*d*) when infants under the age of nine months are to be vaccinated against both yellow fever and smallpox, there should be an interval of 21 days between the two vaccinations, no matter which is performed first. Under no circumstance is the interval to be shortened.

(*e*) *Pregnancy.*—Risks to the foetus due to maternal viraemia consequent upon yellow fever vaccinations are now thought to parallel those due to such naturally occurring viraemias as that due to rubella. Yellow fever vaccination to pregnant women is therefore regarded as most inadvisable and is only to be performed where urgent reasons exist and after the calculated risk involved has been explained to the women. Normally travel for such cases should be arranged by a route for which yellow fever vaccination is not an international requirement. Should a pregnant woman wish to take up residence in a yellow fever endemic area these risks should be brought to her attention.

Cholera (Immunization when Circumstances Demand).

66. Protective immunization against cholera consists of a dose of one-half cubic centimetre of cholera vaccine (4,000 million organisms) followed by a dose of one cubic centimetre (8,000 million organisms) after an interval of seven days.

67. Renewed protection against cholera is required every six months. Dose: 1 cc. (8,000 millions organisms).

International Requirement.

68. All Naval personnel and Naval civilian employees and the wives and families of both proceeding to or through India by air or to India by sea or areas where the disease is endemic, may require vaccination against cholera. All personnel proceeding for service on the East Indies Station, Arabian Seas and Persian Gulf Station require immunization against cholera. All personnel serving on the Far East Station (other than locally entered ratings serving ashore) are to be immunized against cholera and re-immunized every six months.

Certificates.

69. Certificates are valid for a period of six months from the date of the second vaccination. After re-immunization validity is reckoned from that date.

Age of Person Vaccinated.

70. One year and over.

71. In addition to the above vaccinations and immunizations protection against the following diseases may also be required in the circumstances set out below.

Plague (Immunization when Circumstances Demand).

72. Protective immunization against plague consists of a dose of one-half cubic centimetre of plague vaccine followed by a dose of one cubic centimetre after an interval of seven days.

73. Renewed protection against plague is required after a period of six months.

International Requirement.

74. No international requirement exists at present but Naval personnel and Naval civilian employees and the wives and families of both may require a certificate of vaccination against plague when proceeding by air to India, Burma, Far East, South America and the Azores. Instructions will be promulgated by signal.

Certificates.

75. Certificates are valid for six months from the seventh day after the second vaccination. The interval between vaccinations is nine days. Vaccinations are to be recorded on page 10 or 11 of the international certificate.

Age of Person Vaccinated.

76. Two years and over.

Typhus (Immunization when Circumstances Demand.)

77. Protective vaccination against typhus consists of three doses of one cubic centimetre of typhus vaccine given at intervals of seven days.

78. Renewed protection against typhus is required after one year.

International Requirement.

79. Requirements will be promulgated by signal as necessary.

Certificates.

80. Certificates are valid for one year from the seventh day after last vaccination. Three vaccinations are required at intervals of seven days and are to be recorded on page 10 or 11 of the international certificate.

Age of Person Vaccinated.

81. One year and over.

Anti-Poliomyelitis Vaccination (Voluntary).

82. Arrangements have been made with the Department of Health for the supply of Salk Anti-poliomyelitis vaccine for immunization of members of the R.A.N. up to 44 years of age.

83. Immunization is not compulsory. For members under eighteen years of age the written consent of the parent or guardian is to be obtained before vaccination. (*See* paragraph 90.) Members over eighteen years of age may give their own consent.

84. In keeping with the Commonwealth policy it is desired that members up to age 19 (nineteen) years be given priority to those in the later age group if the programme is heavy, otherwise all may be immunized concurrently.

85. Written requests for supplies for immediate use only are to be made by the Medical Officer-in-Charge or Senior Medical Officer direct to, the Secretary, Commonwealth Serum Laboratories, Parkville, N.2, Victoria. Supply will be made direct, enclosed in an iced vacuum flask. The flasks are returnable to the Commonwealth Serum Laboratories and every care is to be taken to ensure their safe return forthwith in good condition.

86. An advice of despatch, indicating method and where possible the E.T.A., will be sent by the Commonwealth Serum Laboratories. Immediate collection of the vaccine is to be arranged and upon receipt it is forthwith to be removed from the flask and placed in cold storage. It is *not* to be frozen.

87. Complete instructions accompany each consignment. Requirements for a full immunizing course are—

1st dose ½ cc.
2nd dose ½ cc. one month later.
3rd dose ½ cc. seven to twelve months following the second dose.

88. A record of each dose given is to be entered on Table 7 of the member's medical envelope, form A.F. Med. 4, as " ½ cc. salk—date ".

89. It may be found that some members have already received the first or second dose before joining the Royal Australian Navy. If this claim is supported by documentary evidence, such information may be entered on Table 7 of form A.F. Med. 4 and the subsequent necessary completing dose or doses given and recorded.

90. Where documentary evidence is not available a written statement from a parent or guardian, or by a member eighteen years of age or more, may be accepted.

91. If other than Commonwealth Serum Laboratories vaccine has been used for the initial dose/s, it is advisable to use the Commonwealth Serum Laboratories product for the final dose/s.

92. In cases of doubt the medical officer is to use his discretion. Advice received from the Commonwealth Serum Laboratories indicates that one, or even two, extra doses will have no adverse effect on the recipient but, on the contrary, will give added immunity. However, the normal course of three injections only should be adhered to.

93. A small first supply of consent cards for members under eighteen years has been obtained and distributed. Further supplies may be obtained from the Medical and Dental Store Officer or the local State Health Department.

94. Where consent cards (A.M. 210) are obtained they are to be filed in the member's envelope, A.F. Med. 4. An enclosure number is not to be allotted to this form.

95. The vaccine is issued free and is not to be taken on charge.

International Requirement.

96. There are no international requirements.

Certificates.

97. Certificates are not normally required unless requested by the recipient.

98. All instructions apply equally to any civilians, Army or Air Force ranks and ratings under Royal Australian Naval control.

99. It is of the utmost importance that the foregoing measures be strictly complied with to ensure that no personnel proceed abroad without adequate protection against the infections referred to in this Order.

100. Navy Orders 390, 634 and 807 of 1958, and 287 of 1959 are hereby cancelled.

(MDG 327/54/19.)

(*Navy Orders* 390, 634 *and* 807 *of* 1958 and 287 *of* 1959.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

C.N.O.'s 359-378/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
25th May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

3383/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

359.—Naval Authorities—Hong Kong.

(*A.F.O.* 697/1960.)

On 20th April, 1960, the Commodore-in-Charge, Hong Kong, assumed command of H.M.S. TAMAR, and took over the duties of Queen's Harbour Master, Hong Kong. He thus becomes the sole naval authority ashore at Hong Kong.

2. All correspondence and signals are to be addressed to the Commodore-in-Charge, Hong Kong.

(DOD 2/3/9.)

UNCLASSIFIED.

360.—Naval Gunfire Support Range—Jervis Bay.

Navy Order 864 of 1959 is to be amended as follows—

(*a*) **Paragraph 11**—

" Position " and " Description " columns—*delete* all details and *insert* in lieu—

" *Position.*	*Description.*
829 712	Tramcars (mid point of convoy).
827 715	Hut No. 1.
829 722	Hut No. 2.
832 724	Hut No. 3.
839 717	Hut No. 4.

The guns previously listed at co-ordinates 833 715 have yet to be re-surveyed."

(*b*) **Paragraph 13**—

Insert the following at end of paragraph—

" Marking is not available for this target."

(DTSR 1436/201/21.)

(*Navy Order* 864 *of* 1959.)

UNCLASSIFIED.

361.—Signalling with Merchant Ships—1959.

The returns of signalling with Merchant Ships and R.F.A.'s during the year ended 31st December, 1959, show a total of 730 successful exercises and 33 reports of failure to establish communication.

2. Exercises reported by H.M.A. ships were as follows—

H.M.A. Ship.	*British.*	*Other SEATO/NATO.*	*RFA.*
VENDETTA	141	12	—
TOBRUK	52	51	6
MELBOURNE	59	4	—
QUICKMATCH	37	25	—
SWAN	51	7	1
KIMBLA..	43	9	—
QUEENBOROUGH ..	34	9	—
VAMPIRE	25	10	—
VOYAGER	23	6	—
WARRAMUNGA ..	24	2	—
ANZAC	14	10	—
QUIBERON	17	6	—
WARREGO	17	1	—
WOOMERA	14	—	—
FREMANTLE	10	—	—
DIAMANTINA	10	—	—

3. There were fifteen cases of merchant ship signalling reported as worthy of special mention which have been communicated to the shipping companies concerned.

4. General Instructions regarding signalling with merchant vessels are given in Q.R. & A.I. article 3372 and in A.F.O. S Series, amplified as follows. Returns of signalling with merchant ships are to be rendered quarterly to Navy Office (for DSD) in original only in the following form. Nil returns are required.

(*a*) Total number of successful exercises with—
- (i) British Merchant vessels;
- (ii) Other SEATO/NATO merchant vessels;
- (iii) R.F.A.'s.

(*b*) Total number of failures to establish communication;

(*c*) Details of signalling with British merchant vessels whose performance is considered worthy of special mention. The following should be shown:—Date, position, name of merchant vessel and brief details of performance. The use of form A.S. 174 is no longer required.

5. Navy Order 339 of 1959 is hereby cancelled.

(DSD 77/5/2.)

(*Navy Order* 339 *of* 1959.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

362.—Fleet Air Arm Ratings—Enlistment and Service in the Royal Australian Fleet Reserve.

The Royal Australian Fleet Reserve is divided into two classes as follows—

(*a*) *Class* " *A* " is a drilling reserve and members of this class are required to carry out seven or fourteen days obligatory training annually.

Class A is made up of ex-members of the Permanent Naval Forces who have no entitlement to pension or gratuity under the Defence Forces Retirements Benefits Act.

(*b*) *Class* " *B* " is a non-drilling reserve of members who are enlisted in fulfilment of the requirement of the Defence Forces Retirements Benefits Act. Service in this class is limited to five years. However, members may on the expiration of their engagement in Class B be re-enlisted in Class A. Class B ratings may in special circumstances be permitted to carry out voluntary training.

2. Consequent upon the decision to disband the Fleet Air Arm in 1963 the following rules will be applied to Fleet Air Arm ratings in regard to their R.A.F.R. obligations—

(*a*) *Class* " *A* " R.A.F.R. (Fleet Air Arm) ratings will be permitted to carry out their annual obligatory training until the end of 1962;

(*b*) No further enlistments or re-enlistments of Fleet Air Arm ratings will be made except in the case of specially selected members of the Electrical Branch;

(*c*) The entry of Fleet Air Arm ratings in R.A.F.R. Class " B " (non-drilling) will be continued to ensure them entitlements under the Defence Forces Retirements Benefits Act;

(*d*) All voluntary R.A.F.R. training of both Class A and B Fleet Air Arm ratings will cease after 31st December, 1961;

(*e*) Re-engagement of all Fleet Air Arm ratings in the R.A.F.R. in both Classes A and B will cease forthwith, except in the case of specially selected members of the Electrical Branch.

(DNR 304/71/6.)

UNCLASSIFIED.

363.—Ration Allowance—R.N. Personnel.

The daily rates of ration allowance payable to R.N. personnel serving in Australia and in receipt of R.N. rates of pay and allowances, have been revised with effect from 1st January, 1960.

2. The following rates will operate from 1st January, 1960, until further notice—

Canberra	102 pence
Sydney	98 pence.
Elsewhere	94 pence.

3. Navy Order 647 of 1959 is hereby cancelled.

(DNA 252/11/2.)

(*Navy Order* 647 *of* 1959.)

UNCLASSIFIED.

364.—Recruiting—Conditions of Entry for Naval Officers and Ratings.

(*A.F.O.* 275/1959.)

From time to time officers and ratings receive inquiries about conditions of entry into the R.A.N., and how applicants should apply.

2. The appendix to this order outlines conditions for entry of officers and ratings which may prove useful for the above purpose. Commanding Officers are requested to bring this order to the attention of all officers and ratings serving under their command.

3. This order will be reprinted for posting on notice boards, additional copies may be obtained direct from the Inspector of Naval Recruiting, Department of the Navy, Victoria Barracks, Melbourne.

APPENDIX.

SCHEDULE OF CATEGORIES, PRE-REQUISITES FOR ENLISTMENT IN THE ROYAL AUSTRALIAN NAVY—RATINGS.

Category.	*Age Limits.*	*Minimum Educational Standards.*	*Period of Engagement.*	*Other Qualifications.*
1. MALE RATINGS (General Service Branches)	Over 17 years and under 26 years	Pass Educational Test at approximately Grade VII. standard, Victoria	Initially for 9 or 12 years and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the service	Pass aptitude tests for suitability for training as either Seaman, Electrical Mechanic, Sick Berth Attendant, Radio or Tactical Communication Operator, Engineering Mechanic, Cook, Steward, Writer, Stores Assistant or Dental Assistant
2. RECRUIT MUSICIAN	Over 17 and under 26 years	Pass Educational Test at approximately Grade VII. standard, Victoria	Initially for 9 or 12 years and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the service	A satisfactory knowledge of music and be an efficient performer on either a brass, a woodwind, a stringed instrument, or a piano or drums
3. RECRUIT JUNIOR MUSICIAN	Over 15 and under 17 years	Pass Educational Test at approximately Grade VII. standard, Victoria	Initial engagement is for either 9 or 12 years, which includes the two year training period, and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the Service	Only a limited musical knowledge and limited ability to play either a brass, a woodwind, a stringed instrument or a piano are required

APPENDIX—*continued.*

Category.	*Age Limits.*	*Minimum Educational Standards.*	*Period of Engagement.*	*Other Qualifications.*
4. JUNIOR RECRUITS	15½ to 16½ years	Approximately Sub-intermediate or equivalent	Initial engagement is for 12 years including the 1 year junior recruit training period and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the service	Pass aptitude tests for suitability for training for the general service branches
5. TRADE BRANCHES	Under 28 years ..	Normally at least Sub-intermediate standard before apprenticeship	Initially for 9 or 12 years and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the service	Completion of 5 years apprenticeship. Pass trade test
6. NAVAL ARTIFICER APPRENTICE	Over 15 and under 17 years on the date of joining the Apprentice School	Hold an Intermediate or Sub-intermediate or equivalent certificate	For 12 years (including the five years apprenticeship) and then the option of further shorter engagements up to 50 years of age, subject to recommendation and the requirements of the Service	Pass aptitude tests, and have ability and desire to do skilled manual work
7. W.R.A.N.S. .. (Women's Royal Australian Naval Service) (General Service)	Over 18 years and under 30 years. (Ex-servicewomen up to 35 years)	Pass Educational Test at approximately Grade VII. standard, Victoria	Initially for 4 or 6 years and then the option of further engagements for periods of 2, 3, 4 or 6 years up to 50 years of age, subject to recommendation and the requirements of the service	Pass aptitude tests for suitability for training as Radio Operator, Writer, Stores Assistant, Sick Berth Attendant, Cook, Steward, Radar Plotter or Motor Transport Driver. (Writers (G.D.) and Stores Assistant must be able to type, Writers (S.T.) must be trained stenographers and pass a trade test. Motor Transport Drivers must hold a current driving licence for a car.) Unmarried, or a widow without dependent children

NOTES: Nationality Requirements .. To be British subjects or non-British migrants who have officially declared their intention to become naturalized.

Residential Requirements .. To be resident in Australia.

Medical Fitness .. .. To be medically fit and pass the Naval Medical Examination.

FOR FULL DETAILS AND APPLICATION FORMS APPLY TO THE NAVAL RECRUITING OFFICER AT THE COMBINED SERVICES RECRUITING CENTRE.

APPENDIX—*continued.*

SCHEDULE OF CATEGORIES PRE-REQUISITES FOR OFFICER ENTRY INTO THE ROYAL AUSTRALIAN NAVY.

Category.	*Age.*	*Minimum Educational Standard or Qualifications.*	*Period of Service.*
NAVAL COLLEGE CADETS—			
Normal Entry ..	14½ to 16½ years ..	Pass a qualifying examination in English and Mathematics (including Trigonometry) of approximate Intermediate Standard, Junior Public or 3rd year Tasmania. Entry in January	Officers are expected to serve until they reach the statutory retiring age for rank. An agreement is signed for 12 years service from the age of 18 years
Matriculation Entry ..	Under 19 years ..	Passed matriculation examination or intend sitting for it during the year before entry. Entry in January	Officers are expected to serve until they reach the statutory retiring age for rank. An agreement is signed for 12 years service from date of appointment
UNDERGRADUATES—			
Mechanical Engineers Naval Architects ..	Under 25 years when graduated	Undergraduates at an Australian University undertaking any of the three final years in Mechanical or Electrical Engineering	*Short Service Commission.* To serve 5 years from 1st March, following graduation and then to enrol for 5 years on the Emergency List. Officers may apply for permanent commissions
Electrical Engineers ..	.. .. ..	An undergraduate studying Naval Architecture or full time technical college diploma students in Engineering undertaking the final year of the course. Entry continuous	*Permanent Commissions.* Officers holding permanent commission are expected to serve until they reach the statutory retiring age for rank
Medical	Under 30 years when graduated	Undergraduates undertaking the 4th, 5th or 6th year of the university medical course. Entry January/February	*Short Service Commission.* Candidates in the 4th or 5th year will be required to serve for a further period of 4 years after completing 12 months hospital residency. Two years service after residency time if selected during 6th year. Medical officers may apply for an extension up to 8 years or alternatively for transfer to the permanent naval forces
DIRECT ENTRY—			
Engineers	Under 25 years for Mechanical Engineers and Naval Architects. Under 27 years for Electrical Engineers	A degree in Mechanical or Electrical Engineering a Naval Architecture or an acceptable Technical College diploma equivalent. Entry continuous	*Short Service Commission.* To serve 5 years from date of appointment and then to enroll for 5 years on the Emergency List. Officers may apply for transfer to the Permanent Naval Forces
Medical .. .. Dental	21 to 30 years ..	A duly registered medical or dental practitioner or hold qualifications which entitle legal registration under Commonwealth or State law. Entry continuous	To serve 4 years. Officers may apply for extension of short service commission to 8 years or alternatively for a permanent commission
Instructors	Over 21 years ..	To hold or be qualified for admission to, a degree of a recognized British university or successfully completed the training course at a recognized Teachers' College and hold matriculation certificate with passes in Mathematics and Physics or Chemistry. Entry March/April	Instructor Officers are expected to serve until they reach the statutory retiring age for rank

APPENDIX—*continued.*

Category.	*Age.*	*Minimum Educational Standard or Qualifications.*	*Period of Service.*
DIRECT ENTRY— W.R.A.N.S. Officers ..	Over 21 years ..	Leaving Certificate (Victoria) or equivalent and preferably including such subjects as Social Science, Domestic Science, Educational or Secretarial Training and experience. Unmarried or widows without dependent children	Initially for 4 or 6 years with extensions of appointment up to retiring age, subject to requirements of the Service

NOTES: (1) *Nationality Requirements* .. To be British subjects and substantially of European descent.

(2) *Residential Requirements* .. To be resident in Australia.

(3) *Entry is by Selection.*

FOR FURTHER PARTICULARS AND APPLICATION FORMS APPLY TO THE SECRETARY, DEPARTMENT OF THE NAVY, CANBERRA, A.C.T.

(HPB 469/51/4.)

UNCLASSIFIED.

365.—Taxation Clearances—Personnel Travelling on Duty.

Navy Order 837 of 1959 is to be amended by inserting at the end of paragraph 2 the following—

> "The officers so delegated have no legal power to further delegate their authority to issue such certificates."

(DNA 271/52/3.)

(*Navy Order* 837 of 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

366.—Naval Stores (Technical) (Class F, Group 4) (N.A.T.O. Class/Group 5960)—Introduction of C.V. 4,000 Series of Valves.

Provision has been arranged as necessary of C.V. 4000 series valves as maintenance replacements for the basic type valves in existing equipments for which they are "reliable" equivalents. A revised list of the valves, developed to date, is appended.

2. The basic type valves, already fitted in existing British equipments, will continue to be issued until present stocks become exhausted whereupon issues of the reliable valves will be made automatically as maintenance replacements for the basic type valves.

3. In certain British equipments, however, it is necessary that "reliable" valves should be used even though stocks of the basic type valves still exist, these valves have been annotated "*" in the appended list. It is therefore essential, as far as British equipments are concerned, when demanding "reliable" valves for these applications to state the equipments for which they are required.

4. In the case of American equipment, certain valves also numbered in the C.V. 4000 series are actual requirements and all valves for American equipment are therefore to be demanded and issued strictly in accordance with the relevant Establishment Lists.

5. Navy Order 1087 of 1958 is hereby cancelled.

APPENDIX.

Reliable Valve.	*Superseded Basic Valve.*	*Remarks.*
000–4001	—	—
000–4002	—	—
000–4003*	000–0491	For A.R.I. 5807.
000–4004	000–0492	—
000–4005*	000–0493	For A.R.I. 5807.
000–4006	000–2135	—
000–4007*	000–0140	For Receivers. Patterns 57140D, 57141C, 67757A.
	000–0283	000–4007 must be used in lieu of 000–0283 when required for Display Unit. Pattern 64175 in F.V. 11.
000–4008	—	—
000–4009	000–0454	—

APPENDIX—*continued.*

Reliable Valve.	*Superseded Basic Valve.*	*Remarks.*
000–4010	000–0850	—
	000–2877	—
000–4011	000–2522	—
000–4012	000–0453	—
000–4013	—	—
000–4014*	000–0138	For A.R.I.'s 5489, 5491, 5807 and 5838 and Radar Type 974.
000–4015*	000–0131	For A.R.I.'s 5489 and 5491.
000–4016	—	—
000–4017	—	—
000–4018	000–0797	—
000–4019	000–2883	—
000–4020	000–1832	—
000–4021	—	—
000–4022	—	000–4058 may be used in lieu.
000–4023	000–2524	—
000–4024*	000–0455	For A.R.I. 5807.
000–4025*	000–0140	For A.R.I. 5807 and Radar Type 974. Patterns 57140D, 57141C, 67757A. Not in Receivers, (*See* 000–4007.)
000–4027	000–1856	—
000–4028	000–1833	—
000–4029	—	—
000–4031*	000–0858	For Radar Type 974.
000–4033	—	—
000–4034	—	—
000–4035	—	—
000–4036	—	—
000–4038	—	—
000–4039	000–2129	—
000–4040	000–0416	—
000–4041	—	—
000–4042	—	—
000–4043	000–2136	—
000–4044	000–2235	—
000–4046*	000–0415	For A.R.I. 5489 and 5491.
000–4047	—	—
000–4048	000–0449	—
	000–2573	—
000–4049	—	—
000–4050	—	—
000–4051	—	—
000–4052	—	—
000–4053	—	—
000–4054	—	—
000–4055	000–2127	—
000–4056	—	—
000–4058	000–0133	—
000–4059	—	—
000–4060	—	—
000–4061	—	—
000–4062	000–2179	—

APPENDIX—*continued.*

Reliable Valve.	*Superseded Basic Valve.*	*Remarks.*
000–4063*	000–0136	For A.R.I.'s 5489 and 5491.
000–4064	000–2209	—
000–4066	—	—
000–4068	000–2212	—
000–4069	—	—
000–4070	000–0417	—
000–4071	000–0404	—
000–4073	000–2384	—
000–4074	000–2413	—
000–4077	—	—
000–4078	—	—
000–4079	—	—
000–4080	—	—
000–4081	—	—
000–4082	—	—
000–4083	—	—
000–4086	—	—
000–4501	—	—
000–4502	—	—
000–4503	—	—
000–4504	—	—
000–4505	—	—
000–4506	—	—
000–4507	—	—

(DEE 519/254/9.)

(*Navy Order* 1087 *of* 1958.)

UNCLASSIFIED.

367.—A/S Mortar Mark 10—Off Mounting Equipment Plane Converters.

A report has been received from Admiralty that the Fine Dial (Drawing No. UCW.4050/533) of the trajectory bearing servo in a plane converter was incorrectly marked, inasmuch as the outer figures on the scale are painted GREEN instead of RED and the inner figures RED instead of GREEN.

2. Ships, establishments and gunnery equipment depots, holding plane converters are to examine the dials and report any discrepancy of the above nature.

(DW 736/51/11.)

RESTRICTED.

368.—Torpedoes 18-in. Mark 30 and 21-in. Mark 20—Primary Batteries.

(*A.F.O.* 660/1960.)

Instances have occurred in the R.N. in which perchloric acid electrolyte has leaked from the filling plug of acid chambers of E.D.P. 3 primary batteries of mark 20 (E) torpedoes and, consequently, these batteries have been temporarily withdrawn from service.

2. To prevent this leakage the following instructions must be observed at all times when screwing down the filling plug of filled E.D.P. 1 type 2 (mark 30 torpedo), E.D.P. 3 (mark 20 (E) torpedo) when re-issued and E.D.P. 4 (mark 20 (S) torpedo) primary batteries.

(*See* B.R. 1545—Advance Information on Servicing and Preparation Instructions for the 18-in. mark 30 torpedo, chapter 9, paragraph 30, and H.M.S. VERNON's Pamphlet 234—Advance Information on Servicing and Preparation for the 21-in. mark 20 (E) and (S) torpedoes, chapter 11, paragraph 35)—

(*a*) Thoroughly wet the entire surface of the washer with clean water.

(*b*) Place the combined plug key and sac inflator in position on each cell in turn and gently squeeze the bulb to keep the sac extended while the plug is screwed down as tightly as possible by hand.

(*c*) Remove the plug key and finally tighten down the plug with the torque spanner provided, set at 32-lb. ins.

Notes.

(i) These instructions apply to battery filling plugs fitted with either flat rubber washers or " O " ring seals.

(ii) The sac inflator should be used at all times regardless of the filling instructions supplied with each battery which state that it should only be used above certain temperatures.

(iii) Torque spanners will be added to the tool kits of these batteries.

3. The following additional precautions are also to be observed—

(*a*) Before filling, the acid chambers of all batteries are to be examined for cracks or ejection of knock-out discs. Because of the transparent material of the acid chamber, this inspection can conveniently be carried out by placing a torch in the filling aperture.

(*b*) All filled E.D.P. 1, E.D.P. 3 and E.D.P. 4 batteries are to be inspected for acid leakage six months after being filled and at three-monthly intervals thereafter. To examine properly for leakage the cover priming mechanism complete should be removed and the underside of the rubber packing sheet on top of each acid chamber examined.

4. Depending on service experience the intervals between inspections may be extended to six months at a later date. Frigates and submarines should transfer their torpedoes to the nearest Depot Ship, Escort Maintenance Ship or Armament Depot for these inspections, and where possible, replacement torpedoes will be issued in lieu.

5. If examination reveals acid leakage, the battery is to be emptied in accordance with the relevant Servicing Instructions (B.R. 1545 or V.P. 234) and returned to the nearest Armament Depot or R.A.N.T.E. Both the battery and the interior of the torpedo are to be thoroughly cleaned with copious supplies of warm distilled water and then dried with swabs.

6. E.D.P. 1 batteries will always be issued with small breather sacs, E.D.P. 3 batteries may be issued with either large or small sacs and E.D.P. 4 batteries will always be issued with large sacs. Should these large sacs be removed at any time from the acid chambers they are not to be re-used but are to be replaced by new sac/plug units. Sacs must always be of the same type as the one removed.

7. When applying the 5-lb. per sq. in. air pressure test for water-tightness detailed in B.R. 1545 (chapter 3, paragraph 13 (7) and chapter 4, paragraph 13 (8)) and V.P. 234 (chapter 4, paragraph 19, chapter 5, paragraph 24 and chapter 6, paragraph 17), it is essential that this pressure is not exceeded and that accurately calibrated pressure gauges be used. (The redesign of the apparatus used for applying the 5-lb. per sq. in. test, to include a large scale pressure gauge, is under consideration.)

In addition, the pressure is to be held at $2\frac{1}{2}$-lb. per sq. in. for five minutes when raising and releasing.

8. All E.D.P. type batteries are being redesigned to overcome these difficulties, and revised instructions will be promulgated when the redesigned batteries are issued.

(DW 712/51/57.)

RESTRICTED.

369.—21-in. PR. Mark 4 Torpedo Tube Mountings—Rear Door Locking Arrangements.

Cracks have been reported in the internal corners of the stop face of the Gear Case TP. 15890 (General Notes on 21-in. A.W. PR. Mark 4 Torpedo Tubes D.O.T.M. 6145, plate 5).

2. The designed engagement of the lugs on the locking and screwed rings is 50 per cent. when new to 80 per cent. when door is metal to metal, and it is considered that the cracks are caused by over-tightening of the rear door locking ring with subsequent use of force to unlock the door causing excessive impact between the stop faces of the handle TP.15888 and the gear case, thus initiating cracking in the sharp corner.

3. Ships, establishments and Gunnery Equipment Depots holding the above equipments are to examine the gear cases, and where cracks are present they are to be cut out and the gear case repaired by bronze welding, maintaining a $\frac{1}{16}$-in. built-up radius at the sharp corners of the stop faces, the handles being correspondingly radiused on the external corners.

4. On brackets which show no sign of fracture the sharp corners of the stop faces are to be under-cut to $\frac{1}{16}$-in. radius.

5. Defect action for the above repair is to be taken by ships and establishments concerned and the work carried out by dockyards at the first opportunity.

6. Dockyards. Where a satisfactory repair cannot be made by welding, a new gear case to drawing TP.19701 is to be made and fitted.

7. Navy Order 42 of 1959 is hereby cancelled.

(DW 712/251/74.)

(*Navy Order* 42 *of* 1959.)

UNCLASSIFIED.

370.—Fleet and Other Competition Trophies—Reports of Receipt Transfer, &c.

Difficulty has been experienced from time to time in tracing the whereabouts of Fleet Competition Trophies. In order that records can be brought up to date, all H.M.A. ships and establishments are to report through their administrative authorities details of all Fleet or other competition trophies held as at 28th July, 1960.

2. The reports should include the following information and copies should be forwarded to Navy Office, F.O.C.A.F., and F.O.I.C.E.A.—

(*a*) Full description of the trophy including any inscription.

(*b*) Name of donor and date of original presentation.

(*c*) Source and date of receipt by present holder.

(*d*) Conditions (if any) attached to the presentation.

(*e*) The competition for which the trophy is used.

(*f*) The account in which recorded and the description shown in the account.

3. In order that records may subsequently be satisfactorily maintained, action is to be taken to ensure that the following requirements *vide* A.B.R. 4, Article 2204, are strictly complied with in future—

(*a*) Fleet and other competition trophies won by H.M.A. ships and establishments are to be accounted for in the Naval Store Account (Presentations, Relics and Trophies Section) immediately on receipt.

(*b*) At the time of receipt, either from a donor, or on winning a competition receipt is to be reported to Navy Office in the form indicated in A.B.R. 4, Article 2204. In this regard, where won in competition the name of the ship or establishment from which won should be stated.

(*c*) All Fleet or Competition trophies received and/or transferred during the year are to be reported to Navy Office annually as at 31st December in the form indicated in A.B.R. 4, Article 2204 (*b*).

(*d*) Where a trophy is re-allocated from one competition to another, this is to be reported to Navy Office by the authority concerned.

(DNAS 138/51/6.)

UNCLASSIFIED.

371.—Hull Structure and Fittings of H.M.A. Ships—Instructions for Examinations and Surveys.

Introduction.

These orders supersede existing instructions for the examinations and survey of the hull structure and fittings of H.M.A. ships. In particular they replace articles 501–509 of B.R. 16, the Engineering Manual, and a notation is to be made in that manual referring to this order. The relevant planned maintenance schedules will be amended.

General.

2. In order that the hull structure of ships may be effectively maintained in good condition, and that the anticipated life of a ship may be realized without the need for major structural repairs, it is necessary that regular examinations, surveys and tests be carried out so that incipient defects can be checked and made good. With normal maintenance, a ship can be expected to have an effective life of approximately 20 years; this life can be prolonged by careful maintenance but will be reduced if necessary maintenance is not carried out.

3. The Captains of destroyers, frigates and small vessels generally are to keep in mind that these vessels are constructed of comparatively light scantlings and the utmost care is required if loss of structural strength and watertightness is to be avoided.

4. An item of structure or a hull fitting should be regarded as defective when the repair or replacement of the item is considered necessary. Deterioration, distortion or wastage may be present, and shall be recorded when examinations are carried out, but they are not necessarily defects. Where wastage has occurred the current state of preservation may be poor, in which case the coating is defective and should be so described.

5. Further instructions for the survey and examination of the structure and fittings of Her Majesty's Australian ships are contained in B.R. 16, Engineering Manual, and in planned maintenance schedules for each class of ship. Instructions for painting and preservation of structure and fittings are contained in the Painting Manual, A.B.R. 19, and the Cathodic Protection Manual A.B.R. 5023.

Examinations of Structure by Ships' Officers.

6. A thorough examination by the ships' officers of every accessible part of the outer and inner bottom plating, framing, bulkheads, deck plating, W.T. doors and hatches and hull fittings which contribute to the strength or watertight or gastight integrity of the ship, is to be continually in progress during the whole time the ship is in commission. Examination is to be arranged so that the entire structure is inspected annually.

7. The objects of these examinations are to ensure—

(*a*) That compartments are maintained in a watertight and gastight condition.

(*b*) That all plating, &c., is free from corrosion and is coated effectively with paint or other preservative.

(*c*) That all doors, hatches, manhole covers, pipes, sluice, drain and other valves affecting the W.T. and gastight sub-division of the ship are maintained in a good and efficient condition.

(*d*) The detection of incipient structural defects and the checking of their development.

(*e*) That all drainage holes in frames and girders are kept clean.

Periodical Examination of Fittings.

8. All fittings permanently attached to the hull, and on which safety of life depends (e.g., eyeplates, ring bolts) are to be periodically examined for flaws and defects, and if there is doubt, to be removed, fireproofed and tested. Results of examinations are to be reported on form A.S. 194. Periodical inspection should also be made of wood masts, spars, &c.

9. Records of these examinations and corrective action taken are to be entered in the appropriate maintenance records. Defects discovered which cannot be made good by ships' staff are to be made good by the Dockyard.

10. When a defect is discovered a defect record form A.S. 2061Z is to be raised, classified either ships' staff or dockyard, and subsequent action taken in accordance with the Instructions for Hull Planned Maintenance.

Quarterly Inspection of Certain Compartments.

11. There are certain areas in which early and repeated failure of protective coatings is likely to take place due to severe conditions imposed by the environment. This breakdown is often encouraged by difficulties in obtaining adequate surface preparation, and coating failure may permit unnoticed corrosion in areas difficult of access.

12. All compartments, or places therein, which are known by experience to require close attention, are to be listed on the appropriate maintenance schedule. They are to be examined quarterly, and action taken to patch or renew deteriorated coatings. Details of examinations and corrective action taken are to be entered in the appropriate maintenance record.

Examination of Propellers.

13. In certain localities, roughening of the propeller surfaces due to the growth of marine fouling, develops with great rapidity; this results in serious increase of fuel expenditure. To counter this is it to be ensured—

(*a*) That dry docking is to be deferred as close as practicable to the date on which the ship is to proceed to sea.

(*b*) That before undocking propeller blades are coated with a temporary fouling preventive.

(*c*) That the propellers are thoroughly cleaned by divers before proceeding to sea after the ship has been lying nine days in water above 60°F., or fourteen days in other waters.

(*d*) That propellers are cleaned within ten days prior to any full power trial.

Examinations and Inspections by Ships' Officers Responsibility.

14. The periodical examinations and inspections by ships' officers are to be carried out by the Shipwright Officer, assisted where necessary by the Engineer Officer and the other Heads of Departments. In vessels where no Shipwright Officer is borne the responsibilities of the Shipwright Officer are undertaken by the Executive Officer.

Surveys of Structure by Dockyard Officers—General.

15. The Dockyard Officers will carry out periodical surveys of the structure of vessels in accordance with the following instructions. Captain of ships are to ensure that the surveys are carried out at the required intervals. Any proposals for varying the interval between surveys, or occasions when it is impracticable for Dockyard Officers to carry out a survey due, are to be referred to the Naval Board.

16. If any vessel has been strained, or it is believed that water has been lodging in any part of her, or there is any reason to think that the hull is defective, a thorough survey of the place likely to be affected is to be made, whether the periodical survey is due or not.

17. The instructions to, and action taken by Dockyard Officers, are not to be considered as relieving the Ships' Officers of responsibility for the proper survey and maintenance of the vessel.

18. On completion of each survey, a report of survey is to be made out and forwarded by the dockyard to the Naval Board. The nature and due date of the next survey is to be noted on the report of survey, a copy of which is to be inserted in the ship's book.

Docking Survey by Dockyard Officers.

19. Ships are to be docked at the intervals shown in the Appendix and a detailed survey of the underwater hull and fittings is to be carried out by Dockyard Officers at each docking. Particular attention is to be given to the condition and performance of the anti-corrosive and anti-fouling paint system, and of the cathodic protection system if fitted. Defects discovered are to be made good and the underwater paint system is to be touched up or renewed, as necessary.

20. A report of docking is to be rendered on form A.D. 495 in accordance with the instructions thereon.

21. When ships are docked in private yards where no overseer is available, or in foreign ports, the docking particulars are to be provided by the ships' officers, and the docking report on form A.S. 238 is to be sent to the Naval Board through the Administrative Authority.

Annual Survey by Dockyard Officers.

22. This survey is to be carried out by Dockyard Officers annually, or at each main Dockyard refit.

23. An examination is to be made externally and as necessary internally to ascertain the general condition of the hull. Particular attention is to be paid to areas liable to excessive corrosion or other deterioration; all doors, hatches, scuttles, ventilation flaps and other fittings affecting the watertight or gastight integrity of the ship; and all structural discontinuities and corners of openings in strength decks and bulkheads.

24. In destroyers and frigates, particular attention is to be paid to the hull plating and framing adjacent to and under boilers. Where necessary, the brickpans of one boiler are to be removed at each annual survey to permit examination. If considered necessary, as a result of this examination, the brickpans of the remaining boilers should also be removed. In any case where the conditions of plating and framing in the vicinity of a boiler is found defective, the adjacent brickpans are to be removed, if necessary, for the survey of the plating and framing below them.

25. Should it be necessary for any reason to remove the brickpans of a boiler, the opportunity is to be taken to carry out a survey of the plating and framing so exposed.

26. The ships' maintenance records are to be available for the information of the Dockyard Officers carrying out the survey. All known defects and areas of undue deterioration are to be specifically listed in the request for survey. These defects, and defects discovered during the survey are to be made good.

27. A report of survey is to rendered which is to list any major defects discovered and made good, any defects or deterioration not made good, and the general comments of the surveying officer on the condition of the hull structure.

Special Survey by Dockyard Officers.

28. This survey is to be carried out by Dockyard Officers at main dockyards refits at the intervals shown in the following table—

Type of Ship.	*When surveys are to be carried out.*
Aircraft Carriers	Every 4–5 years.
Cruisers	
Destroyers, Frigates and other ships with shell plating not less than 10 lb. weight	Every 3 years.
Floating Docks	
Submarines	At each Main Dockyard Refit.
Steel hulled ships with shell plating less than 10 lb. weight	
Wooden vessels	
Support Craft	Annually (C.N.O. 618/59 refers).

29. The special survey is to include a careful examination of the whole of the structure contributing to the strength or watertight subdivision of the vessel, including the outer and inner bottom plating, W.T. doors, hatches, manhole covers, pipes, sluice, drain and other valves below the weather deck. When special surveys are being carried out the Ships' Companies are, as far as possible, to clear the magazines and shell rooms, store rooms, fuel oil tanks, double bottoms and other compartments, as necessary. All bilges are to be clean and dried out.

30. Survey of fuel tanks is to be carried out as part of the special survey. However, as it may not be convenient to survey all tanks at the one refit, their survey may be spread over several refits during the interval between special surveys.

31. Where lining, lagging, linoleum, or other coverings prevent direct access to hull structure, portions of such coverings are to be removed to allow detailed examination to be made. Particular attention is to be paid to those areas in which water may accumulate. Where these examinations indicate that corrosion is taking place, additional coverings are to be removed as necessary to ensure that all corrosion is arrested and to allow protective coatings to be made good.

32. As far as practicable, all defects discovered during the survey are to be made good.

33. A report of survey is to be rendered on form A.D. 171 in accordance with the instructions thereon. The report is to record the condition of each compartment and its fittings, all defects discovered and made good, and any defects or deterioration not made good. In those areas where undue deterioration is noted but immediate renewal is not considered necessary special measures are to be taken to preserve the plating life. Such areas are to be specially noted on the report of survey and are to be examined at each subsequent annual survey until deterioration is arrested. Reports of survey are to be amplified where necessary by diagrammatic sketches to show defects or deterioration of the hull.

34. When in the opinion of the Surveying Officer, certain items of hull structure may require renewal at the next refit, or at any time prior to the next survey, such items are to be entered in the Survey Report with an estimated date of renewal underlined in red.

General Survey After 9 *Years' and* 15 *Years' Service.*

35. At the special surveys, which are carried out after approximately 9 years' and 15 years' service or when ships are paid off into dockyard control for major refit, a thorough assessment of the future life of the various components of the hull structure is to be made. This assessment is to be made by estimating the expected life in years before renewal of the various major structural components, taking into account the corrosion and wastage that has occurred prior to the date of survey and assuming normal maintenance will be carried out.

36. Comprehensive measurements of the thickness of shell plating, strength decks, and any structure with signs of excessive wastage, are to be taken using non-destructive methods. The number of measurements required will vary with the type of ship surveyed and the condition of hull structure; the following is a guide to the measurements required in the 9 and 15 year survey of a destroyer.

Area.	*No. of Measurements.*
Shell plating	30 each side particularly in way of machinery space bilges and wind and waterline.
Weather decks..	20
Interior decks and bulkheads ..	20

37. Areas of excessive wastage are to be renewed or made good as necessary. The decision to renew a plate is dependent on numerous factors but generally any plate which has wasted 30 per cent. of its original thickness should be renewed. The measured wastage should be confirmed by drill testing before the plate is cut out.

38. Reports of these surveys are to be made on form A.D. 171 and are to be accompanied by a statement which is to include—

(*a*) How long the hull structure and the various major structural components will remain efficient for further service with normal maintenance and ordinary minor repairs.

(*b*) Whether the life of the hull could be extended appreciably by the renewal of any items. If so, the period of extension and particulars of renewals should be stated.

(*c*) The measurements taken of hull structure thickness.

Appendix.

H.M.A. SHIPS, FLOATING DOCKS AND SUPPORT CRAFT—DOCKING INTERVALS.

1. The intervals at which H.M.A. ships, floating docks, and support craft are to be docked or slipped, are in general, as shown in the table below. These intervals are intended to serve as a general guide to requirements and it may be necessary to depart from them in individual cases according to the underwater condition of ships concerned, the nature of their service, or intended service, and in the light of operational requirements.

2. When necessary, administrative authorities may extend the normal docking interval of cathodically protected ships by up to 6 months, and of other ships by up to 3 months. Additional extensions of docking intervals are not to be made without the prior approval of the Naval Board.

3. Should any abnormal reduction in speed or increase of fuel consumption be noted in any particular ship, during the interval between dockings, the underwater hull is to be examined by divers and its condition reported to the Administrative Authority who, if he considers it necessary, will request the Naval Board to arrange an intermediate docking for the ship concerned.

TABLE OF DOCKING INTERVALS.

Type of Ship.	*Description.*	*Normal Interval between Dockings.*
Active Ships	All ships	6 months
Ships in Operational Reserve	With overall cathodic protection ..	24 months
	Other ships	12 months
Ships in Supplementary or Extended Reserve and Floating Docks	With overall cathodic protection ..	48 months
	Other ships and docks	24 months
Support Craft ..	Concrete Barges	24 months
	Dumb Steel Craft	18 months*
	Powered Steel Craft	12 months*
	Dumb Wooden Craft—sheathed ..	12 months
	Dumb Wooden Craft—unsheathed ..	6 months
	Powered Wooden Craft—sheathed ..	6 months
	Powered Wooden Craft—unsheathed	3 months

* Certain steel-built small craft, operating in remote areas, are fitted with specially designed cathodic protection systems to enable them to operate without docking, for double the normal docking interval.

(DNC 1211/51/75.)

(*Navy Order* 618 *of* 1959.)

UNCLASSIFIED.

372.—Naval Stores—Accounting.

Recent inspections of Naval and Air Store Accounts have disclosed that errors and omissions in connection with accounting for Naval and Air Stores continue to occur. The principal matters noted are as follows—

(*a*) (i) Stocktaking reports not being raised on discrepancies being revealed.
(ii) Stock being reported as correct without actually sighting the items.
(*b*) Issues of stores from storerooms without correct accounting action.
(*c*) Exchange transactions not always being recorded on form A.S. 1091 when items issued in lieu.
(*d*) Items supplied to the ship not being taken on charge at the time of receipt.
(*e*) Errors in identification and nomenclature.
(*f*) Departments drawing stores direct from Dockyards without correct accounting action.
(*g*) Items returned from fixtures without necessary voucher action.

2. The Naval Board view with concern these deviations from correct store-keeping practice and expect a much higher degree of diligence in supervision by responsible officers to ensure that the relevant regulations and instructions are obeyed.

(DNAS 400/51/56.)

UNCLASSIFIED.

373.—Naval Stores (General) (Class B, Group 7)—Monel Metal Rods—Patterns 12592 to 12599 inclusive—Amendment to Description.

(*A.F.O.* 478/1960.)

The description " Monel Metal " at present applicable to patterns B7/12592 to 12599 inclusive, has been *amended* to *read* as follows:—

" Nickel-Copper Alloy—B.S. 3076, N.A.13 (Monel Metal) ".

2. Admiralty has advised that the Rate Book and Authorized list of Naval Stores, B.R. 810, will be amended accordingly.

(DNAS 505/84/12.)

UNCLASSIFIED.

374.—Fire Extinguishers—Failure to Operate.

(*A.F.O.* 733/1960.)

A recent fire in one of H.M. ships, started by sparks from a welding operation in a boiler room, assumed major proportions because the single 2-gallon water extinguisher (pattern 7272) in the vicinity failed to operate.

2. It has been established that failure of this type of extinguisher to operate is frequently the result of leakage at the wheel head joint because the wheel head has not been properly screwed home after re-charging or inspection.

3. The extinguisher will also fail to operate if the operating knob is held down, as this allows the expellent gas to escape through the operating knob housing. When using the extinguisher the knob must be driven down to pierce the CO^2 cylinder seal, then released immediately so that it will spring back and form a tight seal.

4. Attention is therefore drawn to the importance of proper tightening of the wheel head of the pattern 7272 extinguisher after re-charging or inspection, and to the correct method of operation by striking and releasing the operating knob.

5. On every occasion of re-charging pattern 7272 extinguishers the new CO^2 cylinder is to be given the rattle test described in chapter 14.2 (3) (c) (iii) of the Ship Fire Fighting Manual B.R. 1257 to ensure that it is fully charged.

6. Admiralty has advised that B.R. 1257 will be amended.

(DNC 505/87/94.)

UNCLASSIFIED.

375.—Naval Stores (Class F, Group 3)—A.B.C.D.—Introduction and Allowances of Radiac Instruments.

Navy Order 97 of 1960 is to be amended as follows—

(1) **Paragraph 2 (a)**—*Batteries*—

Amend description to read—

" Battery, dry, 1½ V.—J.S.C. 6135–101101—Pattern 14074—Quantity 2.
Battery, dry, 9 V.—J.S.C. 6135–101162—Eveready Q 567—Quantity 1.
Battery, dry, 30 V.—J.S.C. 6135–101163—Eveready 413—Quantity 1."

(2) **Paragraph 2 (b)**—*Batteries*—

Amend description to read—

" Battery, dry, 1½ V.—J.S.C. 6135-101101—Pattern 14074—Quantity 1.

Battery, dry, 30 V.—J.S.C. 6135-101164—Eveready 430P—Quantity 4 ".

(3) **Paragraph 2 (c) (i)**—

Amend description to read—

" Two 150 V., dry batteries, J.S.C. 6135-101165—Eveready Q 576, in battery holder No. 1, J.S.C. 6665-110030 ".

(4) **Paragraph 2 (c) (ii)**—

Delete paragraph.

(5) **Paragraph 2 (c) (iii)**—

Renumber paragraph to read—

" 2 (*c*) (ii) ".

(6) **Appendix C**—*Page* 26—

Delete all reference to—

" Vibrator Unit Contamination Meter J.S.C. 6665-110029 ".

(DNAS 518/58/8.)

(*Navy Order* 97 *of* 1960.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

376.—Fixed Issuing Prices for Provisions and Victualling Allowances as from 1st April, 1960.

The supplementary list of issuing prices for fresh fruit and vegetables which has operated since 1st January, 1960, has been amended as from 1st April, 1960, and revised price lists have been distributed to all H.M.A. ships and establishments.

2. Consequent on the revision of these prices, the following rates of victualling allowances per head, per diem, will apply from 1st April, 1960—

	s.	*d.*
Messes of more than 300	6	4
Messes of 300 and less	6	6
Additional for ships attached to the strategic reserve ..	0	4
H.M.A.S. MELVILLE	6	10
H.M.A.S. TARANGAU	6	11
R.A.N.C.	7	6
R.A.N.A.T.E.	7	5

3. Navy Order 127 of 1960 is hereby cancelled.

(DV 903/51/28.)

(*Navy Order* 127 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

RESTRICTED.

377.—B.R. 1806 The Naval War Manual.

(*A.F.O.* 601/1959.)

The 1958 edition of the Naval War Manual (B.R. 1806) has now been published and is being distributed to all R.A.N. ships and establishments without demand.

2. The book has been extensively revised and, in particular, the chapters on Maritime Strategy and Operations have been completely re-written. In these chapters, an attempt has been made to formulate the aims of British maritime strategy, and to relate each type of maritime operation to the achievement of one or more of these aims. A historical approach has been adopted in order to emphasize the great importance of studying the lessons of past experience.

3. A point of special interest is that vague and ill-defined expressions (such as " Command of the Sea ", " Sea Communications ", " Zones of Control ", &c.) have been expressly avoided. In the past, such expressions have led to much muddled thinking and even to serious mistakes of policy. It is essential, in discussing maritime affairs, to use concrete expressions which admit of no misunderstanding.

4. Although the Naval War Manual is primarily intended for use by junior naval officers undergoing courses, it can be read with profit by all officers as a stimulus to thought on the important subjects of maritime strategy and tactics. In particular, it is a useful introduction to study of sections 1, 2 and 3 of the new Fighting Instructions.

5. The 1958 edition of the Naval War Manual supersedes the 1947 edition, all copies of which are to be disposed of in accordance with B.R. 1.

(DNAS 465/52/48.)

Section 6.

ESTABLISHMENTS.

UNCLASSIFIED.

378.—Naval Stores—Accounting—Responsibility for Permanent Loan Lists—Chief Petty Officers' and Petty Officers' Messes—H.M.A. Establishments Concerned.

It has been decided that, at establishments at which Chief Petty Officers and Petty Officers are appropriated specifically as presidents of messes, such ratings may be made responsible for and may sign Permanent Loan Lists for Naval Stores held in their respective messes.

2. A.B.R. 4 will be amended.

(DNAS 400/51/39.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

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C.N.O.'s 379-405/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
27th May, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

3384/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

379.—Local Administration of R.A.N. Ships in the Commonwealth Strategic Reserve.

The Naval Board has approved the introduction of the title " R.A.N. Division " for the ships comprising the R.A.N. contribution to the Commonwealth Strategic Reserve, and to the Senior Officer of these ships using his own title as the local administrative authority for the R.A.N. Division.

(DOD 1605/1/2.)

UNCLASSIFIED.

380.—Officers—Order of Command in Naval Air Stations.

(*A.F.O.* 711/1960.)

In the light of experience gained since the introduction of the new officer structure, it has been decided that command in naval air stations shall in future descend in the same order as in other Fleet Establishments.

2. Q.R. & A.I., Article **0134**, clause 1 (*b*) is, therefore, to be *amended* to read—

" *In Fleet Establishments, including Naval Air Stations*, command descends first to the officer appointed as Executive Officer of the establishment and then by seniority through those entitled to exercise military command (0132)."

3. Admiralty has advised that Q.R. & A.I., Article **0134** will be amended in due course.

(DOA 317/1/4.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

381.—Marriage Allowance—Reminder of Notification to be made by Member following a Change of Family Circumstances.

Some overpayments of Marriage Allowance have been made because the members concerned did not report change in their family circumstances. To minimize the risk of this happening because of forgetfulness it is desired to remind members of their obligations in this matter.

2. Accordingly, Captains of ships and establishments are to bring this order to the attention of all members eligible for Marriage Allowance on 1st February and 1st August each year.

3. In applying for Marriage Allowance each member, after detailing his family circumstances, signs a declaration as follows—

" I declare that—

(i) I am a widower.

(ii) I am a divorcee.

(iii) I am separated from my wife.

(iv) My marriage has been annulled.

(v) I am maintaining a home for my children at.....
.....

(vi) I am maintaining my children but not in my home.

(vii) A court order for maintenance at the rate of £.....per week/fortnight was made on.....in favour of my wife/*ex* wife and child/children by.....
.....(*Name of Court*).

I hereby undertake to notify my Captain in writing of any change in the particulars declared above. I am aware of and understand the provisions of sections 35 and 43 of the Naval Discipline Act in respect of false declarations made and non-fulfilment of undertakings given. I am also aware of and understand the provisions of regulation 264 of the Naval Financial Regulations under which any amount incorrectly paid is recoverable from my pay."

4. This order will be reprinted for posting on notice boards.

(HNB 252/5/3.)

UNCLASSIFIED.

382.—Naval Health Benefits Society.

Navy Order 217 of 1960 is to be amended as follows—

Appendix—paragraph 15.

Delete sub-paragraph 5.

(NHBS 271/1/12.)

(*Navy Order* 217 *of* 1960.)

UNCLASSIFIED.

383.—Petty Officers' School—Flinders Naval Depot.

The aim of the course held at the Petty Officers' School is to develop the qualities of leadership in Petty Officers so that they may take a more effective part as senior rates in H.M.A. ships and in the general administration of the Service. The course is therefore designed to give them training in leadership and to broaden their outlook by stimulating discussion on problems current in the R.A.N.

2. Petty Officers will be appropriated, normally without relief, to attend the course which is of six weeks' duration.

3. Service certificates, forms A.S. 264 and pay cards of Petty Officers concerned are to be forwarded to H.M.A.S. CERBERUS.

4. The syllabus for the course includes training in—

(*a*) Power of command,
(*b*) Small arms,
(*c*) Field craft,
(*d*) Physical training,
(*e*) Lifesaving,
(*f*) Instructional technique,
(*g*) Personnel management,
(*h*) First aid,

as well as discussions on current affairs and subjects peculiar to the Service. Visits to Government departments and commercial firms are also arranged.

5. On completion of the course, page 3 of the Service Certificates of the Petty Officers concerned is to be noted " P.O.'s Leadership and I.T. Course " with the date of completion and grading of Very Good, Good, Fair, or Fail, shown—e.g., 15 Mar. '60—P.O.'s Leadership (VG) and I.T. (Fail).

6. On completion of each course, results are to be reported on forms A.S. 161A.

7. Commanding Officers should complete a " Follow Up " report six months after the course finishes in order to assess the permanency of its benefits and to suggest any improvement in the syllabus.

8. Courses commence at 0915 on the appropriate Monday and Petty Officers should join Flinders Naval Depot by the afternoon of the previous Friday. Candidates should bring full kits including sports gear.

(DMT 312/21/10.)

UNCLASSIFIED.

384.—Ratings' Re-engagement—Ratings with Welfare Histories.

The recording of ratings' welfare histories is no longer to be entered on page 2 of Certificates of Service, but is to be recorded on forms A.S. 264.

2. Navy Order 992 of 1959 is to be noted accordingly.

(HPB 307/4/7.)

(*Navy Order* 992 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

385.—Axial Flow Fans with Series-Parallel Controllers—Precautions to be Observed.

(*A.F.O.* 527/1960.)

Instances have been reported in connection with the controllers of 20-in.–30-in. Axial Flow Fans which utilize the series-parallel arrangement of connection to the poles to effect speed control, of damage ranging from bad commutation to a complete burn out of the windings.

2. The cause may be due to bad contact on the second or third step of the controller thereby resulting in one of the two sets of field coils being partially or wholly out of circuit.

3. Another cause could be the deliberate increasing of pressure of the contacts on the drum of the starter to ensure good contact, but thereby making the controller handle a little more stiff to operate with the risk of the handle being left in an intermediate position between step 1 and step 2, again leaving only one-half of the field coils in circuit. A similar condition could arise by wear on the cam causing " flats " to develop thereon, again conducing to the starter handle and drum being left in an intermediate position.

4. It is therefore necessary to ensure that—

(*a*) The fixed and moving contact surfaces are clean and smooth.
(*b*) Contact pressure does not unduly impede the movement of the handle and drum.
(*c*) The profile of the cam is free from flat surfaces which might conduce to the handle and drum being left in an intermediate position.

(DEE 1114/51/14.)

RESTRICTED.

386.—C.R.B.F. Directors, Marks 2M, 7 and 7, Mod. 3.

Modifications to C.R.B.F. directors, having been given modification numbers to facilitate identification and recording, are listed hereunder.

2. Ships and establishments are to raise defect list items for the work to be carried out by Naval Dockyards quoting this order as authority.

3. Gunnery Equipment Depots are to arrange for the modifications to be carried out prior to issue of equipments held in store.

APPENDIX.

APPROVED MODIFICATIONS TO C.R.B.F. DIRECTORS, MKS. 2M, 7 AND 7, MOD. 3.

Mod. No.	*Description.*	*D.N.O. Drawings.*	*Remarks.*
1.	To fit modified bottom bracket for training locking bolt to increase stiffness	7162 E. 7162 W. 5931 A. 5547 A.T.	M.R. 1045. To be carried out only if locking bolt clearance exceeds Test specification
2.	To prevent sticking of separation valve liner in valve body in dome analyser		
	PART 1.—To provide grooves in detail 151	5888Z.	M.R. 1055, Part 1. Refer Navy Order 679/58
	PART 2.—To provide a silk filter in main oil supply	7709 G. WDO.178 WDO.179	Part 2
	PART 3.—To provide taper on details 151 and 190 to facilitate removal of valve body	5888 A.E.	M.R. 1078, Part 3. Refer Navy Order 679/58

APPENDIX—*continued.*

Mod. No.	*Description.*	*D.N.O. Drawings.*	*Remarks.*
3.	Elevation side of D.S. and 1½ D.V. cam lever removed to prevent director running on to elevation mechanical stop when elevating at high rates	7129 B. 7129 E. 7511 D.	M.R. 1080
4.	To provide a bracket for mounting theodolite, and bosses for securing same to range box	9846 9846 C. 9846 D. 5884 G.	M.R. 1138
5.	To fit rubber shrouds over aimers and C.O.'s joysticks	7128 7128A 7128B 4987 B. 4987 C. 7114 7114 B. 5906 B.	M.R. 1147
6.	To enable directional coupler A.P.66539/A to be fitted	5931 A. Sheet 1 5931 B. 5955 D.	M.R. 1210. Navy Order 839/59
A.N.1	To fit a blanking plate and niphan socket between sections J and K of tachometric box	WDO.201 DNO.7349G DNO.7103G	As tachometric boxes are landed for repair
A.N.2	Existing M.V. dial to have metal removed from the stop face and additional engraving, to extend the range from 2525 to 2475	7511 C.	M.R. 1232. Mk. 7, Mod. 3 only

(DW 4430/4/115.)

(*Navy Orders* 679 *of* 1958 *and* 839 *of* 1959.)

UNCLASSIFIED.

387.—Guns—Q.F. 40/60, Marks 9, 10, 11 and N1 Series—Exchange Zone for Barrels.

(*A.F.O.* 650/1960.)

Experience has revealed that the life of Q.F. 40/60 barrels, at present assessed at 10,000 E.F.C.'s, may be considerably less than this figure.

2. In these circumstances, it has been decided to cancel the present exchange zone of from 1¼ outfits to 1 outfit. The old exchange zone of 900–600 E.F.C.'s is to be used, in future, to govern the exchange of Q.F. 40/60 barrels.

3. Paragraph 8 of Appendix 14 of B.R. 292 (Ordnance Engineering Manual) will be amended accordingly.

(DW 708/51/26.)

UNCLASSIFIED.

388.—Diving—Precautions to be Observed when using SSBA Hose Reel.

A case has been reported where the axle of the SSBA pressurized hose reel has rusted internally allowing rust flakes to pass through the hose to the demand valve.

2. Pending modification, the following drill is to be observed before diving. Connect the hose reel to the compressor and run the compressor up to 100 P.S.I. then, before connecting the demand valve, blow through the reel and hose with three or four short bursts of air and finally a long burst. The base of the demand valve should also be unscrewed and the filter gauze checked for cleanliness.

3. High pressure air from the emergency cylinders of the hose reel should only be used for blowing-through purposes when the reel is used without a compressor.

(DW 4512/50/577.)

512/74/1

UNCLASSIFIED.

389.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 125. *Classification* " *A* ".

Item: To install two (2) additional three pin 230 volt 50 cycles A.C. power points in 5Q Printing Room. Type of cable A.P. 2520. One power point to be paralleled from existing A.C. power point in 5Q Printing Room. Fuse rating of existing supply 5 amps. Supplied from switch fuse box No. 23 fuse No. 4 situated centreline station 187 5R. Approximate length of run 2 feet. One power point to be looped in, via a looping in base to be fitted in 5Q cross passage starboard side, to the supply to a power point in Dental Workshop 5Q. Fuse rating of existing supply 5 amps. Supplied from switch fuse box No. 23 fuse No. 6 situated centreline station 1875R. Approximate length of run 25 feet.

References:

H.M.A.S. MELBOURNE's proposed alteration and addition item T.D.L. " CA ".

Navy Office letter No. 17425 dated 31st August, 1959.

F.O.I.C.E.A. memorandum N20/14/78 dated 7th January, 1960.

(DCNTS 1213/52/44.)

Amendment 1213/53/1

UNCLASSIFIED.

390.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 34. *Classification* " *A* "

Item: " To fit Naval Store type stowages to forward bulkhead of Ordnance Engineers Store in accordance with Williamstown Dockyard Drawing No. 201/693 Fly."

References:

(i) H.M.A.S. VENDETTA's proposed alteration and addition item T.D.L. " D ".

(ii) F.O.C.A.F.'s memorandum AF.1937/4 (3798) of 29th July, 1959.

(iii) Navy Office letter No. 18135 dated 3rd September, 1959.

(iv) G.M.W.D.'s memorandum 238/63/75 (3168) dated 16th December, 1959.

(v) Navy Office letter No. 3777 dated 11th February, 1960.

(DCNTS 1215/57/22.)

UNCLASSIFIED.

391.—Alteration and Addition Item—A.S. Frigates (Converted Fleet).

The following alteration and addition item is approved for A.S. Frigate (Converted Fleet) H.M.A.S. QUEENBOROUGH—

Class List Item No. 570. *Classification* " *A* ".

Item: " To fit a quiet loudspeaker and microphone on the Action Intercom System, in the Bridge Wireless Office."

Remarks:

(i) Separate action will be taken for H.M.A.S. QUADRANT when required.

(ii) Although the item was completed during conversion in H.M.A.S. QUICKMATCH and H.M.A.S. QUIBERON it is to be recorded in ships' copies of Record of Alterations and Additions with appropriate notations.

References:

Navy Office memorandum No. 08824, dated 9th October, 1959.

F.O.I.C.E.A. memorandum No. N20/18/58, dated 11th December, 1959.

(DCNTS 1224/251/12.)

UNCLASSIFIED.

392.—Naval Stores (Air)—R.A.F. Vocabulary Section 28E—Cancellation of Joint Service Catalogue Numbers.

(*A.F.O.* 801/1960.)

The undermentioned Joint Service Numbers under section 28E have been cancelled and the stores concerned are to continue to be dealt with under their original vocabulary reference numbers.

Joint Service Numbers.	*Original Vocab. Reference Numbers.*
942–9542	8187
942–9610	8184

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with A.B.R. 4, Article 1812 (*g*).

(DNAS 603/78/98.)

UNCLASSIFIED.

393.—Naval Stores (General) (Class B, Group 8, Part 1)—Wheels, Patterns 1543B and 5422—Amendment.

(*A.F.O.* 392/1960.)

As the wheels now being supplied for use with trucks, pattern B8I/1543A, and trolleys, pattern B8I/5420 are interchangeable, wheel, pattern B8I/1543B is being deleted from B.R. 810 (Rate Book and Authorized List of Naval Stores) and the description of wheel, pattern B8I/5422, amended to read—

" Wheel, solid-tyred, for truck, pattern 1543A, and trolley, pattern 5420 ".

2. Admiralty has advised that the relevant publications will be amended.

(DNAS 505/87/86.)

UNCLASSIFIED.

394.—Naval Stores (General) (Class B, Group 11, Part F)—Wrenches, Key, Hexagon—Revised First Outfit Quantities—H.M.A. Ships.

(*A.F.O.* 597/1960.)

Consequent upon the revision of the range of wrenches, key, hexagon, and the wide increase in their use, first outfit quantities of these tools have been revised and are now as shown in the appendix to this order. In addition, quantities as detailed in B.R. 226B, B.R. 226C and E, List A/S 182, are allowed for the maintenance of gun mountings, gunnery control equipments and asdic hull outfit 1/1A.

2. Demands to complete to these quantities, if considered necessary, should be forwarded to the appropriate (S)N.S.O. Supply to ships under construction, &c., will be made as part of the first outfit of naval stores.

APPENDIX.

REVISED FIRST OUTFIT QUANTITIES OF WRENCHES, KEY, HEXAGON.

Ships Accounting Classification.	Class/Group Pattern No.	Previously Pattern No.	Description. Wrenches, key, hexagon— Width A/F. ins.	Arm Length. ins.	Denom.	Aircraft Carriers.	Destroyers.	Frigates and Survey Vessels.
	B 11 F.	B 11 F.						
C	910–6057	H.4263	0.05	$1\frac{21}{32}$ and $\frac{17}{32}$	No.	2	1	1
C	910–6058	H.4264	$\frac{1}{16}$	$1\frac{3}{4}$ and $\frac{9}{16}$	No.	4A	1	3
C	910–6059	H.4265	$\frac{5}{64}$	$1\frac{7}{8}$ and $\frac{7}{8}$	No.	1A B	1	2
C	910–6060	H.4266	$\frac{3}{32}$	2 and $\frac{21}{32}$	No.	3B C	2	2
C	910–6062	H.4268	$\frac{1}{8}$	$2\frac{1}{4}$ and $\frac{3}{4}$	No.	1D	2	2
C	910–6063	H.4269	$\frac{5}{32}$	$2\frac{1}{2}$ and $\frac{27}{32}$	No.	1D	2	1
C	910–6064	H.4270	$\frac{3}{16}$	$2\frac{3}{4}$ and $\frac{15}{16}$	No.	1D	2	2
C	910–6065	H.4271	$\frac{7}{32}$	3 and $1\frac{1}{32}$	No.	1D	1	1
C	910–6066	H.4272	$\frac{1}{4}$	$3\frac{1}{4}$ and $1\frac{1}{8}$	No.	1D	1	2
C	910–6067	H.4273	$\frac{5}{16}$	$3\frac{3}{4}$ and $1\frac{1}{4}$	No.	1D	1	1
C	910–6068	H.4274	$\frac{3}{8}$	$4\frac{1}{4}$ and $1\frac{3}{8}$	No.	1D	1	1
C	910–6069	H.4275	$\frac{7}{16}$	$4\frac{3}{4}$ and $1\frac{1}{2}$	No.	1	1	1
C	910–6070	H.4276	$\frac{1}{2}$	$5\frac{1}{4}$ and $1\frac{3}{8}$	No.	1D	1	1
C	910–6072	H.4276B	$\frac{5}{8}$	$6\frac{1}{4}$ and $1\frac{7}{8}$	No.	1	1	1

Notes.—A = 4 Additional for Air Purposes.
B = 2 Additional if fitted Arrester Barrier Gear.
C = 2 Additional for Air purposes.
D = 6 Additional for Air Purposes.

The quantities shown include one complete set as a compartment allowance for electrical purposes and covers requirements for maintenance of Cinema Projectors and Cryptographic Machines.

(DNAS 506/71/60.)

UNCLASSIFIED.

395.—Naval Stores (General) (Class E, Group 8) "Cess-Kleen" for Use in Shore Establishments—Introduction.

Consequent on successful trials at Flinders Naval Depot, it has been decided to introduce "Cess-Kleen" for cleansing and deodorizing grease traps in Shore Establishments.

2. "Cess-Kleen" is a liquid chemical of non-acid and non-caustic base which emulsifies fat and grease.

3. *Quantities to be used in Grease Traps*—

Household (about $4\frac{1}{2}$ cu. ft. capacity), one quart. Clean grease trap. Pour entire contents into the grease trap or down the kitchen sink, provided there is no intervening trap between the sink and grease trap. To free a grease-clogged absorption trench, pour about $\frac{3}{4}$ gallon into the absorption trench pipe. Once free, the use of "Cess-Kleen" in the grease trap will prevent further absorption trench clogging.

Industrial.—The following figures are a guide to the industrial user, but as the quantity of grease entering the trap varies to such an extent, greater or lesser quantities may be necessary. Lasting effect is governed by the quantity of grease entering the grease trap.

For grease traps with cubic capacity up to 20 cu. ft., use one gallon "Cess-Kleen".

20–40 cu. ft.	$1\frac{1}{2}$ gallons.
40–70 cu. ft.	2 gallons.
70–100 cu. ft.	$2\frac{1}{2}$ gallons.

Over 100 cu. ft., use one gallon for each 50 cu. ft.

4. One application of "Cess-Kleen" remains effective for a period of 5–6 months. Soap powders and detergents tend to form a jellylike substance in grease traps, and it is advisable to inspect the grease trap from time to time and remove this jellylike substance, together with food particles which may have accumulated, in such a manner that "Cess-Kleen", which is at the bottom of the trap, remains undisturbed. Demands for initial quantities required should be lodged with the nearest (S)N.S.O.

(DNAS 401/61/25.)

UNCLASSIFIED.

396.—Naval Stores (General) (Class E, Group 12) Drawing Instruments, Re-classification as Consumable Naval Stores.

The following drawing instruments are to be classified as consumable Naval Stores from the date of this order—

Pattern 3718	Set squares, transparent, 45°, 6-in.
Pattern 3721	Set squares, transparent, 60°, 8-in.
Pattern 3724	Protractors, celluloid, 6-in.
Pattern NP	Protractors, celluloid, 3-in.
Pattern 490	Rulers, boxwood, 12-in.

2. The allowances of the instruments now shown in the various establishments of sea stores are to be regarded as first outfit quantities.

3 Ships and establishments concerned are to adjust their Naval Store Accounts in accordance with A.B.R. 4—Naval Storekeeping Manual, Article 1812 (*d*).

(DNAS 514/62/40.)

UNCLASSIFIED.

397.—Naval Stores (General) (Class F, Groups 2A and 25)—Lamps Electric—Revised Rate Book Classification of.

(*A.F.O.* 1357/1958.)

As from the date of this order all electric lamps hitherto dealt with under class F, group 2A, part III. are to be transferred to class F, group 25 (A.B.C. supply classification class 6240). Navy Order 607 of 1959 (Naval Stores (General) (Class F)—Electrical and Electronic Stores—Revised Rate Book Classification) is relevant.

2. Concurrently with this transfer, the pattern numbers of the electric lamps should be changed to the seven-digit hyphenated numbers in accordance with Navy Order 586 of 1959 (Stores—Joint Service Cataloguing of Items of Overseas Origin). Examples of the change are—

Pattern X951103 becomes pattern 995-1103.
Pattern X965452 becomes pattern 996-5452.

3. Naval Store ledgers in H.M.A. ships and commissioned establishments are to be adjusted as follows—

(*a*) Action in accordance with A.B.R. 4, Naval Storekeeping Manual, article 1812 (*a*) (i), (ii) and (iii).

(*b*) The pages are to be assembled in a new ledger, a new form A.S. 155A raised and details of the pages transferred entered thereon.

4. Admiralty has advised that the relevant publications will be amended.

(DNAS 4518/1/1369.)

(*Navy Orders* 586 *and* 607 *of* 1959.) 517/51/119

UNCLASSIFIED.

398.—Naval Stores (General) (Class F, Group 20)—Sight Tube for Signalling Lanterns—Introduction.

(*A.F.O.* 2318/1958.)

The sighting device on Aldis signalling lanterns, pattern 5110E, is an Aeroscope, pattern 53971. This device has been superseded by a sight tube in lanterns, pattern 16409, currently being produced for the R.A.N. The sight tube has been added to B.R. 810, Rate Book and Authorized List of Naval Stores as follows—

Class and Group.	*Pattern.*	*Description.*	*Accounting Classification.*
F20 ..	197873 ..	Sight tube for lanterns, pattern 16409 (A.B.C. Supply Classification, Class 5850)	Permanent

2. Aeroscopes, pattern 53971, will be marked "O" in the Rate Book and Authorized List of Naval Stores.

(DNAS 4518/88/2.)

519/70/6

UNCLASSIFIED.

399.—Naval Stores (General)—Safety Handlamps, Pattern F2A/8115M—Obsolescence and Replacement by Pattern F25/202755.

(*A.F.O.* 1906/1959.)

Battery operated safety handlamp, pattern F2A/8115M (for use in magazines, gasoline compartments, &c.), in its present form incorporates a steel outer casing which is liable to cause sparks if dropped on a steel deck or struck against a steel object.

2. Hitherto this lamp has been considered suitable for use in magazines, aviation fuel dangerous areas, and in compartments where inflammable gas or vapour is known or suspected to be present. In view of the risk of ignition by sparking of inflammable gas or vapour and explosive material, however, handlamp, pattern F2A/8115M is considered dangerous under these conditions and its use is to be restricted to "safe" areas and in compartments certified as being Gas Free.

3. All future purchases will be of a modified safety handlamp with a non-ferrous outer casing which has been introduced under class F, group 25 as pattern number 202755 for use in the aforementioned dangerous areas and compartments. Handlamp, pattern F2A/8115M, has been made obsolescent. Stocks of handlamp, pattern F2A/8115M and 8115, will be issued for use in "Safe" areas and compartments until expended.

4. Demands, quoting this order, for minimum requirements of the new safety handlamp, pattern F25/202775 for use in magazines, aviation fuel dangerous areas, and in compartments where inflammable gas or vapour is known or suspected to be present should be lodged with S.N.S.O. Sydney. Supplies will not be available for some time and demands should not be hastened.

5. Admiralty has advised that the relevant publications will be amended in due course.

(DNAS 517/51/42.)

UNCLASSIFIED.

400.—Naval Stores (Technical) (Class F, Group 1A, Part 1)—Type 691/CUH Radio Equipment—Revision of Spares and Test Equipment Allowances.

(*A.F.O.* 396/1960.)

At present, spare transmitters for type 691 and receivers for outfit CUH are allowed in E. List 1033 (to Errata 3) on the following basis—

Pattern.	*Description.*	*Maintenance Spares.*
66925	Transmitter 75A	1 } *See Note "A"* below.
66926	Receiver P116	1 }

Note A.—The quantities shown are to be supplied for every four type 691 or outfits CUH fitted.

2. These allowances will not appear in the reprint of E1033 for type 691 and the new list E1255 for outfit CUH now being prepared. Instead, the following spares allowances of drawers will be authorized—

Pattern.	*Description.*	*Maintenance Spares*	
67905	Transmitter drawer 69A	1	*See Note "B"* below.
67909	Power supply drawer design 2	1	
67907	Receiver drawer 62E	1	
67910	Power supply drawer design 3	1	

Note B.—The quantities shown are to be supplied for every three type 691 or outfits CUH fitted, with an over-riding maximum of two spares per ship. Ships holding complete transmitters pattern 66925 and/or complete receivers pattern 66926 as spares should retain them in part or full satisfaction of these allowances.

3. The main effect of the new maintenance spares allowances will be the supply of a complete set of spare drawers to each ship fitted with three type 691 and three outfits CUH.

4. Ships (with the exception of H.M.A.S. MELBOURNE and Tribal Class Destroyers) and establishments concerned should demand drawers to complete to the new allowances from the appropriate (S)N.S.O.

5. Allowances of the following items for use in testing units out of their racks will also be shown in "E" lists E1033 and E1255. Demands to complete to these allowances should be forwarded to the appropriate (S)N.S.O.

Class/Gp.	*Pattern.*	*Description.*	*Outfit.*
F1A/1	64145	Transmitter power connector	691
F23	972–9187	Filament supply connector	691/CUH
F23	972–9188	Receiver power connector	CUH
F23	972–9189	Receiver aerial connector	CUH
F23	972–9190	Transmitter aerial connector	691
F23	972–9191	Power supply connector	691/CUH
F31	208672	Socket 12 pole	691
F31	011–9119	Outlet straight	691
F32	097–0129	Nut	691

(DNAS 517/51/108.)

UNCLASSIFIED.

401.—Naval Stores (Technical) (Class F, Group 1A, Part 2)—Obsolete Asdic and Echo Sounding Stores—Disposal.

(*A.F.O.* 2364/1959.)

The stores detailed in the appendix to this order are now obsolete and are being deleted from the Rate Book of Naval Stores (B.R. 810). All stocks and future returns are to be disposed of in accordance with existing instructions.

2. None of the items listed requires mutilation, for security reasons, before disposal.

3. Strict adherence to the pattern numbers and descriptions quoted is essential, e.g., no pattern with the suffix "A" is to be disposed of where only the pattern without a suffix letter is shown.

APPENDIX.

Pattern.	*Description.*	*Pattern.*	*Description.*
A.193	Board, synchronizing.	A.1744/B	Bag of bolts.
A.207	Box, coupling.	A.2012	Varistor.
A.367	Contact, flyback.	A.2248	Indicator bearing.
A.482	Motor, ¼ H.P. 110 V.	A.2366	Switch, panel.
A.507	Panel, transmitting.	A.2516	Tools, set of
A.705	Disc, screening.	A.2572	Table, pupils.
A.714	Connector, H.T.	A.2573	Bench, pupils.
A.724	Drive, 2-way.	A.2752	Rod sounder.
A.751	Handles, tee.	A.3125	Stop plates.
A.807B	Unit 220 V.	A.3400	Contact.
A.840	Chain, lifting.	3425	Cover.
A.846	Rectifier unit.	3578A	Board, relay.
A.862	Control, volume.	6869	Ring joint.
A.1670B	Strut, streamlined.	9963	Procedure teacher.

(DNAS 518/52/26.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

402.—Socks, Black, Stretch Type—Introduction.

Stretch type wool/nylon black socks have been adopted in the R.A.N. for issue on repayment as an alternative item to socks, black.

2. Because of their nature, these socks will be maintained for issue in two sizes only, viz.—

Small .. .. .. Corresponding to sizes 9½, 10 and 10½.
Large .. .. .. Corresponding to sizes 11, 11½ and 12.

3. Supplies of stretch type socks are available at H.M.A. Victualling Yards and will be accounted for in Clothing Group II., under the following heading—

Socks, black, stretch type.

4. The issuing price will be 7s. 6d. per pair.

(DV 917/76/14.)

UNCLASSIFIED.

403.—Uniform and Clothing—Scales of Measurement.

Navy Order 910 of 1959 is to be amended as follows—

Appendix " A "—

Delete—" Trousers, diagonal serge, fly " and scale of measurements thereunder.

Insert—" Trousers, lightweight serge, fly."

Size No.	*Waist.*	*Inside Leg.*
3	30-in.	28½-in.
3¼	33-in.	27½-in.
3½	30-in.	30½-in.
4	32-in.	29½-in.
4¼	35-in.	28½-in.
4½	32-in.	31½-in.
5	34-in.	30½-in.
5¼	37-in.	29½-in.
5½	34-in.	32½-in.
6	36-in.	31½-in.
6¼	39-in.	30½-in.
6½	36-in.	33½-in.
7	38-in.	32½-in.

Delete—

" Caps, musicians, sizes 6⅜ to 7½ in ⅛ sizes."

" Helmets, musicians, sizes 6⅜ to 7⅝ in ⅛ sizes."

" Trousers, serge, musicians " and scale of measurements thereunder.

" Tunics, serge, musicians " and scale of measurements thereunder.

Delete—	*Insert*—
" Jackets, diagonal serge, D.B."	" Jackets, lightweight serge, D.B."
" Jackets, diagonal serge, police."	" Jackets, serge, police."
" Trousers, diagonal serge, police."	" Trousers, serge, police."

(DV 917/52/4.)

(*Navy Order* 910 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

404.—Command Welfare Officer, Naval Billeting Officer and Recruiting Officer, East Australia Area—Correspondence.

The offices of the Command Welfare Officer, Naval Billeting Officer and Recruiting Officer, East Australia Area, are situated in H.M.A.S. RUSHCUTTER. All correspondence and signals relating to welfare, billeting and recruiting are to be addressed to F.O.I.C.E.A.

(DPS 18/3/26.)

UNCLASSIFIED.

405.—Form A.S. 1303A—Return of Communication Ratings (including W.R.A.N.S.) Recommended to Undergo Courses.

Form A.S. 1303A—Return of Communication Ratings (including W.R.A.N.S.) Recommended to Undergo Courses has been revised and is available on demand from the Superintending Naval and Air Stores Officer, Sydney.

2. On receipt of the new form, remaining stocks of form A.S. 1303A (Revised 1949) are to be destroyed.

(HPB 464/54/129.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

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C.N.O. 406/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
1st June, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos. J. Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

3385/60.

RESTRICTED.

406.—Gun Mountings—4.5-in. Twin R.P. 41 Mountings, Marks 6, 6*, and 6*, Mod. 1—Modifications.

Modifications to the above marks of mounting which were previously promulgated by Vicker's modification numbers have been reviewed and are now issued as Admiralty modification numbers for both fixed and moving structure machinery.

2. Modifications which have been found necessary to suit local conditions are also listed but are prefixed by the letters " A.N.".

3. The following appendices to this order list the modifications applicable to R.A.N. mountings and supersede the list published in B.R. 2014B, Appendix 4, which will be amended in due course—

" A "—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure.
" B "—Mks. 6 and/or 6*—Admiralty Modifications—Fixed Structure.
" C "—Mks. 6 and/or 6*—A.N. Modifications.
" D "—Mk. 6*, Mod. 1—Admiralty Modifications—Revolving Structure.
" E "—Mk. 6*, Mod. 1—Admiralty Modifications—Fixed Structure.
" F "—Mk. 6*—A.N. Modifications.

4. To facilitate recognition of modification items which had earlier featured in the Vicker's list, a cross reference to the Vicker's number is shown where applicable but this number is not to be used in future correspondence.

5. Future modifications will be promulgated by Navy Order and are to be added to the lists to maintain a complete record of modifications.

6. Defect list items are to be raised to have outstanding modifications, applicable to the mark of mounting, carried out by Dockyard quoting this order as the authority.

7. A notation is to be made on completion of each modification, on form S.1151 (*e*) or in the Ordnance Engineers Master Record.

8. Associated spare gear is to be modified concurrently.

9. Navy Order 391 of 1958 is hereby cancelled.

" A "—MKS. 6 AND/OR 6*—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
1	Mk. 6 only. Mk. 6* completed during manufacture	N.36462 Rev. N.36467 Rev.	—	To fit Chevron packings in lifting cylinders for shell and cartridge hoists at top and bottom. Vicker's Mod. 92
2	Mk. 6* only ..	N.52608 Rev. 1095/8 Rev. I.	—	X Turret Daring Class Limited arc of fire when C.R.B.F.D. is manned due to blast effect on personnel. Fitting auxiliary safety firing gear. Vicker's Mod. 163
3	Mks. 6 & 6* ..	N.49743 Rev. N.42488 N.42487 N.39495 N.39487 N.36541 Rev.	N.49743 Rev. all items N.36541 Rev. items 2–11	Servo and replenishment pumps to be flexibly mounted. Vickers Mod. 161
4	Mks. 6 & 6* ..	N.49016 .. N.49012 N.39677 F.A.B. N.39676 N.37322 N.39682 N.39678 N.39677F	N.49012 items 1–17	O.O.T.'s position Lookout Hood. Window wiping hydraulic gear to be fitted with synthetic rubber packings and modified drive. Vicker's Mods. 165 and 222
5	Mks. 6 & 6* ..	X.1569863..	X.1569863..	Fitting domed perspex sight glasses to oil Servo Units. Vickers Mod. 166
6	Mks. 6 & 6* ..	N.39947 ..	—	Cheese headed pin and split pin to be fitted to elevating and training " A " end control connection to Servo Unit. Vickers Mod. 167

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
7	Mks. 6 & 6* ..	N.39304 .. N.39305 N.39313 N.45614 N.45663 N.45684	—	Preserving plugs and captive lanyards for hoses to be fitted on— (*a*) Recoil cylinder filling (*b*) Air charging flex pipes (*c*) O.M. 65 header tank filling hose (*d*) Flexible hose for filling Servo systems. Vickers Mod. 176
8	Mk. 6* only ..	N.36593 Rev. N.36590 Rev.	—	Turntable securing bolt to be lowered. Vickers Mod. 186
9	Mks. 6 & 6* ..	(*a*) A.R.L. (A)1201/8 & 12 (*b*) A.R.L. (A)1201/21 N.46164/1, 2 & 3	—	Turret relay pump Mk. 2M— (*a*) Modify gland. (*b*) Modify pressure relief valve. Vickers Mod. 189
10	Mks. 6 & 6* ..	N.42483 ..	—	Outer part of rammer head guard modified by welding on an extension piece. Vickers Mod. 194
11	Mks. 6 & 6* ..	N.37312 .. N.37311F N.36599 N.36378 Rev. N.36377 Rev.	N.36378 Rev./1, 4–7, 10, 20, 30, 32 & 33	Lifting gear to be to BSS. Hole in shield roof and gunhouse platform enlarged and new cover fitted. Vickers Mod. 197
12	Not applicable to R.A.N. Mtgs.	—	—	A.E.L. joints to be fitted to all pipe joints. Vickers Mod. 198

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
13	Mk. 6 only. Mk. 6* completed during manufacture	Navy Office drg. 1095/3 N.49011	—	Provision made for rigging "Cordtex" de-icing harness. Vickers Mod. 200
14	Mks. 6 & 6* ..	N.46101 .. N.36335, Sheet 1	—	Preserving screws for holes in cradle for lifting bracket. Vickers Mod. 209
15	Mks. 6 & 6* ..	N.50778 ..	—	Cowl for fan trunking vent at rear of shield. Vickers Mod. 210
16	Mks. 6 & 6* ..	N.42498 ..	N.42498/1 & 2	Improved gland packing for elevating and training hand maintenance pumps. Vickers Mod. 214
17	Mk. 6 only. Mk. 6* completed during manufacture	N.36527 Rev. N.36494 Rev. N.36479 Rev. N.36470 Rev. N.36469 Rev.	N.36527 Rev./13–17 N.36494 Rev./18 and 26–29 N.36479 Rev./27, 28, 31–35 N.36470 Rev./39–41, 45–51	(*a*) Shell and cartridge hoists. Valves to be fitted with Chevron type packings. Vickers Mod. 216
	Mk. 6 & 6* ..	N.36492/7, 8 & 16 N.36518/7, 8 & 16	—	(*b*) Starting valve operating gear to be self-aligning. Vickers Mod. 268
	Mk. 6 & 6* ..	N.36482 .. N.36514	—	(*c*) Control valve sliding block limit stop recess and spring stop slot lengthened to increase clearance for spring bolt. A.N. 65. Vickers Mod. 283

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
17	Mks. 6 & 6*. Not applicable if modified to A.N.56	N.36470 Rev.	—	(*d*) Cut-off valve diameter of shuttle reduced by .002-in., bleed hole reduced to .0625-in. Vickers Mod. 285
	Mks. 6 & 6* ..	N.36486 .. N.36487 N.36511 Rev. N.36512 Rev.	—	(*e*) Setting instructions with modified alignment plate and key for combined control and cut-off valves. Shortening nut to 1.35-in. to allow sufficient adjustment between the pilot valve spindle and the floating lever fulcrum
18	Mks. 6 & 6*. 14/N.38453 to be modified to 14/N.50709, 13/N.38423 to be modified to 10/N.50708. Seal housing may require building up	N,50707/1–16 N.50708/1–29 N.50709/1–10, 12–14, 16–24	N.50707/10–16 N.50708/22–28 N.50709/17–24	Fitting Gaco seals to V.S.G. main shaft glands and Dowty seals on V.S.G. machine in lieu of copper washers. Vickers Mods. 218 and 219
19	Mk. 6*. To be undertaken when turret lead in cables are renewed	N.36425 Rev. Sheet I. N.36419	—	The cable lead in clamps, caps and wood packing blocks to be replaced by items of new design. Vickers Mod. 223
20	Future manufacture only	N.50785 .. N.50786 N.50787	—	Shell and cartridge chutes on revolving platform and headguard for modified cartridge tray position. Vickers Mod. 229
21	Mks. 6 & 6* ..	N.36485 Rev. Items 35 & 36 replaced by 37 & 38	—	Shell hoist cams for top lifting pawl modified. Vickers Mod. 238

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
22	Mks. 6 & 6*. As replacement becomes necessary	N.36456/24 replaced by item 25	—	Shell and cartridge hoists return spring for pawls to be interchangeable. Fixed structure similar. Vickers Mod. 243
23	Mks. 6 & 6* ..	N.51450 .. N.51458	—	Provision of turntable clinometer plane and training alignment mark. Vickers Mod. 246
24	Mk. 6 only. Not applicable if B and D switches fitted	N.37265 ..	—	Cowl to be fitted to door switch at rear of gunhouse. Vickers Mod. 248
25	Mk. 6* only ..	N.50771 ..	—	Warning tally plates to be fitted for A and B mountings (muzzle foul). Vickers Mod. 252
26	Mk. 6 & 6* ..	N.37225 .. N.37226 N.39313/42–47 N.39309/8 & 13 N.39476 B.U.1	—	Gunhouse—addition of tally concerning recuperation and accumulator air pressure. Vickers Mod. 258
27	Mk. 6* only completed during manufacture	—	—	Hoists order lamp boxes A.P. 10501 in gunhouse to be repositioned. Vickers Mod. 266
28	Mk. 6* only ..	N.49000/28	—	Retallying of lamp at C.O.G.'s position to read "Check fire lamp" instead of "Danger lamp and check fire bell". Vickers Mod. 267

" A "—Mks. 6 and/or 6*—Admiralty Modification—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
29	Mk. 6 & 6* ..	N.37311F ..	—	Boxes 18 and 19. Preserving screws and washers, items 20 and 21, fitted to gunhouse roof for mounting theodolite platform. Vickers Mod. 269
30	Mk. 6 & 6* ..	N.36378 Rev.	—	Preserving washers to be fitted to bolts, item 18, when lifter, item 2, is removed. Vickers Mod. 273
31	Mks. 6 & 6* ..	N.51052, Sheets 1 & 2 426G/R9/6	N.51052, Sheets 1 & 2. All items 426G/R9/6	Fit rammer actuated gun firing switch to delay gun firing till rammer head is clear of gun recoil (must be done in conjunction with Mod. 33). Vickers Mod. 274
32	Mks. 6 & 6* ..	N.36347 .. N.36346/14, 15 & 52 N.36345/3, 4, & 15–18	—	Addition of stop bracket for rammer head catch bolt. Vickers Mod. 275
33	Mks. 6 & 6* ..	N.48620 .. N.48621	N.48620/12	Rammer control valve piston. Lengthened skirt to delay withdrawal (must not be fitted prior to completion of Mod. 31). Vickers Mod. 276
34	Not required in R.A.N. *See* A.N. 46	—	—	—
35	Mks. 6 & 6* ..	N.37293 .. N.37294	—	Black out curtains for C.O.T.'s position. Vickers Mod. 279

" A "—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
36	Mks. 6 & 6* ..	N.36332 Rev. N.36488 N.36570	—	Mk. 7 Fuze Setting Machine to be lowered in order that the dimension between the retracted fuse setting head and top of fixed pawl is 24.8-in. ± .050-in. Vickers Mod. 282
37	Mk. 6	—	New relay complete	G.S. pump motor starter. Overload to be increased to 140 amps. 15 secs. delay. Vickers Mod. 284
38	Mks. 6 & 6*. *See also* A.N. 54	N.36322/29	—	Breech block lifting eyebolt in mantlet to be locked by spot welding and tested in place after erection. Vickers Mod. 286
39	Future manufacture only	N.36567 .. N.50790 N.36600 Rev.	—	Striking down ammunition. Footstep fitted to cartridge hoist to replace striking down platforms. Vickers Mod. 287
40	Mks. 6 & 6* ..	N.45681 .. N.45682 N.45685 .. N.37230	—	Additional air stop valve and pressure gauge to be fitted adjacent to accumulator in Gun bay. N.R. valve to be removed. Vickers Mod. 288
41	Mks. 6 & 6*. N.O.M. 010835 of 24/10/52 is relevant	N.36348F .. N.36348 F.A.B. N.36351	—	Rammer buffer cylinder accelerator spring and nut to be removed. Vickers Mod. 289
42	*See* Mod. A.N. 80 for R.A.N. mountings	—	—	Shortened flexible hoses for General Service pumps System. Vickers Mod. 293

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
43	Mks. 6 & 6* ..	N.48625 .. N.45679/10 N.36319 Rev. 1 & 6 N.36320/4	—	Loading tray, &c., modified to enable use of tool for extracting jammed cartridge case. Vickers Mod. 295
44	Mks. 6 & 6* ..	N.36453F ..	—	Modification to cartridge chute to allow for withdrawal of recoil piston rod. Vickers Mods. 297 and 42
45	Mks. 6 & 6* ..	N.36544/1 & 2 Mod. N.36531Rev./10 Mod. 28 & 29 added N.36529/6, 7 & 10 Mod., 21–24 added	—	Locking of handles and bolts on central trunk and portable portion of shell and cartridge troughs. Vickers Mod. 299
46	Mks. 6 & 6* ..	N.36325 Rev. N.41286 Rev.	—	8-in. dia. hole to be cut in L.H. trunnion bracket to facilitate withdrawal of wormshaft. Vickers Mod. 300
47	Mks. 6 & 6* ..	N.37263 .. N.48632 N.41480 A.N.	—	Effectively guarded lighting to be fitted in spent cartridge trunk. Vickers Mod. 301
48	Mks. 6 & 6* ..	N.52420 .. N.52419 Rev. N.52418(AN) N.42496 N.42495 N.39494 N.36570F (Part 1) N.36570F (Part 3) N.36453F	—	(*a*) Spent cartridge ejection chutes to be modified to provide ejection through the gunhouse floor. Modification to stiffener on turntable in way of holes for extended cartridge chutes. Vickers Mod. 302A

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
48	Mks. 6 & 6* ..	N.52829 .. N.52830 N.53622 N.53627	—	(*b*) Breech mechanism hand operating tools and rammer recocking tools to be stowed on cartridge chute extensions. Vickers Mods. 290 and 291
	Mks. 6 & 6* ..	N.53622 ..	—	(*c*) Repositioning of Piasaba brush and rods to clear extended cartridge chute watertight doors. Vickers Mod. 211
	Mks. 6 & 6* ..	N.39494 ..	—	(*d*) Vent pipe to G.S. makeup feed tank and pipe to window wiping gear to clear cartridge chute extension
49	Mks. 6 & 6* ..	Part N.36457	—	Modified guard for elevating tail rod made narrower. Vickers Mod. 302d
50	Future manufacture only in R.A.N.	N.36530 ..	—	(*a*) To modify portable sections of the shell and cartridge rings at the joints so that they may be more easily removed. Vickers Mod. 302b
	Mks. 6 & 6* ..	N.36529 Rev. items 30, 31, 32, 34 & 35	—	(*b*) To supply and fit a rake to the outside of the empty cylinder compartment. Vickers Mod. 302c
	Not required in R.A.N. mountings	N.36457 ..	—	(*c*) To fit fairing pieces to the empty cylinder compartment door frames

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
51	Mks. 6 & 6* ..	N.36506 Rev. N.36471 Rev.	—	(*a*) Shell and cartridge hoist loading doors to be strengthened. Vickers Mod. 303
	Mks. 6 & 6*. Only if found necessary	N.36455 ..	—	(*b*) Fit two ½-in. dowels to pawl housings, items 1 and 2
52	Mks. 6 & 6* ..	N.51035/1–19 N.36511 Rev. /8–10	—	Repositioning cartridge hoist clearing gear. Part Vickers Mod. 304
53	Mks. 6 & 6*. For future manufacture dia. of axis pins will be 0.75-in. over the full length	N.36450 .. N.36451	—	Internal dia. of bushes, item 2, increased to 0.77-in. to permit easier withdrawal of roller axis pins. Vickers Mod. 306
54	Mks. 6 & 6* ..	N.52449 .. N.52831 N.52832	—	Flaps to be fitted over inlet and exhaust ventilation ducts in gunhouse. Vickers Mod. 309
55	Mks. 6 & 6* ..	N.46101 .. N.46102	—	Zero securing gear. Strengthening gusset added and holes enlarged. A.N. 16 similar
56	Mk. 6 & 6*. Completed in R.A.N. mountings	N.43887 .. N.39696	—	To shorten two nuts by 0.125-in. and two bolts by 0.15-in. in the flexible coupling on the main training drive shaft nearest the V.S.G. engine such that the bolt can be inserted with the plain portion of the bolts and not the thread in the fitted holes of the disc

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
57	Mks. 6 & 6* ..	N.48766 Rev. N.37311F	—	Seatings to be arranged on turret roof for type 900 M.V. measuring sets and lifting davit stool. Vickers Mod. 149
58	Not Gunmounting item	—	—	—
59	Mks. 6 & 6* ..	X.1619003..	X.1619003, all items	Fit improved pressure feed back unit. Vickers Mod. 202
60	Mks. 6 & 6* ..	N.51463 ..	—	Fitting guide bars to resetter boxes to facilitate assembly on the mounting
61	*See* A.N. 83 for R.A.N.	—	—	—
62	Mks. 6 & 6* ..	—	—	Back of C.O.G.'s bucket type seat to be removed to facilitate access. Vickers Mod. 233
63	Mks. 6 & 6*. As an interim measure the steel cover plate on Servo Unit to be replaced by brass cover plate	N.53618 .. N.39954 D.1621257 E.1621252 E.1621251 E.1621250 D.1621249 D.1621008 D.1621007 D.1621009 D.1515084 B.1621067	—	Oil Servo Units, Mks. 5 and 5* Modification, to prevent condensation and corrosion (*b*) Fitting new zero and dashpot adjusters (*c*) Fitting brass inspection cover to oil Servo Unit. Mod. A.N. 75
64	Mks. 6 & 6* ..	NOL.53677, dated 9.2.56	—	Fitting of steel strips around training base support in the vicinity of locking bolt hole
65	Cancelled ..	—	—	—

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
66	Mks. 6 & 6* ..	N.54790 ..	N.54790/16–18	Fitting emergency training cut-off switches to cut-off gear. Mod. A.N. 84
67	Mks. 6 & 6* ..	N.55087 ..	—	(*a*) Fitting new head to training cut-off plunger raising deck cams and fitting stiffening plate to linkage bracket
		N.54794 ..	—	(*b*) Fitting brackets to gunhouse floor to limit movements of training engine bed plate. Mod. A.N. 85
68	Mks. 6 & 6* ..	N.55177 .. N.55047	N.55177 .. N.55047, 1-No. Set per ship	Drill chutes for ejection through gunhouse floor after Mod. 48 (*a*) has been carried out
69	Mks. 6 & 6* ..	N.44914 .. N.53164	—	(*a*) Hydraulic breech opening gear. Fitting of gland housings and Chevron packings. When existing packing boxes become defective
	When existing soft packings become defective	N.53294 .. N.53295	—	(*b*) Fitting differential double eye adjusting gear and connecting rod to the valve operating adjustment gear. Vickers Mod. 305 *b* and *c*
70	Mks. 6 & 6* ..	DNO.9328, items 1–3, 7, 9–13	—	To fit new adjustable choke piston and overflow pipe to loading tray buffers of shell and cartridge hoists. Vickers Mod. 307a

"A"—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
71	Mks. 6 & 6* ..	Part N.36466 Part N.51018	—	(*a*) To modify shell and cartridge hoist on revolving structure by bell-mounting. Vickers Mod. 307b
		N.54034 .. N.51025 DOUW.A/51182	—	(*b*) Fitting new catch gear to shell hoists. Vickers Mod. 307c
72	Mk. 6 only. *See* Mod. A.N. 81 for 6* Mtgs.	N.39346 Rev., items 1–8, 11–33 N.39348 Rev.	N.39346 Rev., items 2–8, 11–33 N.39346/1 to be modified to item 1, N.39346 Rev. dated (27.10.55)	Mods. to reflector sight bracket to cater for throw-off firing in surface target practice
73	Mk. 6 & 6* ..	N.55583 .. N.55584 N.55585 N.36322 (Sheet 2) N.36341 (issue 2)	N.55583 .. N.55584	Fitting of strengthened loading trays and consequent modification to the cartridge guide bracket. Cradle rebalanced accordingly
74	Mks. 6 & 6* ..	N.36298 .. DNO.10908	—	Mod. to control rod when breech ring recoil cylinders are bored out above 4.35-in. dia. *Important.*—Repair measure only
75	Mks. 6 & 6* ..	N.37235 .. N.39487 N.39495 N.42487 N.42488 N.55396 (*a*) & (*b*) N.55396/1–10 (*c*) N.55396/1, 2, 5–12	(*a*) & (*b*) .. N.55396/1–10 (*c*) 55396/1, 2, 5–12 Purolator Micronic Filter Model MF.2604	Improved filtration of oil supplies to— (*a*) Oil Servo Units, (*b*) Pressure feed back units (*c*) Recoil replenishing tank filling pipe

" A "—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
76	Mks. 6 & 6*. For R.A.N. a single thickness of " Dufour bolting silk, size 14S " to be wrapped around filter element for monthly cleaning runs	DNO.10348	—	Fitting of silk sleeve cartridge to lolos bypass filter in O.S.U. System. Not applicable to R.A.N. mountings. (*See* remarks)
77	Mks. 6 & 6* ..	Parts List 9052 DNO. 11046 Series	Modification Kits to Parts List 9052 and Drg. List DNO.11046, DFC.69856/1–6 are existing items modified	Conversion of Fuze Setting Machines Mk. 7 to Mk. 7, Mod. I
78	Mks. 6 & 6* ..	N.55553 .. NOD.2175/148	—	Mod to rammer trip gear to increase leverage
79	Mks. 6 & 6*. Not to be carried out until Mod. 48 (*a*) has been completed	DNO.11062 Navy Order Diag. 9/58	—	Gunshield vent ports. Remove existing vent plates and manufacture and fit steel cover plates bolted in position. Mod. A.N. 90
80	Mks. 6 & 6*. Navy Order 956 of 1959	(*a*) and (*b*) N.42492, N.42493, N.55396, items 1, 2, 5–12 (*c*) Part 2, N.36479 Rev.	(*a*) and (*b*) N.55396, items 1, 2, 5–12	Shell and cartridge hoists (*a*) Fit filter in main pressure supply to pilot valve (*b*) Fit filter in supply line to starting valve (*c*) Modify the pilot valve body to take a steel sleeve and new pilot valve piston

" A "—Mks. 6 and/or 6*—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
81	Mks. 6 & 6*. Navy Order 292 of 1959	Nil ..	—	To distinguish open hatches. Paint hatches in gunhouse floor white on underside, and stencil thereon " Danger, Hatch Open ". Navy Order 292 of 1959
82	Not applicable to R.A.N. mountings	—	—	Modifications required in the turret as a result of fitting MRS.3 Fire Control System
83	—	—	—	—
84	—	—	—	—
85	Mks. 6 & 6*. Navy Order 761 of 1959	(*a*) N.37309F/17 (*b*) i N.42484 Rev./25 and 26 (*c*) N.55351	— — —	(*a*) To fit rubber joints to the front access covers (*b*) i, To replace existing steel fulcrum pins on the electro-mechanical brake by new pins manufactured of phosphor bronze (*b*) ii, To fit battery lubrication to the heads of the fulcrum pins, involving manufacture of bracket item 26 to replace item 14, and fitting of lubricators and associated piping Mod. A.N. 91 (*c*) To fit drip reflecting plate over the brake
86	Mks. 6 & 6*. Navy Order 762 of 1959	N.52829 .. Navy Order Diagram Issue 13/59	—	Positive stowage for tool, operating breech mechanism. Spring clip replaced by " U " strap

"A"—MKS. 6 AND/OR 6*—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE—*continued.*

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
87	Mks. 6 & 6*. To discontinue the use of the term "SAFE" as applied to gun safety Switches and to establish the use of the terms "OPEN" and "CLOSED" in all mountings fitted with these Switches. Navy Order 842 of 1959	N.41474/36	—	To reverse or renew the existing "SAFE–CLOSED" tally plates on C.O.G.'s dashboard and engrave thereon "OPEN–CLOSED"
88	Mk. 6. To provide a more efficient means of adjustment in the reflector sight drive	N.39343 .. N.39345	—	*See* Mod. A.N. 81 for Mk. 6* mountings. Navy Order 65 of 1960

"B"—MKS. 6 AND/OR 6*—ADMIRALTY MODIFICATIONS—FIXED STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
1	(*a*) Not applicable in R.A.N. (*b*) Mk. 6* only	N.38928 ..	—	(*a*) AEL joint rings to be fitted to all pipe joints (*b*) Oil O.M. 33 to be used in Lockheed Remote Control System
2	Mk. 6* only ..	N.38928 ..	—	Guards fitted to Lockheed Hydraulic System pipes adjacent by by-pass valve operating cylinders
3	Mks. 6 & 6* ..	N.42732 .. N.42736 N.42750 N.42751 N.38341 N.38345 N.38730 N.38731	—	Starting valve operating gear fitted with roller and ball race. Stronger springs fitted on cartridge hoists similar to Vickers Mod. 225
4	Mks. 6 & 6* ..	N.37229 .. N.37231 N.37236 N.37237 N.39308 N.39316	—	Stop valve glands to be fitted with "O" Rings. Vickers Mod. 217
5	Mks. 6 & 6* ..	N.42791/9.. N.38759/9	—	Shell hoist, "Reset" lever on tilting tray catch to be interchangeable with revolving structure similar to Vickers Mod. 201
6	Mks. 6 & 6* ..	N.38336 .. N.42727	—	Shell and cartridge hoists. Stronger springs fitted to all lifting pawls. Similar to Vickers Mods. 160 and 243

"B"—Mks. 6 and/or 6*—Admiralty Modifications—Fixed Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
7	Mk. 6 only. Mk. 6* in manufacture. Unmodified valves may be exchanged for modified valves	N.38734 Rev. /28–33 N.38317 Rev. /27–33 N.38311 Rev. /39–44 N.38310 Rev. /4–6	—	Shell and cartridge hoists. Control valve, Pilot valve, and Starting valve. Body bushed for change to Chevron type gland packing. Similar to Vickers Mod. 216
8	Mks. 6 & 6*. Replacements only	N.38913/3..	—	Adaptors for standard unions strengthened
9	Mks. 6 & 6* ..	N.42736 .. N.42751 N.38345 N.38731	—	Shell and cartridge hoists, Starting valve. Springbox plunger. Thicker collar
10	Mks. 6 & 6* ..	N.42736 .. N.42751 N.38345 N.38731	—	Shell and cartridge hoist. Starting valve. Coupling with spring plunger made larger and bolt hole enlarged. Similar A.N. 41
11	Mk. 6* only ..	N.48757 .. N.48758	—	Guards fitted to shell and cartridge hoist tilting trays
12	Mk. 6 only. Mk. 6* in manufacture	N.48759 .. N.48760	—	Covers fitted to top of shell and cartridge hoists. Mod. A.N. 72
13	Mks. 6 & 6* ..	N.42704 .. N.42767 N.38313 N.38747	—	Shell and cartridge hoists. Tilting tray buffer. Oil passage extended; to prevent restriction
14	Not applicable in R.A.N.	—	—	Turn buckles at adjustment points provided with castellated ends for locking with split pins

"B"—Mks. 6 and/or 6*—Admiralty Modifications—Fixed Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
15	Mks. 6 & 6* ..	N.42711 .. N.42756 N.38736 N.38320	—	Shell and cartridge hoists. Pilot valve operating gear. Coupling nut bore dia. increased to .650-in.
16	Mks. 6 & 6* ..	N.42733/23 N.42763/23 N.38743/23 N.38342/23	—	Shell and cartridge hoists. Wider slots in sliding block for control valve interlock. *See also* Mod. 26
17	Mks. 6 & 6* ..	N.42749/2–6 N.38358/2–6 N.36466/7–11	—	Hand protection. Brass ramps fitted at top of cartridge hoists. A.N. 53
18	Not applicable in R.A.N.	—	—	A.E.L. joints
19	Not applicable if modified to YOB/9136	N.42702 AN. Rev. N.38311 Rev.	—	Shell and cartridge hoists. Shuttle valve dia. reduced by .002-in. and bleed hole dia. reduced to .0625-in.
20	Mk. 6	N.48759 .. N.48760	—	Shell and cartridge hoists. Cover plate at top of hoist. Outer corners cut to profile and corners bent down to clear finger ramps. A.N. 72
21	*See* A.N. 80 ..	—	—	Pressure hoses
22	*See* A.N. 80 ..	—	—	Pressure hoses
23	Mks. 6 & 6* ..	N.42703 .. N.42766 N.38312 N.38746	—	Shell and cartridge hoist tilting trays strengthened at limit plate

"B"—MKS. 6 AND/OR 6*—ADMIRALTY MODIFICATIONS—FIXED STRUCTURE—*continued.*

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
24	Mks. 6 & 6* ..	N.50707 ..	—	V.S.G. size 6 rotary oil seals in shaft glands
25	Mks. 6 & 6* ..	N.42728 .. N.38337	—	Shell and cartridge hoists. Lifting pawl assembly adjacent metal caulked
26	Mks. 6 & 6*. Future manufacture only	N.42733 .. N.42763 N.38342 N.38743	—	Shell and cartridge hoists. Control valve interlock Recess in sliding block altered from 0.7-in. dia. to 0.6875-in. dia.
27	Mks. 6 & 6* ..	N.42711 .. N.42756 N.38736 N.38320	—	Shell and cartridge hoist. Pilot valve spindle. Length of coupling nut reduced to 1.35-in.
28	Mks. 6 & 6*. Navy Order 956 of 1959	N.38906 .. N.38907 N.38908 N.38920 N.38924 N.38925 N.38926 N.46115 N.55396, Part N.42708 Rev.	N.55396/1, 2, 5–12	Shell and cartridge hoists. (i) To fit a filter in the main pressure supply line to the pilot valve (ii) To fit a filter in the supply line to the starting valve (iii) To modify the pilot valve body, including spare valves, to take a steel sleeve and new pilot valve piston

"C"—MKS. 6 AND/OR 6*—A.N. MODIFICATIONS.

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 1	Cancelled ..	—	—	—
A.N. 2	Cancelled ..	—	—	—
A.N. 3	Mks. 6 & 6* ..	N.36327 Rev.	—	Recoil systems instruction plate, engraving correction
A.N. 4	Cancelled ..	—	—	—
A.N. 5	Mks. 6 & 6* ..	D.O.U.W. A/22894	—	Cone connections for use with Ermeto connections on oil Servo system
A.N. 6	Mks. 6 & 6* ..	N.36332 Rev. N.36326F Rev. N.36325F Rev.	—	Modification to clear swing of Q.F. / S.A. changeover lever handle on breech opening gear when moving in depression
A.N. 7	Mks. 6 & 6*. *See also* Adm. Mod. 73	N.36484 .. N.36323 N.36322	—	Cradle. Fitting of balance weights
A.N. 8	Mks. 6 & 6* ..	N.44815 ..	—	Platform and eyebolts for removing training motor
A.N. 9	Cancelled ..	—	—	—
A.N. 10	Mks. 6 & 6* ..	N.45684 ..	—	Portable pump for filling recoil cylinder modification to lettering on name plate
A.N. 11	Mks. 6 & 6* ..	N.39485 .. N.39479 N.39315 N.39314	—	Delete all voice pipes. Holes in structure not now required

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
A.N. 12	Mks. 6 & 6* ..	N.36307 ..	—	Intensifier pressure adaptor modified
A.N. 13	Mk. 6 only ..	N.36467 Rev. N.36462 Rev.	—	Shell and cartridge hoists. Modification to profile on tappet cam
A.N. 14	Cancelled ..	—	—	—
A.N. 15	Mks. 6 & 6* completed in R.A.N.	N.38319 .. N.38320	—	Shell hoist clearing lever. Addition of handle and guard
A.N. 16	Cancelled ..	—	—	Adm. Mod. 55
A.N. 17	Mk. 6	N.41219/6..	—	O.O.T.'s position. Height of footrest reduced
A.N. 18	Cancelled ..	—	—	—
A.N. 19	Cancelled ..	—	—	Adm. Mod. 52
A.N. 20	Mks. 6 & 6* ..	N.37207 ..	—	Training worm wheel holding down bolts fitted with slotted nut and split pin
A.N. 21	Cancelled ..	—	—	—
A.N. 22	Cancelled ..	—	—	—
A.N. 23	Mks. 6 & 6* ..	N.36392 Rev.	—	Cradle rear tie piece chamfer added to facilitate insertion of recoil piston rods
A.N. 24	Mk. 6	N.37226 ..	—	Air system. Position of tee piece 14/N.39313 altered to clear eyebolt boss on shield. Pipes 6, 8 and 39 altered to suit

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
A.N. 25	Mks. 6 & 6*. Fixed Structure similar	N.36510 .. N.36506 N.36477 N.36471	—	Shell and cartridge hoists. Increased clearance between tilting tray and catch, retaining
A.N. 26	Cancelled ..	—	—	Adm. Mod. 10
A.N. 27	Cancelled ..	—	—	—
A.N. 28	Cancelled ..	—	—	—
A.N. 29	Mks. 6 & 6* ..	N.37214 ..	—	Safety firing cam. Inner tap-bolts on pad plates changed to cheesehead tap-bolts to avoid fouling cam roller
A.N. 30	Cancelled ..	—	—	—
A.N. 31	Mks. 6 & 6* ..	N.36593 Rev. N.36589	—	Training locking bolt. Engraving added *re* bearing of mounting
A.N. 32	Mks. 6 & 6* ..	N.36322 43 & 44	—	Rammer cylinder. Access to front air venting plug
A.N. 33	Mks. 6 & 6* ..	N.47775 Rev.	N.47775 Rev. all items	Training gear. Gear for wrap up test to be provided as "C" spares
A.N. 34	Cancelled ..	—	—	—
A.N. 35	Mks. 6 & 6* ..	N.36346 ..	—	Rammer head and operating gear. Retaining ring, item 22 replaced by item 49 modified. Spring, item 45 replaced by item 50. Catch bolt, item 14 modified. Trip lever, item 12 or 51 replaced by item 52. Bush, item 53 added

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 36	Cancelled ..	—	—	—
A.N. 37	Mk. 6 .. .. Mk. 6* in manufacture	N.47784/13 N.38740/2 N.38732/1, 4 and 33 N.38350/10, 11 & 36 N.38346/1, 4 & 15 N.38344/10, 11 & 40 N.38333/2 N.38330/2 N.36521 Rev./1 & 2 N.36485 Rev./37 & 38 N.36481/32 & 33 N.36472 Rev./15 N.36463/2 & 3	—	Shell and cartridge hoists. Safety return cams for moving pawls. Reduction in height by 0.25 in. Cover plates to be modified as necessary to cater for reduced height of cams
A.N. 38	Mks. 6 & 6* ..	N.39305/3.. N.39304 N.37235/25–28, added	—	Stowage position added for portable tank and hand pump for filling recoil cylinder
A.N. 39	Mks. 6 & 6*. Fixed Structure Similar	N.36491 Rev. N.36483 Rev. N.36468 Rev./23 N.36462 Rev./29	—	Shell and cartridge hoists. Lifting cylinders. Addition of locking plates to securing screws
A.N. 40	Mks. 6 & 6* ..	N.42493 .. N.42492 N.39311	—	Valve nameplates. Screws securing to be rivetted over at back
A.N. 41	Cancelled ..	—	—	Adm. Mod. 17 (*b*)

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 42	Cancelled ..	—	—	—
A.N. 43	Mks. 6 & 6*. Incorporated if Adm. Mod. 33 is done	N.48621 .. N.48620/2	—	Rammer control valve piston. Functional faces hardened and dimension to stop face altered
A.N. 44	Mk. 6	N.36480/9..	—	Shell and cartridge hoists. Pilot valve locking bolt. "Lead in" taper to be ground on flat of bolt and re-surface hardened
A.N. 45	Mk. 6	N.39451 ..	—	Trainers footrest. Material for chain and ring, items 10 and 11, increased from 13 S.W.G.
A.N. 46	Mk. 6 only. Mk. 6* in manufacture	Fly to DEE 16228, N.46565	N.46565, all items	G.S. pump. Fit "Motor Running" indication lamp box in gunhouse. Similar to Adm. Mod. 34
A.N. 47	Cancelled ..	—	—	—
A.N. 48	Mks. 6 & 6* ..	N.36345 ..	N.36345/1 & 2	Rammer. Strengthened type of rammer head guide bracket to be fitted
A.N. 49	Mks. 6 & 6* ..	N.36467 Rev./40 N.36462 Rev./35	—	Shell and cartridge hoists. Addition of locking plates to tappet securing bolts
A.N. 50	Mks. 6 & 6* ..	N.39476 .. N.39310 N.39309 N.39303 N.37230 N.37226 N.37225	—	Air systems. Stop valves on H.P. and L.P. air panels to be modified to seat in "open" position. H.P. air panel. Charging and air cylinder pipes to be changed round. Screw down non-return valve to be altered to screw down stop valve

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 51	Mk. 6	Navy Office drawing 1095/1	Switch recoil, 2-No. Relay Box, 1-No. Push 7070, 2-No. Relay 60031, 2-No.	Fuzing and firing circuits. Fit interlocks to ensure that fuze setter head will not retract unless gun recoils, and that fuse is fully set before retraction takes place in remote control
A.N. 52	Mk. 6	—	—	Servo motor fuzes. 10 amp. Patt. No. 19259 in J.B. Patt. No. 7177, to be increased to 20 amps, Patt. No. 19261
A.N. 53	Mks. 6 & 6* ..	N.42749/2–5 N.38358/2–6 N.36466/7–11	—	Cartridge hoists. Fit hand protection ramps to platform
A.N. 54	Mks. 6 & 6* ..	N.44815, Part N.44815	—	Gunhouse. Fit 2-No. eyebolts "P" to gunhouse floor for hand operation of breech mechanisms. Mantlet plate eyebolt to be spot welded to boss, first ensuring eyebolt is threaded $\frac{7}{8}$-in. B.S.W. and screwed hard home. Adm. Mod. 38 similar
A.N. 55	Mks. 6 & 6* ..	N.37300 .. D.O.U.W. A/24725	—	Gunshield. Provision of larger openings for access to training and elevating Servo and control units
A.N. 56	Mks. 6 & 6* ..	N.36472 Rev. 1 & 2 N.36470 Rev. 24A	N.39671, AN/9, 11, 13, 14, 17–21 N.36505/1 & 2 N.36470/24A	Shell and cartridge hoists. Modifications to improve functioning

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 57	Mks. 6 & 6* ..	A.P. 123 ..	A.P. 123/51 & 52	Fuze setting machine, Mk. 7, Reg. Nos. 1–240, fit rubber sleeve and clip as oil save-all
A.N. 58	Mks. 6 & 6* ..	N.36297/1	—	Recoil cylinder. Chamfer added to piston rod to facilitate assembly of packing
A.N. 59	Cancelled ..	—	—	—
A.N. 60	Mks. 6 & 6* ..	D.O.U.W. A/50391	A/50391/1–5	Breech mechanism. Modification to stripping arrangements
A.N. 61	Mk. 6	D.O.U.W. A/50421	—	Shell and cartridge hoists. Section of slide bars made removable for access to lifting cylinder gland packing adaptor
A.N. 62	Mks. 6 & 6*. Promulgated as A. & A. item by Navy Order in 1954 An additional miniature Type 10 unit Terminal Block is to be fitted in the terminal chamber of the A.F.C.C. instrument panel	D.O.U.W. A/50053 D.O.U.W. A/49060 Fly to DEE 16230/R.3 Mod. Navy Office Drg. 651/16/103	A/50053, all items A/49060, all items	Turret training indicator gearbox. Modify to drive a 2-in. indicator magslip for turret training indication in T.S.
A.N. 63	Cancelled ..	—	—	—

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
A.N. 64	Mk. 6	—	—	Modification to prevent faults in lighting system affecting control of mounting in auto. 8 way distribution box, Patt. No. 5138B (supplies Servo magnet coils and heater). Remove turret lighting circuit (fuzeway No. 1), transfer to a new 5-way D.B. Patt. No. 25024 to be fitted above and wired from the 10 amp. fuse in existing 6-way J.B. Patt. N.7177 at present supplying the 12½-in. fan motor. The 12½-in. fan motor is to be rewired to the 5-way D.B. Patt. No. 25024
A.N. 65	Cancelled ..	—	—	Adm. Mod. 17 (*c*)
A.N. 66	Cancelled ..	—	—	—
A.N. 67	Mk. 6 only ..	N.42724 .. OB.6426	N.42724/4–9 OB.6426/1–14	No. 2 fixed structure shell hoist. New lifting cylinder complete fitted with synthetic rubber packings to replace present lifting cylinder
A.N. 68	Cancelled ..	—	—	—
A.N. 69	Mks. 6 & 6* ..	X–O.B./8826 X–O.B./8825 X–O.B./8824 X–O.B./8672	—	Mantlet weathering gear. Position of Tee piece altered from top to side and improved drainage troughs fitted
A.N. 70	Mks. 6 & 6* ..	N.41218 ..	—	Barrel withdrawing gear. Item 8 to be strengthened by fitting solid ends

"C"—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
A.N. 71	Cancelled ..	—	—	—
A.N. 72	Cancelled ..	—	—	Adm. Mod. 12 and 20. Fixed structure
A.N. 73	Mks. 6 & 6*. If required when modifying barrel locking plate	N.36295 ..	—	Cutting in cradle top plate to facilitate withdrawal of barrel locking plate
A.N. 74	Mks. 6 & 6* ..	OB.10393 ..	—	Copper pipes connecting oil Servo Unit to oil Servo pump and top cover of oil Servo Unit to be lagged. Lagging to be covered to prevent contamination by oil. Addition of wind shields to motor and Oil Servo Unit
A.N. 75	Cancelled ..	—	—	Adm. Mod. 63 (*b*), (*c*)
A.N. 76	Mks. 6 & 6* ..	—	—	Amplifiers, Mk. 15H (E.M.V. 28) and Mk. 2J (E.M.V. 51). Modification to dither circuit
A.N. 77	Mks. 6 & 6* ..	D.O.U.W. A/50729	—	Fit guard rails at shell and cartridge hoist loading numbers positions in gunhouse
A.N. 78	Mks. 6 & 6*. Not to be carried out on levers stamped "V.9.A"	DNO.9980	—	Fixed and revolving structure, shell hoists. Pilot valve operating gear floating lever. Addition of rubbing strip
A.N. 79	Mk. 6	—	—	Oil Servo Unit. Heaters to be supplied from an unswitched circuit

" C "—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 80	Mks. 6 & 6* ..	N.53789 .. N.44836	N.53789/ 8–14, 18, 33, 44 and 45 N.44836/ 40–47, 50–52	New type flexible hydraulic hoses to be fitted
A.N. 81	Mk. 6* .. For Mk. 6, *see* Mod. 72	N.54251 .. N.54250 N.54249 A.N. N.54248 A.N. N.54247 N.54246 N.53494 N.39345 N.39343/6 Mod. N.39342/6 Mod.	N.54250, all items N.54248, all items N.54247, all items N.54246, all items N.53494, all items N.39343/ 29–37 N.39342/13 and 14	Fit new type carrier, adjustable for tangent elevation, for reflector sight and binoculars *See also* Adm. Mod. 88
A.N. 82	Cancelled ..	—	—	Adm. Mod. 65
A.N. 83	Mk. 6*. Revolving Structure only. If repeated failure of existing 80 amp. HRC. fuses is experienced, links, are to be fitted in lieu until Adm. Patt. 200247, 200 amp. HRC. fuses become available	K.506A (G.S. motor starter) K.506 (Training Motor Starter)	New switch interior	Starters of Laurence Scott manufacture for G.S. and training motors. Interiors of starters of L.S. manufacture to be replaced by interiors of Messrs. Electrical Apparatus Co. Ltd. manufacture. *See* A.N. 88
A.N. 84	Cancelled ..	—	—	Adm. Mod. 66
A.N. 85	Cancelled ..	—	—	Adm. Mod. 67

" C "—Mks. 6 and/or 6*—A.N. Modifications—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 86	Mks. 6 & 6* ..	N.36353 ..	N.36353 .. items 4 and 30	Rammer piston rod nut. Replacement of nut and lock washer securing rammer crosshead clip to rammer piston rod by flanged nut and larger lock washer
A.N. 87	Cancelled ..	—	—	Adm. Mod. 75
A.N. 88	Mk. 6* ..	Navy Office Drg. 1095/27 Revision I.	Relay Z.530295	Training pump Starter. Fit electrical interlock for training brake. To be done in conjunction with fitting of Direct-on-line starters. Mod. No. A.N. 83
A.N. 89	Mk. 6*. Reg. No. 106 onwards. Applicable to all mountings if fitted with removable choke bushes	N.36352, Part I., Item 15 modified (new item) N.36353, items 47 and 48 modified	—	Rammer Cylinders. Modification to reduce pressure in rammer choke during cut-off
A.N. 90	Cancelled ..	—	—	Adm. Mod. 79
A.N. 91	Cancelled ..	—	—	Adm. Mod. 85
A.N. 92	Mks. 6 & 6*. Navy Order 601 of 1959	Navy Order Diagram Issue 10/1959	—	Shell hoists revolving and fixed structures. Tilting tray catches relieved to avoid fouling lever. Navy Order 601 of 1959
A.N. 93	Mks. 6 & 6*. Navy Order 504 of 1959	N.36500 Rev. N.50748 WOB. 10275	—	Inner shell hoists. Ramps welded to footstep cover brackets to protect operators' hands
A.N. 94	Mks. 6 & 6*. Navy Order 958 of 1959	N.44918 .. N.44919 N.44920	—	Fit a grub screw to lock the spring plunger plug into the S.A. cam

"C"—MKS. 6 AND/OR 6*—A.N. MODIFICATIONS—*continued.*

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 95	Mks. 6 & 6*. Navy Order 581 of 1959	—	—	Fuze setting contactor panels. Solid conductor cables connected to the existing magslip are to be replaced by flexible cables Patt. 13458A or similar
A.N. 96	Mks. 6 & 6*. Navy Order 764 of 1959	N.37311F .. D.O.U.W. A/51197 Series	D.O.U.W. A/51197	Cover plate at rear of right hand side of gunhouse to be replaced by an access door
A.N. 97	Mks. 6 & 6*. Navy Order 957 of 1959	N.52419 Rev. /5, 13 and 19 Navy Order Diagram Issue 17/59	—	Ejection chute — Watertight doors. Lubrication of axis pins

"D"—MK. 6* MOD. 1—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
1	Completed in manufacture	N.54150 to N.54163 (inclusive) N.36520 N.39968 N.44917 N.47936 N.39698 N.39369	—	*Lubrication*— (*a*) Identification of points in accordance with charts (*b*) Replacement of existing Springwell oilers by hydraulic nipples and fitting plain oil holes with hydraulic nipples for Springwell oilers where space is confined
2	Not required if lever item 19 is stamped V9A	DNO. 9980 N.36486 Rev. /19–23 (inclusive)	—	Shell hoist floating lever modified by addition of brass rubbing strip
3	Completed in manufacture	N.36322 .. N.36323	—	Rammer cylinder guard modified for access to vent plug, and jointing to be red lead
4	Completed in manufacture	N.55031 .. N.55049	—	Modification to training cut-off gear— (*a*) Overtravel of cam carrier increased by fitting double cam, &c. (*b*) Limit switches fitted
5	Completed in manufacture	N.52608 Rev.	—	Micro switch box in auxiliary safety firing gear repositioned with base plate and cam plates on cantilever supports modified to prevent foul with hoist
6	Completed in manufacture	N.51450 .. N.36467	—	Datum mark pad piece on cantilever structure reduced in thickness and chamfer cut on cartridge hoist interlock bolt tappet to prevent foul

"D"—Mk. 6* Mod. 1—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
7	Completed in manufacture	N.52615 .. N.52617 N.55044	—	Repositioning of training receiver
8	Completed in manufacture	N.37309F .. N.50794 Rev. N.55044	—	(*a*) Fitting rubber joint to front access covers in shield (*b*) Modifying training brake for lubrication and fitting drip deflecting plate
9	Cancelled ..	—	—	—
10	—	N.55047 .. N.55177	Modified trays 1-No. set per ship will be supplied	Drill loading chutes modified to guide shells and cartridges through doors in gunhouse floor
11	Completed in manufacture	N.55196 ..	—	Positioning fire extinguisher (AP. 7272) in gunhouse
12	Completed in manufacture	Allen West 121501	—	Elevation pump motor starter, &c., modified by —Replacement of type MA 35 starter by A31 Direct-on-Line starter
13	Completed in manufacture	N.55198 .. N.50742	—	Stowage of testing cylinder in front of gunhouse
14	Completed in manufacture	—	—	Fitting a grill over fan outlet of amplifier
15	Completed in manufacture	DEE.28020	—	Fitting plug sockets at dummy director position in gunbay
16	Completed in manufacture	—	—	Removing header tank assembly from oil Servo unit and reverting to original arrangement on N.51902 Rev.

"D"—Mk. 6* Mod. 1—Admiralty Modifications—Revolving Structure—*continued.*

Mod. No.	Remarks.	Drawings.	Supply of Mod. Parts.	Description.
17	—	DNO. 10908	—	Modification to control rod when breech ring recoil cylinders are bored out above 4.35-in. dia. *Important* — Repair measure only
18	—	N.55396 .. N.52186 N.52185 N.52184 N.39487 N.37235	Purolator micronic filter. Model M.F. 2604	To fit to elevation and training motions, a purolator filter in the oil Servo pressure line in addition to the existing filters and sintered filters in the main pressure lines to the Pressure Feed Back Unit and the filling pipe for the Recoil Replenishment Tank
19	Completed in manufacture	N.55553 .. NOD.2175/148	—	Modification to rammer trip gear
20	Completed in manufacture	N.55583 .. N.55584 N.55585	—	Fitting of strengthened loading trays
21	For R.A.N. a single thickness of "Dufour" bolting silk size 14.S to be wrapped around filter element for monthly cleaning runs	DNO.10348	—	Fitting of silk sleeve cartridge to Lolos By-pass filter in O.S.U. system. Not applicable to R.A.N. mountings
22	Patt. A.C. 2021. Binoculars fitted in R.A.N. mountings to N.54248 AN and N.54249 AN	—	—	Modification to adaptor to take binoculars, Patt. No. A.C. 2035. Not applicable to R.A.N. mountings
23	Completed in manufacture	N.37311F ..	—	Gunshield vent ports. Steel cover plates to be bolted in position

"D"—MK. 6* MOD. 1—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE—*continued.*

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
24	Navy Order 956 of 1959	(*a*) & (*b*) .. N.42493 N.51143 N.55396, items 1, 2, 5–12 (*c*) Part 2 N.36479 Rev.	(*a*) & (*b*) .. N.55396 items 1, 2, 5–12	Shell and cartridge hoists. (*a*) Fit filter in main pressure supply to pilot valve (*b*) Fit filter in supply line to starting valve (*c*) Modify the pilot valve body to take a steel sleeve and new pilot valve piston
25	Completed in manufacture	Nil ..	—	To distinguish open hatches. Paint hatches in Gunhouse floor white on underside, and stencil thereon "DANGER, HATCH OPEN"
26	—	—	—	—
27	—	—	—	—
28	Navy Order 762 of 1959	N.52829 ..	—	Positive stowage for tool operating breech mechanism. Spring clip replaced by "U" strap
29	To discontinue the use of the term "SAFE" as applied to gun safety switches and to establish the use of the terms "OPEN" and "CLOSED" in all mountings fitted with these switches. Navy Order 842 of 1959	N.41474/36	—	To reverse or renew the existing "SAFE-CLOSED" tally plates on C.O.G.'s dashboard and engrave thereon "OPEN-CLOSED"

"E"—MK. 6* MOD. 1—ADMIRALTY MODIFICATIONS—FIXED STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
1	—	(i) & (ii) .. N.44845 N.55396 (iii) Part N.46711	N.55396, Items 1, 2, 5–12	Shell and cartridge hoists (i) To fit a filter in the main pressure supply line to the pilot valve (ii) To fit a filter in the supply line to the starting valve (iii) To modify the pilot valve body, including spare valves, to take a steel sleeve and new pilot valve piston

"F"—MK. 6* MOD. 1—A.N. MODIFICATIONS.

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*

(DW 736/259/14.)

(*Navy Orders* 391 *of* 1958 *and* 292, 504, 581, 601, 761, 762, 764, 842, 956, 957, 958 *of* 1959 *and* 65 *of* 1960.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
6th June, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

3801/60.

UNCLASSIFIED.

407.—Advancement—Half-yearly Extracts of Advancement Rosters on Completion of Advancements Effective 12th February, 1960.

The extracts from advancement rosters in appendix "A" of this order are promulgated with the object of giving members an indication of the present state of their rosters.

2. A roster date shown in the extract gives no indication of the time a man has been waiting or his length of service because—

(*a*) it is possible to gain a basic date for advancement some time before being placed on the advancement roster, and

(*b*) recommendations for accelerated advancement also affect the basic dates given in the roster.

3. Requests for information regarding roster positions should be forwarded only as laid down in A.B.R. 10/1958, article 0117.

4. Before being placed on an advancement roster, a rating must possess the following qualifications—

(*a*) Professional qualifications—where applicable. (*See* A.B.R. 10/1958, article 0107 (10) *re* provisional examinations.)

(*b*) Service qualification.

(*c*) Educational qualification—where applicable.

(*d*) Swimming qualification—where applicable.

(*e*) Specialist qualification—where applicable.

(*f*) A.B.C.D. qualification—where separate from professional examination, e.g., Supply and Secretariat.

5. Where a considerable gap occurs between the roster date of the top and second man, the roster dates of the first two or three men are shown in column 4 of the extracts. Column 6 gives the names of a proportion of men on top of their rosters.

6. Names of all ratings advanced during the last six months are shown in appendix "B" of this order.

7. Advancements effective from 12th February, 1960, are based on qualifications held on 31st December, 1959, and the rosters shown are based on qualifications held on 29th February, 1960.

8. This order will be reprinted for posting on notice boards.

9. Navy Order 894 of 1959 is hereby cancelled.

APPENDIX "A".

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
C.P.O.	134	Nil	1. 1.3.51 2. 1.6.51 3. 1.7.51 4. 1.8.51	Nil	1. V.G. Conduct broken 2. Lacks sea service 3. Forsyth, E. G. 4. V.G. Conduct broken 5. Clark E. A. F. 6. Clements, K. V. 7. Not recommended 8. James, R. 9. Jessop, K. E. 10. Bilbe, T. J. 11. Gosch, J. W. 12. Cowan, T. M. 13. Heaney, A. 14. Baum, E. C. 15. Williams, J. L. 16. Robinson, R. B. 17. Fitzgerald, W. T. 18. Prosser, L. M. 19. Campbell, G. A. C. 20. Hope, G. D. M.
P.O.	3	4	1. 31.8.57 2. 31.3.58 3. 29.2.60	12	1. V.G. Conduct broken 2. V.G. Conduct broken 3. Ross, N. A.

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
L.S.	13	34	1. 30.6.58 2. 31.3.59	44	1. Reynolds, K. W. 2. V.G. Conduct broken 3. Barnes, R. J. 4. Davis, A. R.
C.SLMR.	Nil	Nil	—	Nil	—
SLMR.	1	Nil	1. 26.3.53	Nil	1. Bourke, R. L.
C.C.Y	10	Nil	1. 1.7.53 2. 1.4.54 3. 1.7.55	1	1. Not yet recommended 2. Harris, W. C. 3. Duffey, J. R.
C.Y.	2	5	1. 31.12.57 2. 30.9.58	4	1. V.G. Conduct broken 2. Gerry, P. J.
L.T.O.	Nil	19	—	2	—
C.R.S.	5	Nil	1. 2.4.56 2. 1.2.57	4	1. Tuckwell, R. C. 2. Nelson, C. W.
R.S.	1	3	1. 30.9.58	4	1. Linning, G.
L.R.O.	1	29	1. 30.6.57	1	1. Not yet recommended
C.R.S.(S)	1	Nil	1. 1.2.57	Nil	1. Roland, M. B.
R.S.(S)	4	Nil	1. 31.3.58	2	1. Not yet recommended 2. V.G. Conduct broken
L.R.O(S)	5	Nil	1. 31.3.58	1	1. Not yet recommended 2. V.G. Conduct broken
C.E.R.A. .. .. .. C.MECH.	5	Nil	84 Points	4	1. V.G. Conduct broken 2. Osborne, J. T.
C.M(E)	31	Nil	1. 9.3.55 2. 1.6.55	3	1. Minns, F. T. 2. Rosser, N. D. 3. Devlin, K. R. 4. Heron, J. M. 5. Dowd, J. R. 6. Campbell, I. K.
P.O.M(E)	35	Nil	1. 31.3.55 2. 31.3.55 3. 30.6.55	4	1. V.G. Conduct broken 2. Not recommended 3. Wilks, S. C. 4. Smith, J. 5. Not yet recommended 6. Clarke, R. G.
L.M(E)	19	57	1. 27.12.50 2. 3.12.51 3. 28.5.57	27	1. Not recommended 2. Not recommended 3. Not yet recommended 4. Hews, G. 5. Peeters, H. M.
C.N.S.	Nil	3	—	Nil	—

APPENDIX "A"—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
C.O.A.	Nil	1	—	Nil	—
C.E.A. .. .. .. / C.R.E.A. .. .. .. / C.E.A.(AIR) .. .. .. / C.R.E.A.(AIR)	Nil	2	—	2	—
C.E.L(P)	23	Nil	1. 1.11.53 2. 1.1.54 3. 1.6.54	2	1. Page, B. L. 2. Upton, N. 3. Moore, D. D. 4. Buckley, J. C. 5. Theodore, P. J. 6. Johnson, K. A.
P.O.EL(P)	15	Nil	1. 30.9.55 2. 31.12.55	4	1. Not yet recommended 2. Howlett, R. S. 3. Jolly, G. A. 4. Mills, J. T.
L.E.M.(P)	4	11	1. 14.2.59 2. 29.10.59	11	1. Not yet recommended 2. Owen, J. E. 3. Blad, H. W.
C.E.L.(E)	11	Nil	1. 1.6.54	Nil	1. Teale, T. L. 2. Robinson, N. M. 3. Halloran, J. M. 4. Nugent, N. C. 5. Bradwell, D. E.
P.O.EL(E)	1	Nil	1. 5.9.58	1	1. V.G. Conduct broken
L.E.M.(E)	2	18	1. 30.9.57 2. 1.2.60	4	1. Hughes, W. N. 2. Watson, R. B.
C.R.E.L.	Nil	1	—	2	—
P.O.R.E.L.	Nil	40	—	2	—
L.R.E.M.	5	59	1. 26.2.59 2. 16.9.59	15	1. V.G. Conduct broken 2. Paul, B. H. 3. Griffioen, P. W. M.
C.A.A.(A/E) .. .. .. / C.A.MECH.(A/E)	5	Nil	1. 60 Points 2. 56 Points	Nil	1. Warfield, T. 2. Stilton, I. H. 3. Tucker, R. H.
C.A.A.(O) .. .. .. / C.A.MECH.(O)	2	Nil	1. 4 Points 2. 4 Points	2	1. Hall, H. B. 2. Wade, N.
C.A.F.(A)	20	Nil	1. 1.9.52 2. 1.4.53	Nil	1. McCarley, K. A. 2. Not recommended 3. Lambert, R. J. 4. Daniels, D. J. 5. Moloney, R. W. 6. Reidy, W. A. 7. Mack, M. S. 8. Knibbs, G. H.

APPENDIX "A"—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
PO.AF(A)	8	Nil	1. 18.9.56	Nil	1. Connellan, R. L. 2. Ikin, J. W. 3. Wilcox, K. M.
L.A.M(A)	4	Nil	1. 23.12.55	4	1. Walter, G. A. 2. Maurice, C. H.
C.A.F(E)	26	Nil	1. 30.6.49 2. 1.4.51 3. 1.10.51	Nil	1. Matheson, K. J. 2. McQuarie, A. J. 3. Christopher, T. J. 4. Campbell, S. G. 5. Manning, W. G. 6. Vinson, D. S. 7. Howard, H. W. 8. Lees, K.
PO.AF(E)	13	Nil	1. 30.4.57	Nil	1. Cole, R. C. 2. Dunderdale, S. R. 3. Boyd, W. H. 4. Jenkins, R. C.
L.A.M(E)	Nil	10	—	2	—
C.A.F(O)	7	Nil	1. 1.7.52 2. 1.1.53	Nil	1. Harrison, J. J. 2. Peacock, R. K. 3. Tiffen, M.
PO.AF(O)	4	Nil	1. 18.11.56 2. 30.11.57	1	1. Pascoe, K. L. 2. Healey, A. E.
L.A.M (O)	Nil	6	—	Nil	—
C.AIR(AH)	12	Nil	1. 1.1.53	2	1. Not recommended 2. Not recommended 3. Davis, R. L. 4. Harris, M.
PO.AIR(AH)	4	Nil	1. 6.8.57	3	1. Cotterill, R. S. 2. McGuire, T.
L.AIR(AH)	1	Nil	1. 31.12.57	2	1. Not recommended
C.AIR(SE)	4	Nil	1. 1.7.54 2. 1.12.55	Nil	1. Kempnich, K. F. 2. Lee, G. W.
POAIR(SE)	1	Nil	1. 9.4.56	1	1. Donovan, F. J.
L.AIR(SE)	2	Nil	1. 30.9.58 2. 31.12.58	Nil	1. Todd, G. McK. 2. Weber, G. P.
C.AIR(MET)	1	Nil	1. 1.4.54	Nil	1. Percival, L. N.
PO.AIR(MET)	2	2	1. 31.12.58 2. 31.12.58	Nil	1. McMahon, N. P. 2. Watts, H. K.
L.AIR(MET.)	Nil	Nil	—	Nil	—
C.AIR(PHOT.)	2	Nil	1. 1.1.54 2. 9.11.56	Nil	1. Baldock, R. A. 2. Not yet recommended
P.O.AIR(PHOT.)	1	Nil	1. 30.9.58	Nil	1. Crisp, S. T.

APPENDIX " A "—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by " RED " Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
L.AIR(PHOT.)	1	Nil	1. 31.12.57	Nil	1. Hughes, K. C.
C.EL(AIR)	7	Nil	1. 1.7.53	1	1. Birtles, H. J. 2. Dun, J. G.
P.O.EL.(AIR)	8	Nil	1. 30.9.55	Nil	1. Shepherd, L. A. 2. Corkhill, W. J. 3. Anning, A. W.
L.E.M(AIR)	3	Nil	1. 7.9.59	3	1. Russell, D. A. 2. Oakley, T. G. F. 3. Collins, R. H.
C.R.E.L(AIR)	1	Nil	1. 30.10.57	Nil	1. Edwardes, D. H.
P.O.REL(AIR)	1	11	1. 30.6.58	1	1. Dundas, E. J.
L.REM(AIR)	1	9	1. 16.10.59	9	1. Larder, L. R.
S.B.CPO.	19	Nil	1. 24.6.52 2. 24.3.53	Nil	1. Hay, D. 2. Pope, W. B. 3. Nash, J. B. 4. V.G. Conduct broken 5. V.G. Conduct broken 6. Black, R. S. 7. Monaghan, P. J. 8. Not yet recommended
S.B.P.O.	7	Nil	1. 4.11.55 2. 21.10.56	Nil	1. Turner, J. 2. Kildy, N. G. 3. Sawtell, M. L.
L.S.B.A.	Nil	6	—	2	—
CPO.D.A.	Nil	1	—	Nil	—
PO.DA.	Nil	Nil	—	1	—
L.D.A.	Nil	1	—	3	—
CPO.WTR.	27	Nil	1. 1.7.53	4	1. Picard, C. A. 2. Campbell, C. 3. Cummins, J. G. 4. Bryce, R. W. 5. Carroll, L. H. 6. Cairns, B. D. 7. Connor, D. W. 8. McConnochie, L. P.
PO.WTR.	8	Nil	1. 31.3.58	6	1. Sly, R. M. 2. Scott, R. A. 3. Crawford, T. C.
L.WTR.	9	Nil	1. 30.6.58 2. 31.12.58 3. 30.6.59	11	1. V.G. Conduct broken 2. V.G. Conduct broken 3. V.G. Conduct broken 4. Nash, R. J.
S.C.P.O.(S)	16	Nil	1. 1.3.52 2. 1.1.53 3. 1.5.53	2	1. Johnson, D. C. 2. Sheridan, G. L. 3. Dingle, N. H. A. 4. Lockett, G. F. 5. Heaslip, J. V.

APPENDIX "A"—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
S.P.O(S)	9	Nil	1. 30.6.56 2. 31.5.57 3. 7.9.58	4	1. Trew, K. M. 2. Petrie, J. S. 3. Penn, B.
L.S.A(S)	2	10	1. 30.6.59	Nil	1. Boller, K. E. 2. Kilner, K. W.
S.C.P.O(V)	13	Nil	1. 1.6.53 2. 1.8.53	1	1. Pashen, B. W. 2. Churn, F. E. 3. Dwyer, K. 4. Pitman, D. E.
S.P.O(V)	4	4	1. 30.6.55 2. 30.4.56	2	1. V.G. Conduct broken 2. V.G. Conduct broken
L.S.A(V)	2	8	1. 30.6.57	5	1. Dennis, V. H. 2. Not yet recommended
CPO.CK(S)	5	Nil	1. 1.1.54 2. 1.7.54	3	1. Not recommended 2. Meyer, S. H.
PO.CK(S)	10	Nil	1. 1.10.55 2. 31.12.55 3. 31.12.56	3	1. Humphris, L. T. 2. Baranovsky, B. M. 3. Bacon, R. H.
L.CK(S)	Nil	17	—	10	—
CPO.CK(O)	9	Nil	1. 1.10.52	Nil	1. Wagner, L. A. 2. Bury, L. L. 3. Shepherd, A. A.
PO.CK(O)	14	Nil	1. 1.10.55 2. 1.1.56	2	1. Darroch, J. R. 2. Boxsell, T. L. 3. Matthews, S. G. 4. Not recommenced 5. Weaver, N. S.
L.CK(O)	Nil	3	—	7	—
CPO.STD.	25	Nil	1. 1.2.51 2. 1.10.51	Nil	1. Cox, E. A. 2. Foley, T. F. 3. Boyle, A. H. 4. Pavletich, S. N. 5. Not recommended 6. Not yet recommended
PO.STD.	Nil	4	—	4	—
L.STD.	2	44	1. 31.12.57 2. 30.6.59	8	1. Not yet recommended 2. Atkins, C. J.
M.A.A.	7	Nil	1. 3.6.55 2. 31.7.55	1	1. McLaine, K. H. 2. Slattery, S. O.
R.P.O.	5	Nil	1. 7.8.56 2. 24.9.56	3	1. Terry, B. D. 2. Boyington, G. A.
CPO.BTCHR.	Nil	Nil	—	1	—

APPENDIX " A "—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by " RED " Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
CPO.MUSN.	3	Nil	1. 1.1.55	Nil	1. Coxon, G. D. 2. McDonough, J. H.
PO.MUSN.	3	Nil	1. 25.1.57	Nil	1. Nichols, T. G. F. 2. Farrell, W. W.
L.MUSN.	1	11	1. 24.4.58	1	1. Foale, K. J.

APPENDIX " A "—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Wran at Top of Roster. (Adjusted by " RED " Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Wrans on Top in Roster Order.*
C.WR.RS.	Nil	3	—	Nil	—
PO.WR.RS.	Nil	9	—	1	—
L.WR.RO.	Nil	20	—	4	—
PO.WR.SB.	Nil	1	—	Nil	—
L.WR.SB.	Nil	1	—	Nil	—
PO.WR.WTR(GD) & (P) ..	1	3	1. 31.12.58	Nil	1. Rimmington, S. V.
L.WR.WTR(GD) & (P) ..	3	Nil	1. 30.6.59 2. 31.12.59	3	1. Fox, P. 2. Not yet recommended
L.WR.WTR(ST)	1	2	1. 31.12.59	Nil	1. Hall, L. M.
PO.WR.SA(S) & (V)	Nil	Nil	—	Nil	—
L.WR.SA(S) & (V)	3	Nil	1. 30.6.57 2. 30.6.59	Nil	1. Not yet recommended 2. Not yet recommended
PO.WR.CK.	Nil	Nil	—	1	—
L.WR.CK.	1	Nil	1. 7.10.59	3	1. Not yet recommended

APPENDIX " A "—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Wran at Top of Roster. (Adjusted by " RED " Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Wrans on Top in Roster Order.*
C.WR.STD.	Nil	1	—	Nil	—
PO.WR.STD.	Nil	1	—	1	—
L.WR.STD.	6	Nil	1. 31.12.58 2. 30.6.59	5	1. Not yet recommended 2. Not yet recommended
C.WR.REG.	Nil	2	—	Nil	—
PO.WR.REG.	Nil	3	—	Nil	—
PO.WR.RP.	Nil	1	—	Nil	—
L.WR.RP.	3	1	1. 31.12.59	Nil	1. Not yet recommended 2. Brown, S. D.
C.WR.MTD.	Nil	1	—	Nil	—
PO.WR.MTD.	Nil	4	—	Nil	—
L.WR.MTD.	7	3	1. 8.5.58 2. 7.9.58	6	1. Not yet recommended 2. Not yet recommended

APPENDIX " B ".

LIST OF RATINGS ADVANCED DURING THE LAST SIX MONTHS.

Name.	*O.N.*
Petty Officer.	
Gardiner, W. G.	R37612
Lawrence, O.	R35415
Wotherspoon, A. R. ..	R45050
Hughes, B. K.	R45812
Jones, C. F. L.	R37042
Harris, M. D.	R37618
Clifford, R. P. H. ..	R35829
McGhee, R. C.	R46259
Magee, W. F.	R31605
Sutton, D. G.	R44344
Swinnerton, N. W. ..	R38092
Clark, J. D.	R36092
Leading Seaman.	
Clifford, D. C.	R35830
Oakey, L. J.	R51755
Worth, G. P.	R50383
Ashby, R. H.	R33131
Moore, D.	R51931
Porter, R. G.	R51085
Coombe, J. H.	R51384
Paynter, J. R.	R51651
Taylor, G. A.	R52038
Heyhorn, N. C.	R51501
Watson, E. A.	R51958
Horne, C. O.	R49962
Hill, N.	R51155
Allan, D. K.	R51719
Chirgwin, P. K.	R51195
Gale, F. E.	R36287
Kemp, J.	R51370
Connor, N.	R25497
Ball, A. W.	R50173
Corkhill, T. R.	R44847
Luckey, G. R.	R41700
Woods, R. D. E.	R48320
Hines, L. A.	R33345
Boyd, L. W.	R51914
Cox, R. J.	R51893
Blenkinsopp, P. J. ..	R52155
Kindelan, A. A.	R50781
Thompson, J. W. ..	R51305
Smith, C. A.	R51606
Lipscombe, A. W. ..	R50101
Edgar, M. K.	R50844
Scott, H. G.	R50891
Pearson, R. T.	R52224
De Lai, J. P.	R49468

Name.	*O.N.*
Wigfield, J.	R40875
James, E. T.	R51748
Riekie, B. J.	R51571
Green, R. H.	R47067
Burrows, J. C.	R44826
Thorpe, M.	R41679
Yates, W. N.	R36983
Dall, B. G.	R50199
Richey, R. J.	R50011
Boatfield, W. J.	R52156
Chief Communication Yeoman.	
Cass, W. L.	R34403
Communication Yeoman.	
Higgins, K. J.	R27532
Cogzell, W. J.	R45342
Burgin, F. M.	R49954
McKillop, A.	R41661
Leading Tactical Communication Operator.	
Schofield, B. M.	R50624
Greenberg, E. L. ..	R51047
Chief Radio Communication Supervisor.	
Mason, D. S.	R25035
Taylor, K. O.	R30677
Watson, A. E.	R29933
Lowe, W. L.	R29727
Radio Communication Supervisor.	
Ellis, N. W.	R44866
Watling, H. E.	R41727
Lynch, B. J.	R46549
O'Neill, B. F.	R46979
Leading Radio Communication Operator.	
Jaques, R. J.	R50098
Radio Supervisor (Special).	
Manning, E.	R49750
Shanahan, D. N.	R47111

APPENDIX "B"—*continued.*

Name.	O.N.
Leading Radio Operator (Special).	
Boyle, S. E.	R51890
Chief Engine Room Artificer.	
Bradshaw, J. J.	R35954
Shepherd, W. J.	R37206
Beasley, F. A.	R40241
Snow, P. J.	R37563
Chief Engineering Mechanic.	
Richards, H. E.	R27672
O'Connor, E. C.	R27996
Green, J. E.	R35191
Petty Officer Engineering Mechanic.	
Malin, A. S.	R36811
Warren, M. J.	R37332
Christensen, W. E.	R37599
Bishop, C. D.	R37113
Leading Engineering Mechanic.	
Aked, L. E.	R49765
Donohue, R.	R34036
Wintzloff, F. G.	R38616
Sutherland, C. J.	R47740
Bell, W. R.	R32348
Cameron, R. W.	R51474
Collis, K. B.	R51963
Riters, P. E.	R51491
Jones, P. W.	R52100
Quinn, W. R.	R51603
Whiteman, C. J.	R37509
Rogers, V. W.	R51797
Disselkeon, A. H.	R51672
Platt, R. J.	R50989
Lee, N. D.	R38440
Huszczo, J.	R50866
Young, A. M.	R51166
McStay, D.	R32446
Broadbent, N. F.	R51399
Cox, G. M.	R51724
Graham, D. S.	R51585
Rogojsky, A.	R51826
Pollock, D.	R47242
Cumming, J.	R37260
Caton, L. E.	R46308
Parnell, R. J.	R51711
Crye, W. J.	R49632

Name.	O.N.
Chief Plumber.	
Embleton, W. H.	R33681
Chief Electrical Artificer.	
Dittman, B. M.	R49379
Ryan, B. J.	R49252
Chief Electrician (P).	
Cochrane, W. F. V.	R24776
Weldon, J. C.	R23731
Petty Officer Electrician (P).	
Start, L. J. A.	R36350
Eastgate, M.	R37264
Cumming, B. D.	R37017
Parker, B. J.	R37410
Leading Electrical Mechanic (P)	
Patterson, C. V.	R51602
Smith, J. L.	R52641
Osborne, F. V.	R51345
Boyd, T.	R41656
Morris, D. J.	R50065
Dellavanzo, G.	R52969
Serisier, W. M.	R51281
Cruickshank, G. D.	R15725
East, R. A.	R50221
Yates, H.	R48314
Harris, W. E.	R52611
Petty Officer Electrician (E).	
Philp, J. H.	R36814
Leading Electrical Mechanic (E).	
Langer, R. O.	R52556
Cross, C. W.	R52171
Gibson, L. J.	R52983
Asher, D. J.	R49306
Chief Radio Electrician.	
Bonney, K. M.	R35718
McCabe, V. J.	R39209

APPENDIX "B"—*continued.*

Name.	O.N.
Petty Officer Radio Electrician.	
Haas, B. J.	R49773
Thomson, J. B. W.	R49996
Leading Radio Electrical Mechanic.	
Phillips, I. G.	R50739
Dobson, J. B.	R51150
Secker, B. D.	R51223
Flynn, W. A.	R50820
Bailey, R. G.	R51609
Ford, L. A.	R52003
Reid, J. A.	R52907
Reed, W. A.	R53218
Haren, M. J.	R39462
Maunder, B. F.	R53203
Trevithick, R. J.	R52717
Wade, A. J.	R52518
Carter, G. P.	R52674
Schmeichel, H. W. A.	R53138
Odell, G. J.	R51858
Chief Aircraft Mechanician (O).	
Saunders, F. A.	R23669
Rashbrooke, D. J.	R30242
Leading Airman Mechanic (A).	
Douglas, R. S.	R50630
Hagg, N. B.	R50697
Kelson, J. G.	R50651
MacFarlane, W. B.	R55284
Leading Airman Mechanic (E.)	
Bourke, P. J.	R51765
Bennett, G. D.	R50322
Petty Officer Airman Fitter (O).	
Ryan, H. C.	R37927
Chief Airman (AH).	
Blunden, J. L.	R33905
Manuel, M.L.R.	R28871

Name.	O.N.
Petty Officer Airman (AH).	
Bartlett, L. R.	R37934
Cannon, J. W.	R48289
Leslie, H. R.	R36312
Leading Airman (AH).	
Forbes, R. Mc.	R45359
Wilcox, G. W.	R49195
Petty Officer Airman (SE).	
Beardsley, G. A.	R36749
Chief Electrician (Air).	
Rice, D. V.	R28669
Leading Electrical Mechanic (Air).	
O'Connor, T. P. R.	R52412
Suter, I. H.	R52921
Wlodarczyk, W. M.	R53144
Petty Officer Radio Electrician (Air).	
Moore, G. R.	R50137
Leading Radio Electrical Mechanic (Air).	
Hayes, B. P.	R51941
Loveday, G. E.	R52557
Crawley, J. A.	R53086
Morley, D.	R52408
Martin, R. F.	R52315
Williams, B. F.	R48312
Little, J.	R51819
Cleary, L. F.	R53084
Campbell, R. R.	R51364
Leading Sick Berth Attendant.	
Humphries, W. W.	R45375
Jones, A. B.	R37865
Petty Officer Dental Assistant.	
Jacka, J. K.	R36935

APPENDIX "B"—*continued.*

Name.	*O.N.*
Leading Dental Assistant.	
Moyle, D. J.	R51007
Crozier, N. B.	R52276
Vass, W. G.	R51332
Chief Dental Mechanic.	
Bertram, T. A.	R30378
Chief Petty Officer Writer.	
Dellamarta, A. W.	R35001
Medaris, J.	R36592
Barrett, P. C.	R30001
Walsh, E. J.	R36736
Petty Officer Writer.	
Gillies, M. G.	R47064
Brown, P. J. C.	R49929
Goodieson, A. G.	R47198
Gardiner, K.	R49797
Ward, W. T.	R50113
Henderson, D. C.	R44098
Leading Writer.	
Thomson, R. G.	R51714
Swindells, D. J.	R51163
Billingham, P.	R41674
Guild, J.	R50162
Sanders, K. S.	R50622
Shannon, A. M.	R50871
Watson, R. E.	R52247
Morgan, I. A.	R52407
Skipworth, J. W.	R50892
Thomas, L. D.	R38609
Beutel, K. F.	R51382
Stores Chief Petty Officer (S).	
Rattle, M. W.	R35069
Morgan, L. F.	R31576
Stores Petty Officer (S).	
Mitchell, T. P.	R37404
Haywood, S. W.	R36923
Tarrant, J. W.	R44742
Jacobson, R. E.	R37796

Name.	*O.N.*
Stores Chief Petty Officer (V).	
Wood, R. K. G.	R25033
Stores Petty Officer (V).	
Clark, A. J.	R41653
Wright, R. S.	R47129
Leading Stores Assistant (V).	
Dunmore, H. G.	R49873
Jackson, A. G.	R51319
Towers-Hammond, P.	R28074
Feenan, K. W.	R50073
Spence, J. A.	R49886
Chief Petty Officer Cook (S).	
Fechner, J. W.	R29153
Burridge, A. E.	R28948
Hartman, A. B.	R36199
Petty Officer Cook (S).	
Krisanskie, S. H.	R37362
Newell, J. A.	R47781
McGowan, K. A.	R46424
Leading Cook (S).	
Westcott, R. H.	R38471
Clark, R. W.	R51056
Cryer, H.	R49795
Craib, J. L.	R51232
Chapel, P. R.	R44834
Fairley, H.	R40078
Scott, D. H.	R47960
Martin, J. R.	R51753
Brown, B. S. L.	R51459
Hannon, R. E.	R52045
Petty Officer Cook (O).	
Nicholson, K.	R25085
Price, R. N.	R37491

APPENDIX "B"—*continued.*

Name.	*O.N.*
Leading Cook (O).	
Clark, A.	R39574
Roxburgh, J. G.	R50142
Brown, H. E. J.	R51836
Gray, E. J.	R52291
Archibald, H. T. G.	R30373
Thomson, J. J.	R52345
Brewer, M. J.	R51722
Petty Officer Steward.	
Edgerton, R. A.	R50244
Thacker, W. A.	R49728
Kennedy, J. T.	R38074
Nisbet, R. K.	R50239
Leading Steward.	
Maudlin, R.	R41654
Attwood, M.	R50307
Dunn, B. C.	R51553
Kitts, G. G.	R50544
Mayberry, W. J.	R51534
Gibson, W. J.	R52090
Greensitt, J. R.	R41806
Bambrook, K. B.	R49766
Master-at-Arms.	
Ross, W. L.	R35316
Regulating Petty Officer.	
Faunce, R. J.	R36112
Fathers, G. N.	R36558
Farquharson-Scott, I.	R37752
Chief Petty Officer Butcher.	
Symes, D. A.	R34931
Leading Musician.	
Jeffery, R. K. G.	R49851
Wran Radio Communication Supervisor.	
Emtriken, M. C.	R84485

Name.	*O.N.*
Leading Wran Radio Communication Operator.	
MacDonnell, P. A.	R84728
Hansen, J. A.	R84835
Mead, J. A.	R84847
Flanagan J. D.	R84832
Wran Radio Supervisor (Special).	
Mears, J. B.	R84571
Leading Wran Writer (GD).	
Crutchfield, M.	R84742
Orange, E. B.	R84854
Leading Wran Writer (P).	
Gallagher, M. M.	R84749
Petty Officer Wran Cook (S).	
Hyde, V. J.	R84608
Leading Wran Cook (S).	
Nixon, P. F.	R84807
King, J. R.	R84671
Sutton, R.	R84788
Petty Officer Wran Steward (G).	
Maiden, A. L.	R84591
Leading Wran Steward (G).	
McNamara, R. G.	R84694
Gillard, N. D.	R84751
Burton, E. A.	R84684
Smith, M. A.	R84600
Kennedy, J. C. C.	R84803
Leading Wran Motor Transport Driver.	
Hobbs, J.	R84800
Taunton, M. P.	R84790
Ives, E. D.	R84837
Apps, J. L.	R84816
Smith, E. M.	R84860
Baker, J. S.	R84818

(DDM 316/4/12.)

(*Navy Order* 894 *of* 1959.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
7th June, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

3802/60.

UNCLASSIFIED.

408.—Books—Distribution of Non-Accountable Publications during March, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." series, contained in the appendix to this order, have been distributed to ships and services during March, 1960. Section 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " series amendments and A.P. amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	8th January, 1960.
Aeroplane	15th January, 1960.
Aeroplane	22nd January, 1960.
Aeroplane	29th January, 1960.
Aircraft	Volume 39, No. 6, March, 1960.
Manual of A.B.C. S.C. Cataloguing in Australia (Provisional)	Amendment No. 3.
The Communicator	Volume 13, No. 3, Christmas 1959.
DARD Technical Circular No. 207	Addendum No. 1.
Fibres and Plastics	Volume 21, No. 1, January, 1960.
Fibres and Plastics	Volume 21, No. 2, February, 1960.
Flight	8th January, 1960.
Flight	15th January, 1960.
Flight	22nd January, 1960.
Flight	29th January, 1960.
Guide to Optimum Frequencies (S.7/60), February, March, April, 1960	Correction No. 1 (S.26/60) to Part 1—Commonwealth Naval Ship—Shore Organization.
Joint Services Recognition Journal	Volume 14, No. 12, December, 1959.
Journal of the Institute of Navigation	Volume XIII., No. 1, January, 1960.
Journal of the R.N. Scientific Services	Volume 14, No. 6, November, 1959.
Manual of the Audit Act, and Treasury Regulations.	Issue No. 21, dated 12th January, 1960.
Manual of the Audit Act, and Treasury Regulations.	Issue No. 23, dated 3rd February, 1960. Pages 1–12.
N.A.M.A.N.	N2041–N2051, dated 29th February, 1960.
Occupational Safety and Health	July–September, 1959.
United Nations Review	Volume 6, Nol 8, February, 1960.
United States Naval Institute Proceedings	Volume 86, No. 2, February, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 10/1958	1.
N.Z.B.R. 30	1.
B.R. 55	14.
B.R. 60/1958	Chapter 20, and Appendix 4.
B.R. 70/59	November Supplement.
B.R. 91A—1958	Amendment 1.
B.R. 91B—1958	4.
B.R. 91C—1958	2.
B.R. 91D—1958	2.
B.R. 125, Volume 1, 1959/1960	Supplement No. 7, January, 1960.
B.R. 125, Volume 1, 1959/1960	New Entries No. 7, January, 1960.
B.R. 128 (1)	Supplement No. 4, December, 1959.
B.R. 226B (66)	Amendment 2.
B.R. 227 (4)	2.
B.R. 227 (5)	2.
B.R. 227 (8)	2.
B.R. 333 (2)	55.
B.R. 664	Amendments 33, 34 and 35.
B.R. 667/1959 (34th Edition)	Supplemental Service, Issue No. 4, Noter-Up, 26th January, 1960.
B.R. 819 (1) 1953	Amendments to Article 128 of Appendix 3, of R.N.A.S., Part 1 (Admiralty Ref.: AS/DW1135)
B.R. 819 (6)/51	Amendment 20.
B.R. 1257	19.
B.R. 1300	6.
B.R. 1401	59.
B.R. 1492 (A)	Amendments 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 30, 31, 32 and 33.
B.R. 1492 (B)	Amendments 6, 7 and 8.
B.R. 1653	Amendments 9 and 11.
B.R. 1787 (57)	5.
B.R. 1834 (49)	14.
B.R. 1836	13.
B.R. 1837 (7), Division J, Section Intro.	Amendments 16 and 17.
B.R. 1837 (7), Division J, Section JB	Amendments 8 and 9.
B.R. 1837 (7), Division J, Section JF	5.
B.R. 1837 (7), Division J, Section JH	8.
B.R. 1837 (7), Division J, Section JJ	5.
B.R. 1837 (7), Division J, Section JL	3.
B.R. 1837 (7), Division J, Section JP	8.
B.R. 1837 (7), Division J, Section JQ	3.
B.R. 1837 (7), Division J, Section JS	6.
B.R. 1837 (7), Division J, Section JT	3.
B.R. 1837 (7), Division J, Section JX	12.
B.R. 1837 (7), Division J, Section JY	5.
B.R. 1837 (7), Division K, Section KB	15.
B.R. 1837 (7), Division K, Section KC	8.
B.R. 1837 (7), Division K, Section KF	6.
B.R. 1837 (7), Division K, Section KG	7.
B.R. 1837 (7), Division K, Section KJ	14.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 1837 (7), Division K, Section KL	9.
B.R. 1837 (7), Division K, Section KM	7.
B.R. 1837 (7), Division L, Section LG	10.
B.R. 1837 (7), Division L, Section LH	13.
B.R. 1837 (8), Division M, Section intro.	17.
B.R. 1891	16.
B.R. 1986	20.
B.R. 1987 (1) (A)	R.A.N. Amendment No. 1.
B.R. 2050 (342)	Amendment 3.
B.R. 2050 (369)	4.
B.R. 2050 (373B)	4.
B.R. 2050 (399A)	5.
B.R. 2050 (402B)	4.
B.R. 2050 (402C)	4.
B.R. 2050 (408A)	1.
B.R. 2050 (409)	4.
B.R. 2050 (418A)	4.
B.R. 2050 (581)	5.
B.R. 2050 (632)	4.
B.R. 2050 (635)	3.
B.R. 2050 (641)	2.
B.R. 2050 (644)	2.
B.R. 2134/57	1.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 156.
880B, Vol. 1	A.L. 53.
957C, Vol. 1 (2nd Edition)	A.I.L. 1/59.
1086, Book 1 (2nd Edition)	A.L. 28.
1086, Book 3, Part 1 (2nd Edition)	A.L. 73.
1086, Book 3, Part 2 (2nd Edition)	A.L. 123, 124 and 125.
1086, Book 4, Part 1 (2nd Edition)	A.L. 111 and 112.
1086, Book 4, Part 4 (2nd Edition)	A.L. 4.
1086, Book 6 (2nd Edition)	A.L. 99.
1086, Book 9 (2nd Edition)	A.L. 126, 127, 129 and 130.
1086, Book 10 (2nd Edition)	A.L. 92 and 93
1086, Book 11 (2nd Edition)	A.L. 145, 146, 147 and 148.
1086, Book 12, Part 1 (2nd Edition)	A.L. 169.
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1182A, Vol. 1	A.I.L. 2/59 A.L. 159.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
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1182E, Vol. 2	(A.L. 74)–C.8 (Alt. 1 inc.).
1275A, Vol. 1, Section 13	A.L. 25.
1275A, Vol. 1, Section 16	A.L. 30.
1275A, Vol. 1, Section 17	A.L. 28.
1275A, Vol. 1, Section 18	A.L. 27, 28 and 29.
1275A, Vol. 1, Section 19	A.L. 4.
1275A, Vol. 1, Section 20	A.L. 50, 51, 52 and 53.
1275A, Vol. 1, Section 21	A.L. 30.
1275A, Vol. 1, Section 22	A.L. 22 and 23.
1275A, Vol. 1, Section 24	A.L. 41.
1275A, Vol. 6, Section 20	A.L. 6, 7 and 8.
1275B, Vol. 1, Section 15	A.L. 7.
1275B, Vol. 2	(A.L. 49)–D.1 (Alt. 1 inc.).
1275G, Vol. 1	A.L. 57 and 59.
1275G, Vol. 2, Part 1	(A.L. 139)–C.28 (A.L. 141)–C.29.
1355, Vol. 2, Part 1	(A.L. 130)–C.152 (A.L. 131)–Z.125.
1355D, Vol. 1	A.L. 31.
1355F, Vol. 1	A.L. 13.
1374B, Vol. 2, Part 1	(A.L. 69)–J.3.
1374G, Vol. 2, Part 1	A.L. 24 (Alt. 1) to List of Sections (A.L. 23)–B.18 (A.L. 25)–D.1.
1464B, Vol. 1	A.L. 170.
1464G, Vol. 2	No. 103.
1469F, Vol. 1	A.L. 26.
1538, Vol. 1	A.I.L. 2/59.
1538D, Vol. 2, Part 1	No. 214 (A.L. 3) No. 220.
1641P, Vol. 1, Part 2 and Vol. 5	A.L. 46.
1641S, Vol. 1, Parts 1 and 3	A.L. 40.
1641S, Vol. 1, Part 2 and Vol. 5	A.I.L. 4/59.
1661, Vol. 2, Part 1	B.32.
1661B, Vol. 1 (2nd Edition)	A.L. 92.
1661D, Vol. 1 (2nd Edition)	A.L. 114.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
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1661F, Vol. 1	A.L. 84 and 86.
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	A.117
	B.4
	B.5
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	D.136 (A.L. 3)
	D.149 (A.L. 1 inc.)
	D.150
	D.151
	D.154 (A.L. 1)
	D.155
	E.107 (A.L. 1 inc.)
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	F.100
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	S.56
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1803D, Vol. 1, Book 2	A.L. 55.
1803D, Vol. 2, Part 2	A.L. 220.
1803E, Vol. 1	A.L. 116.
1803F, Vol. 1, Book 1	A.L. 24.
1803F, Vol. 1, Book 2	A.L. 22.
1803N, Vol. 1, Book 1	A.L. 28.
1803P, Vol. 1	A.L. 98 and 99.
1803P, Vol. 2, Part 2	A.L. 26.
1803P, Vol. 2, Part 3	A.L. 11.
1803S, Vol. 1, Book 1	A.L. 10.
1803S, Vol. 1, Book 2	A.L. 17 and 18.
1803T, Vol. 1	A.L. 81 and 82.
1803T, Vol. 6	A.L. 50 and 51.
2234E, Vol. 2, Part 1	(A.L. 45)–B.1 (Alt 1).
2240A, Vol. 1, Book 1	A.L. 129.
2240A, Vol. 1 and Vol. 6 (Book 4)	A.L. 21.
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2247, Vol. 3, Part 1, Section 42EQ, Book 4	A.L. 15.
2276F, Vol. 1	A.L. 82.
2306B, Vol. 1 and 6 (2nd Edition)	A.L. 5.

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2531L, Vol. 1	A.L. 5.
2531N, Vol. 3	A.L. 6.
2533C, Vol. 3, Part 4 (2nd Edition)	A.L. 5.
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	(A.L. 126)–B.63 (Alt. 2 inc.)
	(A.L. 127)–B.79.
2550B, Vol. 2, Part 1	No. 19 (A.L. 1 inc.).
2552L, Vol. 2	(A.L. 24)–B.17.
2552L, Vol. 3	A.L. 11.
2656A, Vol. 1	A.I.L. 4/59.
2662B, Vol. 1	A.L. 26.
2887Q, Vol. 2	(A.L. 10)–B.8
	(A.L. 11)–B.9
	(A.L. 12)–B.10.
2892F, Vol. 2	(A.L. 89)–B.71 (Alt. 1)
	(A.L. 84)–B.72
	(A.L. 87)–B.74.
3042, Book 1	A.L. 3 and 4
3042, Book 2	A.L. 8.
3042A, Book 1	A.L. 8.
3158, Vol. 1	A.L. 12.
3158, Vol. 2	(A.L. 489)–A.2 (Alt. 7)
	(A.L. 494)–A.16 (Alt. 6 inc.)
	(A.L. 496)–B.6 (Alt. 7)
	(A.L. 492)–B.11 (Alt. 20)
	(A.L. 497)–B.38
	(A.L. 498)–B.39
	(A.L. 490)–E.4 (Alt. 13)
	(A.L. 493)–H.16
	(A.L. 495)–H.17
	(A.L. 491)–K.2 (Alt. 4 inc.).
3207 (2nd Edition)	A.L. 9.
3279	A.L. 15, 16 and 17.
3280A	A.L. 15.
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D.C.A. Airways Operations Instructions, Vol. 1	A.L. 2.
De Havilland Ghost Spare Parts Catalogue	A.L. 28.
I.C.A.O. Monthly Bulletins	Vol. XIV., No. 10, 1959.
R.A.F. Flight Information Publications Terminal Approach Procedure Charts Far East Area, High and Low Altitudes	A.L. 6 (5.2.60) to T.A.P. Check List dated 31.10.59
	A.L. 7 to T.A.P. Check List dated 31.10.59
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Title.	*Date.*
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Lloyds Shipping Index	7th March, 1960.
Lloyds Shipping Index	14th March, 1960.
Lloyds Shipping Index	21st March, 1960.

(DNAS 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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C.N.O.'s 409-423/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
8th June, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

3803/60.

CONTENTS.

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

409.—Aircraft—Cartridges, Power—KJ 079 CTGES, Engine Starter, Electric, No. 8, Mark 1.

(*A.F.O.* 728/1960.)

The following stores have been introduced into Naval Service—

KJ 079 CTGES Engine Starter, Electric, No. 8, Mark 1 (R.A.F. Ref. No. 12K/1198).

2. They are used in connection with Rotax turbo starter motors for starting the Ghost engines in Sea Venom and each unit of the Double Mamba engines of Gannet aircraft.

3. These cartridges are described in Air Publication A.P. 1661F, Volume 1.

4. Cartridges will be supplied to service packed in tin plate presscap cylinders No. 611, eight of which are packed in a steel box H50 measuring 18-in. x 11-in. x 10.2-in. They are classified as group 6, category Y, for storage and transport both ashore and afloat.

5. As the fired cartridges can be refilled, they are to be treated with care to avoid damage and returned to R.A.N. Armament Depots without delay. In the interests of economy, the fired cartridges should, whenever possible, be replaced in cylinders No. 611 complete with internal furniture. In order to reduce the incidence of corrosion at the bottom of the cylinder, attributed to the products of combustion, it is recommended that the fired cartridge be replaced in the cylinder in the reverse order, i.e., cartridge flange downwards.

6. The provisional life allocated to these cartridges is three years except as indicated in paragraph 8. On expiry of this life, the cartridges will be examined and if found serviceable they will be marked " Re-tested (Month/Year) " and will have a further life of three years from the date of re-test. Cartridges reaching the end of their life (or extended life) are to be returned to the nearest R.A.N. Armament Depot.

7. If one of the two cartridges in the twin breech of a starter motor has been fired and the second is for any reason withdrawn before being fired, the following procedure must be followed—

(*a*) The cartridge must be replaced in the breech in the next barrel to be fired (normally the one from which it was taken); or

(*b*) it must be returned to an R.A.N. Armament Depot suitably labelled, for breakdown. It must not be merged into stock for future use. Cartridges in this category can easily be distinguished as they will be smoke blackened around the mouth.

8. The starter breech must normally be re-charged with cartridges from the aircraft stowage, this being replenished with fresh cartridges. Aircraft stowage should be arranged so that the cartridges can be withdrawn in the order of insertion. Any cartridge which has been exposed continuously for seven days or more to temperatures below freezing or remaining in the aircraft stowage after seven days in the tropics must be regarded as " time expired " and returned to an R.A.N. Armament Depot, appropriately labelled for breakdown and refilling.

9. Allowances of these cartridges are shown in the Warrant of Naval Aircraft Armament Stores. The allowances for Gannet aircraft have been based on the assumption that on 50 per cent. of the occasions when the engines are started, it will be possible to start the second engine by wind-milling the airscrew in the slipstream of the first engine started.

10. Navy Order 419 of 1958 is hereby cancelled.

(DW 727/58/20.)

(*Navy Order* 419 *of* 1958.)

UNCLASSIFIED.

410.—A/S Mortar, Mark 10—Introduction of Tropical Range Plugs.

(*A.F.O.* 732/1960.)

Weapon .. .. .. A/S Mortar, mark 10.

Part affected .. .. CH 053 barrel assembly.

Modification .. .. Two additional CH 385 plugs blanking, calibrated for use in high temperatures, to be supplied for each barrel. Each new plug to be stamped with the serial No. of the barrel for which it is supplied, the size of the calibration hole, and the letters TROP. Existing plugs fitted to the mortar for use in temperate conditions to be stamped with the barrel serial number, size of hole and the letters TEMP.

Supply of Modified Components H.M.A. ships are to demand the necessary tropical plugs from the nearest R.A.N. Armament Depot, quoting the serial numbers of the barrels for which they are required. Existing plugs will be stamped " TEMP " concurrently.

Purpose .. .. .. To improve ranging of A/S mortars, mark 10 in tropical conditions. Temperate plugs are to be exchanged for tropical plugs by ships' staffs whenever the ambient temperature is higher than 80° F. Similarly temperate plugs are to be replaced whenever the temperature falls below this figure. A ¾-in. Whitworth spanner is required to effect the exchange. Care must be taken that the plugs in use are always fitted to the correct barrel.

Stowage of Spare Parts .. A bracket holding the six plugs not in use will be fitted in each mortar handling room. The supply and fitting of this bracket will be the subject of a separate Navy Order, and until such times as it is introduced into service the six plugs not in use are to be carefully stored.

Additional Remarks .. If for any reason a barrel is landed, it must be accompanied by two temperate and two tropical plugs. Once mated to barrels, plugs will be treated as components and will not be accounted for separately.

R.A.N.A.D.'s only .. Separate instructions have been promulgated in UW(A)8/60.

(DW 707/51/31.)

UNCLASSIFIED.

411.—Guns—Q.F. 4.5-in., Mark 5—Modification to Loading Stop.

(*A.F.O.* 792/1960.)

The following modification is approved—

Gun .. .. .. Q.F. 4.5-in., mark 5.

Parts affected .. .. BP 076 Stop, loading, left gun—assembly.
BP 089 Stop, loading, right gun—assembly.
BP 434 Pin, axis, long, loading stop, left gun.
BP 447 Pin, axis, long, loading stop, right gun.
BP 226 Pin, axis, short, loading stop.

Purpose .. .. .. To facilitate withdrawal of the axis pins for adjustment of the loading stops and to provide lubrication of the axis pins.

Nature of modification .. Provision of a ¼-in. B.S.F. tapped hole in the long and short axis pins to take a tecalemit lubricator A.P. 5747.

New parts required .. AB 106 Lubricator Tecalemit, hexagon head type 11B–AP5747.

Drawings .. .. N.O.D. 3175/25, items 8, 22 and 24.

By whom to be done .. R.A.N. Armament Depots.

When to be done .. As convenient.

2. Spare BP 076 and BP 089 Stop, loading—assembly, BP 434 and BP 447 Pin, axis, long, loading stop, and BP 226 Pin, axis short, loading stop, held in store and on board H.M.A. ships are to be modified concurrently.

3. Schedule of modifications, part I.

Q.F. 4.5-in., mark 5 gun and accessories.
Add Serial No. 32.
Endorse Serial No. 31 by adding to Remarks column—
" Superseded by Serial No. 32 ".
Amend Serial No. 28 by deleting remark " Amend by Serial No. 31 " and inserting " Amend by Serial No. 32 ".

4. Navy Order 805 of 1959 is relevant.

(DW 706/51/27.)

(*Navy Order* 805 *of* 1959.)

UNCLASSIFIED.

412.—Bathythermographs—Periodical Return for Repair and Recalibration.

(*A.F.O.* 468/1960.)

The slides and log sheets of Bathythermograph dips carried out in accordance with Navy Order 859 of 1959 (*Ocean Passage Observations by the Fleet*) are now sent to the U.S. Navy Hydrographic Office for analysis. It is therefore of the greatest importance that the slides should be free from defects and that the log sheets should be accurately and fully completed. Good traces cannot be obtained at high speeds. In general the ship's speed during the dip should not exceed 10 knots. Sub-standard slides should not be forwarded.

2. Bathythermographs deteriorate in service and have to be returned to the manufacturers for overhaul and recalibration at intervals. Ships should return these instruments to store for overhaul eighteen months after issue or earlier if the defects listed below appear in the traces given by the instrument.

3. The following defects justify earlier return of BT's:–

(*a*) Any gross defect or sign of bad corrosion.

(*b*) Excessively thick, ragged or confused traces.

(*c*) Displacement of the zero-depth line by more than 20-ft. in a 450-ft. instrument or 10-ft. in a 180-ft. instrument.

(*d*) A difference of more than 4°F. between the surface water temperature as read by the bathythermograph and as read by a thermometer.

(*e*) A double trace with more than 1°F. between the traces where they are nearly vertical.

(*f*) Any apparent inconsistency.

4. The temperature error and depth error should be determined by an actual dip and not by the procedure described in B.R. 1891, Chapter 5, paragraphs 8 and 9.

5. Paragraphs 5, 8 and 9 of Chapter 5 of B.R. 1891 are being amended as follows—

Paragraph 5.—Under no circumstances should any attempt be made to dismantle the instrument.

Paragraph 8.—The temperature error should be determined by comparison of the surface water temperature as measured by the bathythermograph and as measured by a thermometer in a bucket of water or in the engine cooling water inlet.

Paragraph 9.—The depth error should be determined as the difference between the top of the trace and the zero depth line of the graticule on the same dip as is employed to determine temperature error.

6. These tests of accuracy are carried out every time a dip is made (B.R. 1891, Chapter 3, paragraph 21).

(DW 518/52/47.)

(*Navy Order* 859 *of* 1959.)

UNCLASSIFIED.

413.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 124. *Classification* " *A* ".

Item: Ring Main Model situated in E.P. 2 to be—

(*a*) Reconstructed so that its presentation is for and aft to the ship.

(*b*) Shown as now, with the following additions—

(i) Up-to-date D.C. station markings superimposed on existing bulkhead marks.

(ii) 1, 2 and 3 section base delineation markings.

(iii) Divided into Ring Main Sections.

References:

(*a*) H.M.A.S. MELBOURNE's proposed alteration and addition item T.D.L. " CD ".

(*b*) Navy Office letter No. 17426 dated 31st August, 1959.

(*c*) FOICEA memorandum No. N20/14/76 dated 17th December, 1959.

(*d*) Garden Island drawing No. 561/597.

(DCNTS 1213/52/36.)

UNCLASSIFIED.

414.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 126. *Classification* " *A* ".

Item: " To fit radar installation type 978 and remove radar installation type 974 ".

References:

(*a*) Navy Order 1122 of 1958.

(*b*) Navy Office letter No. 55189, dated 27th February, 1959.

(*c*) FOICEA memorandum CR N20/1/9 dated 23rd November, 1959.

(*d*) Navy Office letter No. C430 dated 13th January, 1960.

(DCNTS 1211/51/53.)

(*Navy Order* 1122 *of* 1958.)

UNCLASSIFIED.

415.—Alteration and Addition Item—Boom Defence Vessels.

The following alteration and addition item is approved for H.M.A.S. KIMBLA—

Class List Item No. 132. *Classification* " *A* ".

Item: " To fit a stainless steel urinal in the outboard forward corner of the Ships Company Heads."

References:

(*a*) H.M.A.S. KIMBLA's proposed alteration and addition item, temporary distinguishing letter " G ".

(*b*) FOICEA memorandum N20/12/29 dated 21st September, 1959.

(*c*) Navy Office letter 1232/57/15 (76911) dated 24th November, 1959.

(*d*) FOICEA memorandum N20/12/31 dated 13th January, 1960.

Note: This item is not applicable to H.M.A. ships KANGAROO, KOOKABURRA, KOALA and KARANGI.

(DCNTS 1232/57/15.)

UNCLASSIFIED.

416.—Alteration and Addition Item—A/S Frigates (Modified River).

The following alteration and addition item is approved for A/S Frigates (Modified River)—

Class List Item No. 594. *Classification* " *A* ".

Item: " To fit a bench model 10/20 quart electric mixing machine in accordance with Navy Office drawing No. 165/736 (G.I. Drg. No. 72/168) ".

References:

(*a*) H.M.A.S. BARCOO's proposed alteration and addition item, temporary distinguishing letter " C ".

(*b*) H.M.A.S. BARCOO's memorandum 10/1/62 dated 21st November, 1954.

(*c*) FOICEA's E.A. 4282/505/21/1, undated.

Remarks: The item is applicable to H.M.A. ships DIAMANTINA, GASCOYNE and BARCOO only, and may be reviewed when other ships of the class are brought forward.

(DCNTS 1224/51/39.)

UNCLASSIFIED.

417.—Alteration and Addition Item—A/S Frigates (Modified River).

The following alteration and addition item is approved for H.M.A.S. GASCOYNE and H.M.A.S. DIAMANTINA—

Class List Item No. 601. *Classification* " *A* ".

Item: " To fit non-slewing derrick at frame 89 starboard side for coring equipment."

References:

(*a*) Navy Office message 010506, March, 1960.

(*b*) FOICEA message 030228, March, 1960.

Remarks:

(*a*) The item is not applicable to H.M.A.S. BARCOO or remaining ships of the class in reserve.

(*b*) Drawings showing the arrangement of this equipment together with a statement of any alteration in weights are to be forwarded to Navy Office in due course.

(DCNTS 1224/57/30.)

UNCLASSIFIED.

418.—Alteration and Addition Item—Frigate (Sloop)—H.M.A.S. SWAN.

The following alteration and addition item is approved for H.M.A.S. SWAN—

Class List Item No. 546. *Classification* " *A* ".

Item: " To improve accessibility of main switchboard emergency terminals by extending them outside the switchboard in accordance with Garden Island Drawing No. 538/209."

References:

(*a*) FOICEA memoranda N20/20/26 dated 10th July and 8th December, 1959.

(*b*) H.M.A.S. SWAN proposed item T.D.L. " K ".

(*c*) Navy Office letters Nos. 18403 and 791 dated 4th September, 1959 and 12th January, 1960.

Remarks: The item is applicable to H.M.A.S. SWAN only.

(DCNTS 1221/53/7.)

UNCLASSIFIED.

419.—Boilers—Composite Sprayer Caps and Plugs—Instructions for Assembly.

(*A.F.O.* 461/1960.)

Navy Order 1005 of 1959 (*Composite Sprayer Caps and Plugs—Introduction*) introduced the new composite sprayer cap and plugs to replace the sprayer caps and plugs pattern B.12/6310 and 14 to 24 which are now obsolescent.

2. It is essential that an oil-tight seal is obtained between the new-type sprayer cap, pattern B.12/32908 and the front face of the atomizer plate. Copper asbestos washers pattern E2D/2850 should be used for this purpose, the washers being replaced periodically when obvious deterioration has occurred.

3. Peg spanners pattern B.11G/14889 should be used to tighten the plug, pattern B12/32909, which holds the atomizer plate in position.

(DNAS 1101/51/14.)

(*Navy Order* 1005 *of* 1959.)

UNCLASSIFIED.

420.—Drinking Water Coolers—Hermetically Sealed Refrigerant Circuits.

(*A.F.O.* 202/1960.)

It has been brought to notice that attempts are being made by R.N. ships' staffs to carry out repairs to the hermetically sealed refrigerant circuits of drinking water coolers.

2. Hermetically sealed units were introduced in order to reduce the maintenance task in H.M.A. ships. This policy, which also embraces that of repair by replacement, will be negated if maintenance is attempted by ships' staffs.

3. Because of their design only the manufacturer or a Dockyard with the essential workshop facilities can repair these units economically.

4. Drinking water coolers in which the hermetically sealed refrigerant circuits have become defective are to be landed for repair and/or replacement.

(DEE 1112/51/20.)

UNCLASSIFIED.

421.—Naval Stores (General) (Class B, Group 8, Part 1)—Lightweight Metal Truck—Pattern 16000.

It has been decided there is now no service requirement for a pattern 16000 lightweight metal truck that cannot be met by the types of truck now in service.

2. Navy Order 135 of 1959 is hereby cancelled.

(DNAS 505/87/39.)

(*Navy Order* 135 *of* 1959.)

UNCLASSIFIED.

422.—Painting Beneath Evaporators—Killrust L72B.

Trials have been carried out to determine the most suitable paint for the protection of areas beneath evaporators. Results indicate that Killrust L72B accounted for as a non-pattern item under class E, group 7, is the most satisfactory coating yet tried. Further comparative trials of this and other suitable coatings are proceeding.

2. Pending the completion of these trials Killrust L72B is to be used as the standard coating for application beneath evaporators. This material may also be used in bilges and stern gland compartments where there is no foot traffic or any undue abrasion.

3. Killrust L72B is a semi-drying, heavy bodied grease-like coating which does not dry hard and the area to be coated is to be scraped to remove any loose rust and scale and then wire-brushed and allowed to dry out. One heavy coat is to be applied by brush to give a thickness of ⅛-in. or a coverage of approximately 20 sq. ft. per gallon. In places not easily accessible by brush it may be applied by spreading by hand, using a glove.

4. The material is supplied ready for use and does not require thinning or heating. Brushes may be cleaned with mineral turpentine.

5. A.B.R. 19 will be amended.

(DNC 1211/51/101.)

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

423.—Office of the Principal Naval Overseer, Newcastle—Closure.

The office of the Principal Naval Overseer, Union House, 33 Watt Street, Newcastle, has been closed and overseeing in that area is now administered directly by the General Overseer, East Australia Area.

2. Correspondence formerly addressed to the Principal Naval Overseer, should in future be addressed to the General Overseer, East Australia Area, Garden Island.

(HNB 2/4/27.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

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C.N.O.'s 424-442/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
8th June, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

3804/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

424.—Flags—Sizes of Colours to be Worn by H.M.A. Ships.

The sizes of colours to be worn in harbour and when entering and leaving harbour by the various classes of H.M.A. ships are to be standardized throughout the Royal Australian Navy, as shown in the appendix to this order, to meet various occasions of use.

2. During foul weather in harbour, the senior officer present may authorize the use of smaller sized colours than those laid down in the appendix.

3. For ships smaller than frigates the sizes of flags to be worn are to be ordered by the appropriate authority to ensure uniformity.

4. Commanding Officers of H.M.A. ships concerned in commission should arrange for holdings of flags and ensigns to be adjusted to provide sufficient stocks only of those sizes now required.

APPENDIX.

SIZES OF COLOURS (IN BREADTHS) TO BE WORN BY H.M.A. SHIPS.

Class of Ship.	*Sundays, weekdays in foreign ports and when dressing ship.*	*Weekdays.*
(a) Ensigns—		
Aircraft Carriers	14	12
Destroyers .. .. .. / Frigates	8	6
Note: In order to economize whenever possible, 4-breadth ensigns are to be worn at sea.		
(b) Jacks—		
Aircraft Carriers	12	10
Destroyers .. .. .. / Frigates	6	4
(c) Standards and Distinguishing Flags—		
Aircraft Carriers	8	6
Destroyers .. .. .. / Frigates	6	4
Note: Whenever possible 4-breadth is to be worn between dusk and dawn, and at sea.		

(d) Masthead Ensigns—

All classes of ships listed above are to wear 6-breadth Masthead Ensigns (including Foreign Ensigns).

(DSD 37/2/21.)

UNCLASSIFIED.

425.—Senior Naval Officer, R.A.A.F. Pearce—Lapse of Title.

The appointment of Senior Naval Officer, R.A.A.F. Pearce, will lapse on 30th June, 1960.

(DOA 333/4/23.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

426.—Commonwealth Employees' Compensation Act—Repatriation Institution Charges.

The Repatriation Department has agreed that cases where liability is accepted under the Commonwealth Employees' Compensation Act and which are admitted to Repatriation institutions for treatment will be charged a maximum rate of £5 2s. 2d. per day.

2. Supply and Certifying Officers are to ensure that payments in excess of the agreed rate are not made on account of such cases in claims rendered by the Repatriation Department.

3. In some cases a considerable time may elapse before a determination under the Commonwealth Employees' Compensation Act is issued in respect of a member who has received treatment in a Repatriation institution. Adjustments should be made in such cases as requisite.

4. Commanding Officers should inform the Repatriation Department on receipt of advice that a determination has been issued accepting liability under the Commonwealth Employees' Compensation Act in respect of a member under treatment in a Repatriation institution.

(Sec. 125/1/6.)

UNCLASSIFIED.

427.—Discipline—Reciprocal Powers of Arrest Amongst Australian Forces in Malaya.

Consequent upon a decision of the three Chiefs of Staff of the Australian Armed Forces and an amendment to the Defence Force Regulations, Sections 5, 6, 7 and 8, it was agreed that the R.A.N., A.M.F. and R.A.A.F. were considered to be acting together in Malaya and that the police patrols of all three services have, as a result, reciprocal powers of arrest.

2. Powers of arrest, however, are restricted to all officers and ratings of the rate of Leading Seaman and above in the R.A.N., all non-commissioned officers of the rank of Corporal (Bombadier) and above in the A.M.F. and R.A.A.F.

3. Commanding Officers of all H.M.A. ships serving in the Malayan Strategic Reserve are to advise their ships' companies of the implications of paragraphs 1 and 2 ensuring that they understand an Australian Army or R.A.A.F. Corporal or above who is a member of a shore patrol may, if the circumstances so justify, arrest any Australian Naval rating ashore in Malaya, and that Leading Seaman and above in Naval shore patrols have similar powers of arrest over Australian Army and R.A.A.F. personnel in Malaya.

(DGS 321/1/6.)

UNCLASSIFIED.

428.—Excess Luggage Warrants—Air Transport.

Cases have occurred where excess luggage consigned as unaccompanied air freight in accordance with I.P.I. 187/3 has been charged for as excess luggage due to inadequate endorsement of Excess Luggage Warrants.

2. To obviate future cases, the heading on the Excess Luggage Warrant is to be amended by deleting the words " Excess luggage " and inserting in lieu the words " Unaccompanied air freight " whenever luggage is to be despatched unaccompanied by air.

(DNA 205/68/5.)

UNCLASSIFIED.

429.—Malaya Allowance and Education Allowance—Income Tax.

The Commissioner of Taxation has advised that although Malaya Allowance and Education Allowance are not subject to tax instalment deductions, the totals of these allowances are, for the following reasons, to be recorded in the relevant group certificates for the appropriate year of income—

(*a*) *Education Allowance*—Where the Commonwealth subsidizes a member of the Navy in respect of education expenses which may be claimable by him as deductions from assessable income, the view is taken by the Commissioner of Taxation that only the excess, if any, of his actual expenses over the amount of Education Allowance he received during the relevant year of income, qualifies for deduction as being " necessarily incurred " under Section 82J of the Income Tax and Social Services Contribution Assessment Act 1936–1959 which reads as follows—

" 82J.—(1.) Amounts paid by the taxpayer in the year of income in respect of expenses necessarily incurred by him for or in connexion with the full time education at a school, college or university or from a tutor, of a person who is less than twenty-one years of age and—

(*a*) is a child of the taxpayer; or

(*b*) is a person in respect of whom the taxpayer is entitled to deduction under Section eighty-two B of this Act,

shall be allowable deductions.

(2.) The deductions allowable under this section, in respect of any one year of income, in relation to the education of any one person shall not exceed one hundred pounds."

Notice of payment of the Education Allowance is also required by the Taxation Department for the proper consideration of claims for allowance of the standard deduction of £91 in respect of a student child over sixteen years of age.

(*b*) *Malaya Allowance.*—Special Treasury approval has been given to the remission of tax on Malaya Allowance. Exemption of Malaya Living Allowance is effective only by reason of a special Treasury remission. The law requires, however, that assessments be prepared upon the basis of the Malaya Allowance being, legally, fully subject to tax. This requires the inclusion in group certificates of details of the allowance to enable also the amount due for remission to be ascertained and other necessary accounting requirements to be fulfilled in accordance with usual remission procedure.

(DNA 271/1/9.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

430.—D/F Calibration—Curves of Correction.

In the interest of avoiding non-essential expenditure of time, money and material, it has been decided that copies of curves of D/F Calibrations are not to be forwarded to Navy Office or to administrative authorities except as follows—

(*a*) First installation of each type of D/F set in each class of ship.
(*b*) When calibration abnormalities make it desirable to enclose curves with the report.
(*c*) On re-siting D/F aerial or after major changes to superstructure; however, curves are not to be forwarded in this case if no significant difference exists between present and previous calibrations.

(DEE 1213/252/21.)

UNCLASSIFIED.

431.—Admiralty—Gyro-Compass, Pattern 5005—M.T.U. and C.R.U.—Motor Pattern 5014—Maintenance Instructions.

(*A.F.O.* 591/1960.)

It is intended that the follow-up motor, pattern 5014, fitted in Master Transmission Unit, pattern 5008, and Compass Retransmission Units, patterns 5009 and 5030, shall be superseded by an improved motor operating at a lower running temperature. Until the new motor becomes available, existing motors, pattern 5014, should be greased at three-monthly intervals and not annually as stated in B.R. 8, chapter 13.

2. The new motor will be designated pattern 5014, mod. 1, and, when available, will be fitted during the annual overhaul of compass equipment.

(DEE 519/53/83.)

UNCLASSIFIED.

432.—Ammunition—Propellant—Naval Propellant Regulations Temperature Returns—Revised Procedure—Periods of Use.

Several reports recently received have not conformed to the revised regulations governing the periodic return of temperatures of storage of propellant.

2. It is essential that reports of propellant stored in temperatures exceeding 90°F. be rendered to Navy Office on form S.1147A in duplicate, on 1st April and 1st October to cover the preceding six months.

Should any such propellant be—

(*a*) transferred from ship to ship,
(*b*) landed at Naval Armament Depots (except " on deposit " or as samples),
(*c*) carried as freight and landed,

form S.1147A, in duplicate, is to be furnished to the ship or depot receiving the propellant.

3. *H.M.A. Ships and Establishments and R.A.N. Air Stations*—Blank returns are not required.

4. *R.A.N. Armament Depots.*—Returns need not be rendered on 1st October if no temperature above 90°F. has been experienced for the preceding half year, but in that case returns of 1st April must cover the whole year.

5. Form S.1147A (revised July, 1957) includes the revised regulation and should be used when available.

(DW 729/57/14.)

UNCLASSIFIED.

433.—Gun Mountings—Emergency Substitute for Oil OM. 65 as Hydraulic Oil.

To meet the possibility of requirements of oil OM. 65 (Specification E in C.O.2) arising at ports where supplies are not readily available or obtainable in the vicinity, details of the various Australian commercial brands which are equivalent to and can be freely mixed with oil OM. 65 are as follows—

Caltex	Regal PC (R/O).
Shell	Vitrea Oil 33 or Turbo 33.
Vacuum	D.T.E. Heavy Medium.
Atlantic	Essomar 52.
H.C. Sleigh	SM20 or Purol Heavy Medium.
Wakefields	Perfecto NN.
Ampol	Tecoma 32.
B.P.	Energol TH100–HB.

2. If none of these is available, then in warm climates, turbine engine oil OM. 100 is to be used as an emergency substitute.

3. Purchases of commercial oils are to be made only when stocks to specification are unobtainable.

(DNAS 512/91/25.)

UNCLASSIFIED.

434.—Naval Armament Stores—Introduction of Vacuum-Sealed Containers.

(*A.F.O.* 659/1960.)

New types of containers, which are sealed by creation of an internal vacuum have been introduced for packing certain Naval Armament Stores.

2. The containers are fitted with two lids, viz.—

(*a*) an inner sealing lid, fitted with a removable rubber bung and provided with a rubber washer to make an air-tight sealing. It is kept in position by the vacuum created in the container during packing.
(*b*) an outer metal lid which fits over the inner lid. On certain containers it is screwed on, and on others it is kept in position by a clamping band, similar to that used on normal press cap cylinders. Some designs of this outer lid have a central aperture with a hinged cover for use only by the packer. It should be kept in the " closed " position.

3. The containers are expensive and should be handled carefully. When empty they are to be returned to the nearest R.A.N. Armament Depot with both lids properly in position and packed in the outer packages in which they were supplied.

4. To open vacuum-sealed containers, the outer lids should first be removed. The removal of the rubber bung will release the vacuum and enable the inner lid to be easily removed. The rubber bung should not be replaced by the ship's staff once it has been removed but returned with the empty containers.

5. The vacuum-sealed containers already in use and the stores they contain are as follows—

Containers N7	..	Detonators N5 for charges demolition 1-lb.
Cylinder fuse N19	..	Fuses N80 and N90 series.

6. It is important that these containers should not be opened unless and until the contents are actually required for use. Deterioration may set in once the vacuum is released. Detonators returned in opened containers cannot be issued again and have to be scrapped.

7. It has been reported that since the introduction of containers N7 large quantities of detonators N5 are being destroyed at R.N. Armament Depots having been returned by H.M. ships in containers which have been opened.

8. Separate instructions governing the use and testing of these containers have been issued to Armament Depots.

9. Navy Orders 534 of 1958 and 197 of 1960 are hereby cancelled.

(DW 735/52/39.)

(*Navy Orders* 534 *of* 1958 *and* 197 *of* 1960.)

UNCLASSIFIED.

435.—Asdic Type 170 Series—Temporary Modification to S.R. Key Relay Z.530003.

(*A.F.O.* 794/1960.)

For a number of years experimental S.R. keys containing relays similar to pattern Z.530003 but open and not sealed, have been in use in a few selected ships. As a result of their performance and the continued reports of failure of the sealed relays pattern Z.530003 a temporary modification is hereby introduced to provide a simple form of venting for the present sealed relays in the pattern A.3080 S.R. keys of ships fitted with type 170 series.

2. When rendering any further reports of failure of relay Z.530003 in its S.R. key application as called for in Navy Order 602 of 1959 (*Anti-Submarine—Asdic—Types* 170 and 170*B—Relays, Patterns Z.*530003 *and Z.*530004), it should be stated whether the relay has been modified as described below.

3. Each relay must be punctured with the tool described in Navy Order Diagram Issue 10/60. This tool is to be made up by ship's staff to the diagram, the critical dimensions of which are those locating the screw holes and the location of the brazed top strap. To ensure that the relay cover is pierced with minimum distortion, it is essential that the angle of the screw points is not exceeded.

4. Care must be exercised in puncturing the cans to see that the device is located squarely on each relay and that no more than five complete turns are given to the screws after contact of each with the can. The diameter of the holes produced will be approximately $\frac{1}{64}$-in.

(DEE 518/52/49.)

(*Navy Order* 602 *of* 1959.)

UNCLASSIFIED.

436.—Alteration and Addition Item—Ammunition Carrier, H.M.A.S. WOOMERA.

The following alteration and addition item is approved for Ammunition Carrier H.M.A.S. WOOMERA—

Class List Item No. 108. *Classification* " *A* ".

Item: " To fit an electric ventilating fan and associated trunking to the forward messdeck in accordance with Garden Island Drawing No. 189/12 ".

References:

(i) H.M.A.S. WOOMERA's proposed alteration and addition item temporary distinguishing letter " L ".

(ii) FOICEA memorandum N20/24/69 dated 25th June, 1959.

(iii) Navy Office letter 69538 dated 10th August, 1959.

(iv) FOICEA memorandum N20/24/69 dated 7th March, 1960.

(DCNTS 1240/56/13.)

UNCLASSIFIED.

437.—Alteration and Addition Item—A.S. Frigates (Converted Fleet).

The following alteration and addition item is approved for A.S. Frigates (Converted Fleet)—

Class List Item No. 571. *Classification* " *A* ".

Item: Existing ventilation in Sick Bay to be re-arranged and a 7½-in. supply fan fitted to supply the Sick Bay only. Recirculation arrangements to be fitted and fan marked " Run in A .".

References:

(i) Navy Office letter 4276/4/534 (18497) dated 20th August, 1958.

(ii) FOICEA memorandum CR6/28/365 dated 14th January, 1960.

(DCNTS 1211/51/65.)

UNCLASSIFIED.

438.—Naval Stores (General) (Class F, Group 2A)—V/S Equipment Signalling Projectors and Signalling Lanterns—Revised Allowances—H.M.A. Ships.

R.A.N. allowances of V/S equipment to H.M.A. ships have been revised and the new allowances are detailed in the appendix to this order.

2. The 5-in. hand signalling lantern, pattern 16409, supersedes all 4-in. and 6-in. lanterns at present in service and demands to complete to the revised allowances should be forwarded to the appropriate (S)N.S.O.

3. All 20-in. S.P.'s are being removed but 6 No. will be kept in reserve for use in connexion with the defence of ports.

4. Relevant Sea Shore Establishments should be noted accordingly.

APPENDIX.

ALLOWANCES OF VISUAL SIGNALLING EQUIPMENT—H.M.A. SHIPS.

Class of Ship.	10-in. Signalling Projector, Pattern 3860A.	5-in. Hand Signalling Lantern, Pattern 16409.	I.S.L., Pattern W2174.	Torch, Pattern 16001A (or W1020 Portable 1-in.).	Portable, Pattern 1038.	Hether, Pattern 16466.	Lightweight Daylight Signalling, Pattern No.—		
							443.	AC197859.	DC197860.
H.M.A.S. MELBOURNE ..	4	10	4 + 1B	2 + 1B	1	3 + 1B	2	—	—
Daring Class Destroyers ..	3	5	4	—	2	3	—	2	—
Battle Class Destroyers ..	2	5	3	2	2	3	—	—	2
Tribal Class Destroyers ..	2	4	3	2	1	3	—	—	—
Type 12 Frigates ..	2	5	2	—	4	2C	—	2	—
Type 15 Frigates ..	2	5	4	2	1	2	—	—	—
Modified River Frigates ..	2	2	1	1	1	2	—	—	—
A/S Sloop	2	2	1	1	1	2	—	—	—
Survey Vessels ..	2	8	1	2	—	—	—	—	—
H.M.A.S. SWAN ..	2	6A	2	1	1	2	—	—	—
Minesweepers ..	2	4	1	1	1	1	—	—	—
Boom Defence Vessels ..	1	1	—	1	—	—	—	—	—
Diesel Tugs ..	1	1	—	2	—	—	—	—	—
S.A.R Craft ..	—	3	—	1	—	—	—	—	—
H.M.A.S. SPRIGHTLY ..	2	1	—	2	—	—	—	—	—
H.M.A.S. WOOMERA ..	—	1	1	—	—	—	—	—	—
H.M.A.S. PALUMA ..	1	1E	1	—	—	—	—	—	—
G.P.V.'s (Explorer Class) ..	—	1E	1	—	—	—	—	—	—
Other Small Craft (G.P.V.'s, M.R.L.'s, M.S.L.'s) ..	—	1DE	—	—	—	—	—	—	—

A = 4 for use in boats.
B = flagship stores.
C = 1 additional to S.O.'s ship.
D = carried as required by operating authority.
E = small vessels employed on survey duties are allowed 2 H.S.L.'s in addition to above.

(DNAS 517/251/6.)

UNCLASSIFIED.

439.—Naval Stores (General)—Tool Kits for Electrical Tradesmen of General Service and Air Branch—Re-numbering.

(*A.F.O.* 327/1960.)

As from the date of this order, tool kits types L.1 and L.4 for naval electrical tradesmen ratings of the General Service and Air Branches will be authorized for General Service personnel only. The current identical tool kits for Air personnel will be re-numbered L.8 and L.9 respectively. Although the component tools of all these kits remain unchanged at present, re-numbering will facilitate the promulgation of any future modification applicable to one or more of these trades or branches of the Service.

2. A.B.R. 4, appendix 7—" Composition of Tool Kits "—will be amended to read as follows—

Type.		*Trade or Purpose.*
L.1	..	E.A.'s (other than Air).
L.4	..	Electrical (Power) (Electronic).
L.8	..	E.A.'s (Air).
L.9	..	Electrical (Air).

3. The numbers of the tool kits shown on the History Sheets and Tool Kit Deficiency Lists A.S. 138 of Air Electrical Branch Ratings, as required by A.B.R. 4, article 2707, should be amended accordingly.

(DNAS 506/83/10.)

UNCLASSIFIED.

440.—Fires—Precautions—Welding and Burning Operations.

A large proportion of the total number of outbreaks of fire in H.M. ships and craft results from welding and burning operations, and reports show that these fires are generally due to the omission of adequate precautions.

2. The following instructions are to be observed in the R.A.N. by all concerned—

(*a*) Before welding or burning is commenced by dockyard or contractors' personnel in any ship in commission or under naval administration, the foreman of the dockyard department concerned with the welding or burning (or the overseer concerned in ships under repair by contract) is to inform the Engineer Officer of the ship in writing, on the form shown in the appendix to this order, that this work will be taking place on board, and of its probable extent and duration. Ships' officers can then ensure that all measures to combat fire can be taken immediately, should the necessity arise.

(*b*) The foreman (or overseer) is also to take action as necessary with the ship's officers for the removal of inflammable material as stated in paragraph 3 and is to satisfy himself that the requirements of paragraph 7 of this order are complied with.

3. The following action is to be taken before welding or burning operations are carried out, and the welder or burner is to satisfy himself that this is done in way of each individual job before starting work. All welders and overseers are to be informed personally of this requirement.

Removal of Inflammable Material.

(*a*) All inflammable materials, including paint, cork insulation, stores, dunnage packing materials, oil in bilges, rubbish, &c., in the vicinity are to be removed.

(*b*) All compartments adjoining that in which welding or burning is to be carried out are to be examined thoroughly and any material likely to take fire is to be removed. This is to include the removal of paint or similar coatings, wet or dried, from bulkheads on which welding or burning is to take place.

(*c*) The access covers of any closed compartments, such as a tank, buoy, &c., are to be removed, and the compartment is to be ventilated, &c., and certified as gas-free.

Welding of Pipes.

4. Welding and burning operations in place are to be entirely prohibited on pipes, any portion of which passes through compartments containing explosives. No welding or burning is to be carried out on any pipe in place until it has been ascertained that the pipe does not—

(*a*) pass through spaces containing inflammable material;

(*b*) contain, or is not likely to contain, any trace of combustible material for a length of at least 6-ft. from the weld. Pipes fitted for the conveyance of water, e.g., drains, are not to be assumed free from risk in this respect, and when conditions are doubtful, the pipes should be taken down before welding or burning.

Protection of Electric Cables.

5. All electric cables in the vicinity of a prospective welding operation and liable to damage from flying spots of molten metal, are to be covered by asbestos or other protective material. Those cables fixed to the far side of the bulkhead are to be moved clear of the bulkhead and suitably protected to avoid damage due to heat. These precautions are to be carried out before welding is commenced and the officer-in-charge of the welding operations is responsible for ensuring that this is done. In this connection, it is necessary to emphasize that Pyrotenax cable is easily mistaken for copper piping.

Machinery Spaces, &c.

6. Particular care should be taken when welding or burning operations are taking place in machinery or other spaces where the possibility of oil being present increases the necessity for special preacutions.

Provision of Fire-fighting Equipment.

7. The following fire-fighting equipment is to be available in the vicinity of welding or burning operations, together with the necessary personnel to operate it—

(*a*) A 2-gallon gas/water extinguisher, pattern 7272, charged in readiness.

(*b*) One 2-gallon foam extinguisher, pattern 4726, if there is any risk from inflammable liquid.

(*c*) Asbestos sheet of suitable size to prevent the spread of sparks.

Gasoline Storage Tanks and Gasoline Tank Compartments.

8. The necessary precautions to be observed are laid down in B.R. 1754, Regulations for the Storage and Handling of Gasoline, Kerosene, &c.

9. Where possible, adequate notice is to be given to the Commanding Officer of ships in which welding and/or burning operations are to be undertaken, to enable stores, cargo, or other inflammable material belonging to the ship to be removed, if necessary. Commanding Officers are responsible that an efficient organization is available for dealing with fires and for ensuring that the necessary fire precautions are carried out.

10. Similar precautions are to be observed in docks, caissons, pontoons, &c., where welding or burning operations are carried out.

11. The closest co-operation is to be maintained between dockyard officers, shipyard officials, overseers, ships' officers and others responsible in order to ensure that all possible precautions are taken. In private yards, where H.M.A. ships are refitting, the overseer is to draw the attention of the shipyard officials to the necessity for closest collaboration with ships' officers in the matter of fire precautions.

APPENDIX.

NOTIFICATION OF SHIPS' OFFICERS OF INTENTION TO CARRY OUT WELDING AND/OR BURNING OPERATIONS.

Date.....

The Engineer Officer,

H.M.A.S.....

It is intended to carry out welding and/or burning operations on board in.....commencing at.....for a period of approx..... Please provide personnel and fire fighting equipment in the near vicinity in accordance with C.N.O. 440/60 paragraph 7, prior to commencement of work.

.....

Foreman

Date.....

Mr.....

Foreman

The provisions of C.N.O. 440/60, paragraph 7, have been met and you may now proceed with the burning and/or welding operations.

Engineer Officer.

H.M.A.S.....

(DNC 1446/51/3.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

441.—Message Forms—Policy for Use.

Message forms F Sigs 52 Series have now been reprinted and re-numbered A.S. 1320 series, as follows—

F Sigs 52 .. .. .. Large re-numbered A.S. 1320L.
F Sigs 52 .. .. .. Small re-numbered A.S. 1320B.

2. Stocks of A.S. 1320 B and L are now held by SNSO and are available on demand. These forms are henceforth to be used for all message drafting purposes and replace forms S.1320 b, c, f and g. Further details are given in the appendix to this order.

3. Forms to be used for distribution purposes are still S.1320 d, e, h, i, j, and k in accordance with the instructions in the appendix to this order.

APPENDIX.

Form.	*Description.*	*Status.*
	Drafting Forms.	
A.S. 1320 B ..	White Small ..	General purpose message drafting form. Replacement for S.1320 b, c, f, and g and F Sigs 52 Small
A.S. 1320 L ..	White Large ..	Message drafting form for use in large shore H.Q. and Flagship for drafting long messages. Replacement for F Sigs 52 Large
	Forms for distribution purposes.	
S.1320d ..	White Small ..	For distribution copies of Unclassified messages
S.1320e ..	White Large ..	For distribution copies of Unclassified messages
S.1320h ..	Pink Small ..	For distribution of Restricted, Confidential and Secret messages
S.1320i ..	Pink Large ..	For distribution of Restricted, Confidential and Secret messages
S.1320j ..	Green Small ..	For distribution copies of Top Secret messages
S.1320k ..	Green Large ..	For distribution copies of Top Secret messages

(DNAS 464/54/128.)

Section 6.

ESTABLISHMENTS.

UNCLASSIFIED.

442.—Naval Stores (General) (Class E, Group 6), Pattern 9060, Weed-killer—Introduction.

A non-selective weedkiller " Atlacide " (which is available in 28-lb. and 300-lb. non-returnable containers) has been introduced for spraying large areas of hard paths, gravel walks, roads, &c., in H.M.A. establishments. " Atlacide " weedkiller is accounted for under class E, group 6, as pattern 9060 and stocks are available from (Suptg.) Naval Store Officers.

2. " Rega " type knapsack sprayers stocked under class B, group 10, Part D, are suitable for use with pattern 9060 weedkiller.

3. " Atlacide " consists of a mixture of sodium chlorate and calcium chloride. Sodium chlorate is a very efficient herbicide, but leaves an inflammable residue; however, the addition of calcium chloride, which is hygroscopic, insures that vegetation killed by the sodium chlorate is kept sufficiently damp to be non-inflammable.

4. For use in R.A.N. Armament Depots and other establishments where there is a high degree of fire risk the rate of application should be 9-lb. of " Atlacide " dissolved in 8 gallons of water per area of 400 square yards.

5. Elsewhere the rate of application should be in accordance with the manufacturer's recommendations as follows—

Weed Condition.	*Square yards Per 10 lb. of " Atlacide " dissolved in Water.*
Seedling weeds	225–280
Medium density low stature weeds	150–225
Very heavy infestation, including well established perennials and thickly matted grass growth	110–150
Formation level treatment where paved areas are being laid down	110–150

6. If care is taken the use of " Atlacide " involves no significant fire risk but since it contains sodium chlorate the following precautions should be observed—

(*a*) It should not be used as a dry powder or in concentrations greater than that specified in paragraph 5.

(*b*) Precautions should be taken against the spray being carried into buildings where inflammables are stored.

(*c*) Ground should not be sprayed during periods of prolonged dry weather.

(*d*) Arrangements should be made to collect and dispose of dead grass or foliage about a week after spraying has taken place.

(*e*) Bulk stocks of " Atlacide " should be kept in a dry store and should not be stowed either with or near inflammables.

(*f*) The non-returnable containers in which the weed-killer is supplied should be segregated and burnt out at the first opportunity after being emptied.

7. Personnel employed on mixing and spraying operations should be warned of the toxic properties of " Atlacide " and of the fire risk if clothing becomes impregnated with the solution. Suitable protective clothing must be worn to prevent contamination of skin and clothing. Precautions recommended by the manufacturer to be observed are set out in the Appendix to this order.

8. Flame guns will not be supplied for clearing vegetable growth from large areas in establishments since the use of a proprietary weed killer applied by some form of pressure sprayer is considered to be more efficient than any other means of weed control.

APPENDIX.

PRECAUTIONS.

1. Any clothing worn while spraying should be thoroughly rinsed in water to remove chlorate which may be remaining on it. Clothing on which chlorate solutions have dried become inflammable.

2. It is advisable to wear rubber boots when spraying. These are easily rinsed and not affected by chlorates. Leather saturated with a solution of chlorate becomes inflammable, hardened and shrinks upon drying.

3. " Atlacide " absorbs and holds moisture under all normal conditions when in contact with vegetation or clothing. However, it is advisable to take all precautions against fire when working with this material.

4. " Atlacide " CA powder is not " selective " in its action, and should not be used to spray commercial crops. When controlling weeds in orchards or vineyards, avoid spraying the foliage of the fruit trees or the vines.

5. " Atlacide " is not poisonous, but like common salt, may be injurious to domestic animals if taken in excessive quantities. Again, poisonous weeds may be rendered more palatable by the salty taste when treated. Therefore, do not leave drums open or allow stock to graze immediately on treated areas. Grazing will also reduce the effectiveness of the spray treatment.

6. Spray equipment should be washed out with clean water after using, for though non-corrosive in itself " Atlacide " picks up moisture from the air, and thus keeps equipment in a damp condition.

(DNAS 512/76/20.)

With reference to Navy Order 1094 of 1959, Navy Orders 303 to 472 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

Registrar.

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C.N.O.'s 443-466/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
14th June, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos J Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

4053/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

443.—Replenishment at Sea—Man Overboard.

(*A.F.O.* 1108/1960.)

Man Overboard during Replenishments.

There is always a particular risk of man overboard during jackstay transfer or replenishment at sea, particularly in heavy weather. Swift and co-ordinated action is essential if rescue operations are to be successful.

2. The present instructions in A.T.P. 1, article 1931, and A.T.P. 16, article 432 (*a*) are inadequate and pending their amendment the following instructions are to govern the action of ships in this event—

(*a*) *Rescue Destroyer or Helicopter Present.*—A rescue destroyer or helicopter should be stationed 500 yards astern for the purpose of rescuing personnel lost overboard.

(*b*) *No Rescue Destroyer or Helicopter Present.*—Normally the Receiving Ship will be the Rescue Ship; however, where two dissimilar warships are replenishing together the smaller ship, irrespective of whether she is the Receiving or Supplying Ship, will be the Rescue Ship and the larger ship should provide the gear.

The Supplying Ship is to drop a lifebuoy with marker and the Rescue Ship is to carry out an emergency disengagement and proceed to pick up the man.

(DTSR 1623/1/10.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

444.—Career Planning—Supply and Secretariat Specialization

With the introduction of the Supply and Secretariat Advanced Course at Flinders Naval Depot, a programme of planned appointments designed to cover the career factor for General List Officers of the " S " Specialization, has been prepared and it is felt that this, taken in conjunction with the new training scheme, should result in a higher standard of officers at Lieutenant-Commander level being produced.

2. The main factors influencing this aim can be controlled by selective appointing and, in this regard, a plan of—

(*a*) Initial training;
(*b*) Career planned appointments;
(*c*) Courses; and
(*d*) Subsequent appointments,

will be followed as far as possible.

3. It will be noted that no account has been taken in the plan of appointments, of the principles expounded under the New Officer Structure, that " S " Officers may receive appointments outside the course of their normal specialization. However,

within the limits of what is practicable, some officers may receive appointments for Seaman Duties and will in the future be eligible for appointment as Executive Officer of a Shore Establishment.

4. The programme of planned appointments is included as an appendix to this order.

APPENDIX.

(i) INITIAL TRAINING—

	Years.	Months.	Rank.
(a) R.A.N.C.	3 (1 year Matric. entry)	—	Cadet Midshipman.
(b) SWAN	—	4	Cadet Midshipman.
(c) B.R.N.C.	1	4	Midshipman.
(d) Fleet for Certificate of Competence	1	—	A/Sub. Lieutenant.
(e) (S) Training	—	6	Sub. Lieutenant.
TOTAL ..	6	2	

(ii) CAREER PLANNED APPOINTMENTS (to gain experience)—

ALTERNATING

(a) Basic Secretariat Training.	Period.	(b) Cash and Stores Training.	Period.
Numbers 3 and 4 Admiral's office Secretary to D.10 .. .. Secretary in Darings .. Secretary to F.1 .. .. Capt.'s Secretary Small Establishment Asst. Secretary Large Establishment	Approx. Two Years.	MELBOURNE .. .. NIRIMBA .. .. ALBATROSS .. .. F.N.D. .. .. .. D.S.O. Small Establishment	Approx. Two Years.

Lieutenant 4 years' seniority on completion.

(iii) COURSES—

S.S.A.C. at Supply School, F.N.D.

Period.	Rank.
5 months.	Lieut. (4).

APPENDIX—*continued.*

(iv) SUBSEQUENT APPOINTMENTS—

PHASE I.

ALTERNATING

(a) Secretarial Appointments.	Period.	(b) Supply Charge Appointments.	Period.
Asst. Sec. F.O.C.A.F. .. Asst. Sec. F.O.I.C.E.A. .. Secretary MELBOURNE .. Secretary Large Establishment	Two Years.	Small Establishment .. " Q " Class Frigates .. Type 12 Frigates .. .. Battle Class Destroyers .. SWAN .. .. .. WARREGO	Two Years.

Lieutenant Commander on Completion.

PHASE II.

Refresher Course at Supply School / Secretarial or Supply as required — 2 weeks.

PHASE III.

Appointments as Lieutenant Commander.

ALTERNATING

(a) Secretarial Appointments.	Period.	(b) Supply Appointments.	Period.
Asst. Sec. to F.O.C.A.F. .. Asst. Sec. to F.O.I.C.E.A. .. Secretary Large Establishment Staff R.A.N.L.O., London .. Supply School F.N.D. .. Staff of Directors at Navy Office	Two Years	Daring Class Destroyers .. Small Establishments .. D.S.O. MELBOURNE .. D.S.O. Large Establishment	Two Years.

Lieutenant Commander 4 years seniority on completion in zone (3–8 years) for promotion to rank of Commander.

(DOA 311/4/27.)

UNCLASSIFIED.

445—Introduction of Officer Training at the Supply School, Flinders Naval Depot.

Officer Training at the Supply School, Flinders Naval Depot will commence on Monday, 8th August, 1960.

2. *The Aim.*

(*a*) To provide two courses per year of advanced instruction for both General List and Special Duties List officers of the Supply and Secretariat Specialization covering all spheres of the Supply Specialist field.

(*b*) To further the training of Junior Supply officers in a broader field associated with their profession.

(*c*) To standardize the professional knowledge of Junior Supply officers.

(*d*) To give instruction, as required to officers of the Seaman, Engineering and Electrical Specializations undertaking Supply duties in small ships.

3. *Courses Available.* To meet the aim, the function of the Supply School, Flinders Naval Depot has been extended to cover the following courses for officers. Those in Section " A " are designed to fit officers for particular appointments, those in Section " B " are short courses for the improvement of officer professional knowledge.

4. *Section " A ".*

(*a*) Supply and Secretariat Advanced Course for General List Supply and Secretariat Specialist Lieutenant Commanders and Lieutenants.

(*b*) Refresher courses to meet the individual needs of Supply and Secretariat Specialist Commanders and below.

5. *Section " B ".*

(*a*) Supply and Secretariat Specialist Special Duties List Officers' Educational and Acquaintance Courses.

(*b*) Short courses in Supply and Secretariat subjects, including canteens, to meet the individual needs of Seaman, Engineering and Electrical Officers.

(*c*) Short course in wardroom management and catering.

6. In order to achieve the standards required and expected of officers of the Supply and Secretariat Specialization, all Lieutenant-Commanders and Lieutenants (General List) at present serving will be required to undergo the S.S.A.C. and Special Duties List Lieutenants and Sub-Lieutenants the S.D. Officers' Course.

COURSE PROGRAMME—1960.

Course.	*Max. No.*	*Commences.*	*Completes.*	*Duration.*
(*a*) S.S.A.C.	5 G.L. " S " Officers	8 August, 1960	2 December, 1960	17 weeks
(*b*) " W " Education and Acquaintance Course	3 S.D. " W " Officers	8 August, 1960	23 September, 1960	7 weeks
(*c*) " S " Education and Acquaintance Course	3 S.D. " S " Officers	5 September, 1960	25 November, 1960	12 weeks
(*d*) Acquaintance Course	G.L. " X ", " E " or " L " Officers	.....as required.....		2 weeks
(*e*) Refresher Course ..	G.L. " S " Officers	.....as required.....		2 weeks

7. Syllabuses for courses (*a*), (*b*) and (*c*) are shown in the appendices to this order.

Selection of Officers for Courses.

8. By selecting ten officers (5 G.L. and 5 S.D.) for each of the two courses per year, it will be possible to eliminate the backlog in 5 or 6 years, when it is intended that General List Officers should undergo the course at 4 years' seniority as a Lieutenant and S.D. List officers as soon as possible after promotion.

9. The appointing authority will select officers for courses being guided by the needs of the Service and the availability of officers.

10. The establishment of officers allowed does not permit the provision of reliefs for officers selected to undergo the courses listed and while every consideration will be given when appointing officers for courses, a heavier load must necessarily devolve on to the shoulders of other Supply Officers borne and also cause a certain amount of inconvenience to Captains of establishments affected. The Naval Board are confident that Captains and other officers concerned will appreciate the importance attached to the new training programme, designed to raise the standard of efficiency in the Supply and Secretariat Branch, and accept the extra work and inconvenience caused as being in the best interests of the Service.

11. Successful completion of the S.S.A.C. will qualify Lieutenants of the (S) specialization professionally, for promotion to the rank of Lieutenant-Commander.

12. *Failures.* General List Officers of the (S) specialization who fails to attain the necessary standard in the S.S.A.C. at the first attempt will not be given another course but will be required to qualify professionally for the rank of Lieutenant-Commander under the present written examination system as detailed in Navy Order 340 of 1959.

APPENDIX " A ".

OUTLINE OF SYLLABUS FOR SUPPLY AND SECRETARIAT ADVANCED COURSE.

General .. ..
Security.
Higher Defence Organization, ANZAM, SEATO.
Role of the Navy.
History of the R.A.N.
Organization at Navy Office.
Organization of Naval Staff—Functions.
Appreciations, Service writing, and graphic method.
Administrative Planning, Logistics, Naval Works.
Welfare and Service conditions.
Naval correspondence and general administrative matters affecting personnel.
O. & M.
Work Study.
Manning.
Reserves.
Supply Officer as Head of Department.
The Admiral's Secretary.
Fleet, Command and Squadron Supply Officer.
Instructional technique.
Public Speaking.
Asia to-day.

Law .. ..
Naval Law and C.M. procedure, circumstantial letter, advice to Court, &c.
Summary punishments.
Rules of evidence.
Criminal Law.
International Law.
Merchant Shipping Act.
Contracts and Sale of goods.
Commonwealth Employees Compensation and Repatriation Acts.

Finance .. ..
Financial control, at Navy Office.
Pay and Cash.
Accounts.
Audits.
Canteens.
Non Public Funds.
Banking.
Exchange.
Income Tax.
Insurance.
Stock Exchange.
D.F.R.B.
N.H.B. Scheme.
R.A.N. Relief Trust Fund.

APPENDIX " A "—*continued.*

Stores .. ..
Accounting.
Supervision.
Stocktaking.
Losses.
Procurement and contracts.
Audit and inspection.
Economy, stockholdings.
Preservation, packaging.
Commissioning and paying off.

Catering .. ..
Cooking.
Butchery.
Food Inspection.
Menu planning.
Equipment.
Staff.
Dietary.

APPENDIX " B ".

S.D. OFFICERS EDUCATIONAL AND ACQUAINTANCE COURSES.

General .. ..
Security.
Higher Defence Organization, ANZAM, SEATO.
Role of the Navy.
History of the R.A.N.
Organization at Navy Office.
Organization of Naval Staff—Functions.
Appreciations, Service writing and graphic methods.
Administrative Planning, Logistics, Naval Logistics, Naval Works.
Welfare and Service conditions.
O. & M.
Work Study.
Manning.
Reserves.
Instructional techniques.
Asia to-day.

S.D. (W) Officers ..
Summary punishments.
Circumstantial letter.
Commonwealth Employees Compensation and Repatriation Acts.
Pay and Cash.
Accounts.
Non Public Funds.
Banking.
Exchange.
Income Tax.
Insurance.
Stock Exchange.
D.F.R.B.
N.H.B. Scheme.
R.A.N. Relief Trust Fund.
Naval, Air and Victualling Store Acquaintance.

APPENDIX "B"—*continued.*

S.D. (S) Officers .. Stores Accounting.
Supervision.
Stocktaking.
Losses.
Procurement and contracts.
Audit and inspection.
Economy, stockholdings.
Preservation, packaging.
Commissioning and paying off.
Cooking.
Butchery.
Food Inspection.
Menu Planning.
Equipment.
Staff.
Dietary.
Pay and Cash Acquaintance.

(DOA 311/4/27.)

(*Navy Order* 340 *of* 1959.)

UNCLASSIFIED.

446.—Officers—Retirement for the Purpose of Establishment in Civil Employment Under Section 39 (2) (c) of the D.F.R.B. Act 1948/59.

Section 39 (2) (*c*) of the D.F.R.B. Act, under which an officer who retires before, but within 3 years of attaining the retiring age for rank held, may be paid a pension on retirement after completing the minimum period of service specified in relation to his rank, provides that such pension will be paid only where the Defence Forces Retirement Benefits Board is satisfied that the purpose of retirement is to enable the officer to establish himself in civil employment.

2. In order to implement this provision of the D.F.R.B. Act it will be necessary for an officer tendering his resignation to take up civil employment, who is eligible for consideration under Section 39 (2) (*c*) of the Act, to furnish the following with his application—

(*a*) If a business undertaking—A statement showing the following particulars—
(i) the class of business and its prospects; and
(ii) previous experience in such a business.

(*b*) If private employment—A letter from the prospective employer stating—
(i) nature of the position;
(ii) salary range;
(iii) tenure of employment;
(iv) avenue of promotion;
(v) whether retirement benefits in the form of superannuation, &c., are payable.

3. Where the Naval Board agree to recommend that the officer's resignation be accepted, the particulars of civil employment prospects will be forwarded to the Defence Forces Retirement Benefits Board. On receipt of advice from the Defence Forces Retirement Benefits Board, the officer concerned will be informed regarding the payment of a pension.

4. Subject to confirmation by the officer that he still wishes to resign, his resignation will be recommended to the Governor-General and the date from which the resignation is to be effective promulgated.

(HPB 263/1/21.)

UNCLASSIFIED.

447.—Prizes—Clare D'Oyly Memorial Prize—Award.

(*A.F.O.* 1013/1960.)

Since the introduction in September, 1958, of the 3-year Long Engineering Course and the annual entry into the R.N. Engineering College, Manadon, officers taking the Long Engineering Course will in future be eligible for the Clare D'Oyly Memorial Prize after eight terms of the course at Manadon, i.e., in April, 1961, and annually thereafter.

2. The prize will be £50 to be awarded annually to the officer who at the end of the Long Engineering Course has shown the best all-round officer-like qualities. Alternatively it may, at the discretion of the Commanding Officer, be divided equally between two or three officers according to the numbers on the course.

3. Officers of the Commonwealth Navies on the course are equally eligible with R.N. officers for this prize.

(DOA 38/6/13.)

UNCLASSIFIED.

448.—Royal Navy Loan and Exchange Officers—Marriage Allowances—Officers to be Fully Acquainted with the Regulations.

It is apparent that many officers do not understand their responsibilities in accepting marriage allowance; it is important that all concerned should make themselves fully acquainted with the rules which are contained in the Naval Pay Regulations (B.R. 1950, articles 91–137). When an officer is uncertain of the interpretation of the marriage allowance regulations he should seek official advice from the Supply Officer. Individual circumstances can vary so much, however, that the Supply Officer may well find it necessary to obtain an official ruling through normal service channels from the Naval Board.

2. Attention is drawn particularly to the following points—

(*a*) Marriage allowance is not payable in respect of an unmarried dependant living as a wife. (Article 91.6.)

(*b*) Marriage allowance is only issuable on the condition that it is used to the full extent towards the maintenance of the officer's family. (Articles 100 *et seq.*)

(*c*) In view of (*b*) no deduction in respect of Income Tax charges is to be made by an officer from marriage allowance credited to him.

(*d*) In applying for marriage allowance, the officer undertakes to report in writing any changes in circumstances affecting the issue or rate of the allowance payable, e.g., death of wife, divorce, separation, &c. (Article 91.5.)

(*e*) If an officer is paying the marriage allowance to his wife by means of allotment, and for any reason his allotment is stopped or reduced by the accounting authorities, the officer is still under obligation to ensure that the full rate of marriage allowance which he is receiving is paid to his wife, but he will be informed of the reason for the stoppage or reduction.

3. It is clear that some officers have not studied these regulations and they are reminded that any breach of them may well have serious consequences or may lead to trial by court-martial.

4. Navy Order 525 of 1958 is hereby cancelled.

(DNA 252/51/6.)

(*Navy Order* 525 *of* 1958.)

UNCLASSIFIED.

449.—Temporary Rental Allowance.

Many applications for payment of Temporary Rental Allowance received in Navy Office do not comply with the requirements of instructions 231/43 and 44 of Interim Pay Instructions.

2. To enable full consideration to be given to his claim each applicant is to ensure that he includes substantial evidence confirming that—

(*a*) he has not limited his search to furnished premises but has made a genuine search for unfurnished premises not necessarily restricted to a rental equivalent to his rent norm or related to the amount which, in respect of furnished premises, would qualify him for payment of the allowances;

(*b*) where failing initial success in his search for unfurnished premises he is forced to occupy furnished premises, that he is continuing his search for unfurnished premises in accordance with (*a*) or for cheaper suitable furnished premises;

(*c*) his search has not been restricted to a locality of his choice within the area in which he is serving but has been made throughout the entire area, i.e., to a distance which is up to 90 minutes travelling time by normal public transport from his place of duty, and in addition;

(*d*) where he accepts a lease of furnished premises—

(i) that he was faced with no alternative but to accept the premises leased;

(ii) that the rental under the lease is reasonable by comparison with existing rental charges for similar furnished premises.

3. Evidence should be given of the localities searched and of particulars of any accommodation rejected and the reasons for rejection. Certificates furnished should be from Estate Agents located throughout the area.

4. Before entering into a lease a member should check with the Billeting Officer for the area on the probable date on which a service residence will become available to him, he should make every endeavour to have a release clause inserted in the lease and, wherever possible, should submit details of the proposed lease for approval.

5. This order will be reprinted for posting on notice boards.

(HPB 252/8/16.)

450.—(This order will not be issued).

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

451.—Allen West and Co. Ltd., Type S.C.F., A.C. Motor Starter—Removal of Air Dashpot—Daring Class Destroyers.

(*A.F.O.* 789/1960.)

There are a number of Allen West & Co. Ltd., type S.C.F., A.C., contactor starters in service which are fitted with an air dashpot as a shockproofing device. This air dashpot is fitted below the contactor armature and exerts a restraining action on the movement of the armature under conditions of shock.

2. Experience in the R.N. ships has shown that these air dashpots are unreliable in service, and they are therefore to be removed from all starters to which they are fitted. This modification is to be carried out by ships' staff and in accordance with the following procedure (*see* Drawing No. D.E.E. C37527)—

(*a*) Remove split pin A which connects the air dashpot B to the contactor armature.

(*b*) Remove the 3 in number screws C by which the air dashpot is fixed to its supporting strap.

(*c*) Remove the air dashpot.

(*d*) Replace the split pin, ensuring that it goes through the contactor operating straps D as well as the magnet armature.

3. It should be appreciated that in small starters such as that shown in Drawing No. D.E.E. C.37527, it may be necessary to remove the contactor from its case before removing the air dashpot.

4. On completion of removal of the dashpots, an item is to be included in the Main Defect List to amend the relevant " As Fitted " drawings.

(DEE 1106/51/7.)

RESTRICTED.

452.—A.A./S.U. Directors, Marks 6 and 6*Director Aim Cameras.

(*a*) *Ships, establishments and authorities concerned*	" Battle " and " Daring " Class Destroyers; West Head Gunnery Range and Gunnery Equipment Depots.
(*b*) *Type and mark of equipment*	A.A./S.U. directors, mks. 6 and 6*.
(*c*) *Purpose of modification* ..	To provide mounting facilities for the director aim camera bracket, A.P. 162040 (D.N.O. 11178/1).
(*d*) *Nature of modification* ..	The spring case cover of the right hand pivot head bearing is to be modified in accordance with Drg. D.N.O. 11178/5. **Warning:** To reduce tension in the pivot head springs the sight beam should be elevated to 90° when removing or replacing this cover.

(*e*) *Drawings*	D.N.O. 11178/1. D.N.O. 11178/5. (Associated drgs:—Items list D.N.O. 11178, D.N.O. 11178/2 and D.N.O. 10971/2B.)
(*f*) *By whom to be done* ..	Dockyards.
(*g*) *When to be done*	At first opportunity. Ships to report when modification completed.
(*h*) *How to be treated* ..	As a defect.

2. Instructions for installing the director aim camera and associated control unit will be issued separately.

3. Navy Order 903 of 1959 is relevant.

(DW 737/252/4.)

(*Navy Order* 903 *of* 1959.)

RESTRICTED.

453.—A.A./S.U. Directors, Marks 6 and 6*—Director Aim Cameras and Event Recorders.

(*a*) *Ships and establishments concerned*	"Battle" and "Daring" Class Destroyers: West Head Gunnery Range.
(*b*) *Equipment affected* ..	A.A./S.U. directors, mk. 6 and 6*, T.S. and ship's wiring.
(*c*) *Purpose of modification* ..	To provide a time base for the director aim camera by connecting it to an event recorder.
(*d*) *Nature of modification* ..	To provide suitable wiring and supply facilities between the director and T.S. in accordance with drawing D.W. A/51212.
(*e*) *Drawings*	D.W. A/51212.
(*f*) *By whom to be done* ..	Dockyards.
(*g*) *When to be done*	At the earliest opportunity, ships to report when modification completed.
(*h*) *How to be treated* ..	As a defect.

2. Navy Orders 903 of 1959 and 452 of 1960 are relevant.

(DW 737/252/4.)

(*Navy Orders* 903 *of* 1959 *and* 452 *of* 1960.)

UNCLASSIFIED.

454.—Guns—Modified Projectile Ejectors—Supply.

(*A.F.O.* 2910/1960.)

If excessive force is applied in attempting to remove a jammed shell, using the existing design of ejector, the head of the ejector tends to expand and remain firmly gripped by the shell. When this happens, it is difficult to disengage the ejector from the shell.

2. To obviate this tendency, existing ejectors for Q.F. 4-inch guns are to be strengthened by fitting a steel bush in the gunmetal head. Ejectors for 4.5-inch guns are also to be strengthened but details of the modification are not yet completed.

3. The existing ejector will be exchanged without demand by the R.A.N. Armament Depot, Sydney, when supplies of the modified item are available.

4. A new Store Reference Number for the modified ejector has been allocated as follows—

A.T. 437 Ejector, projectile Q.F. 4-in. Mk. N7—Assembly (modified A.T. 307).

5. B.R. 1837 Vocabulary of Naval Armament Stores and Ships Warrants will be amended in due course.

6. Navy Order 160 of 1960 is relevant.

(DW 705/51/7.)

(*Navy Order* 160 *of* 1960.)

UNCLASSIFIED.

455.—M.R.S.-3-A.F.C.B. Mark 10—Target Compass Bearing Dial.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted. Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	A.F.C.B. Mk. 10.
(*c*) *Part of equipment affected*	Perspex index ring of target compass bearing dial.
(*d*) *Purpose of modification* ..	To enable Range Operator to set course and speed of target ship on inclination dial in surface blind procedure.
(*e*) *Nature of modification* ..	Circular perspex face of target compass bearing dial to be engraved with inclination readings as shown on drawing.
(*f*) *Drawings*	DW A/51210. D.N.O. 7665, Sheet 4.
(*g*) *By whom to be done* ..	Gunnery Equipment Depots before issue. Ships staff, dockyards.
(*h*) *When to be done*	At the earliest opportunity.

(DW 737/256/20.)

UNCLASSIFIED.

456.—Diving—New Surface Decompression Routine.

(*A.F.O.* 1077/1960.)

A new surface decompression routine for divers has been calculated and tested by sea trials. The new routine may be used for dives in a depth not exceeding 180 feet and for a duration, inclusive of a 10 minute increment, which remains on Table I. The new method has the following advantages over the procedure previously used—

(*a*) It has been tested in conjunction with the recently introduced decompression tables.

(*b*) The diver does not require recompression to the depth he was working at, hence a chamber of lighter construction is suitable, e.g., 45 lb./sq. in. working pressure.

(*c*) Because there is no longer a requirement to recompress the diver to his equivalent pressure on the sea bed the time limitation (5 minutes) for recompressing the diver is easier to achieve.

(*d*) Surface decompression may be carried out from 180 feet without oxygen breathing which was hitherto compulsory for dives in excess of 120 feet.

2. *Procedure* on completion of a dive is as follows—

(*a*) Diver is ordered " Come up diver—surface decompression—first stop recompression chamber ", or if no telephone is used, is signalled four pulls followed by two bells.

(*b*) Diver ascends at regular rate of 1 ft. per sec. to surface.

(*c*) The diver comes inboard (climbing the ladder if one is in use) and is met with sufficient attendants to remove the necessary equipment to enable him to enter the recompression chamber in the shortest possible time consistent with safe handling.

(*d*) Diver is assisted into the recompression chamber and chamber door closed.

Note.—If adequate space and personnel are available an attendant diver should be ready in the chamber to assist the diver's entry and attend him during his subsequent decompression.

(*e*) The chamber is pressurized to the equivalent pressure of the diver's first stop (if he had remained in the water) plus 30 feet—this depth to be known as " chamber bottom ".

(*f*) The compression chamber is kept at chamber bottom for 5 minutes.

(*g*) Decompression is then carried out for a dive of 10 minutes longer than the one actually performed. (Total time of dive for decompression=Time from leaving surface to time from leaving real bottom plus 10 minutes). Ascent to first stop is to take one minute which is to be included in the time spent at that stop.

3. *Conditions.*—The conditions which must be satisfied when using this procedure are as follows—

(*a*) A recompression chamber with an equivalent working pressure at least equal to the diver's 1st stop plus 30 feet must be immediately available and, sufficiently accessible to the diver to ensure that the requirement in (*c*) below can be met.

(*b*) Air supply arrangements to the chamber must be adequate for pressurization in the time required by (*c*), and subsequent ventilation during decompression.

(*c*) Total time from sea bed to 1st stop + 30 feet should not exceed 5 minutes. An adequate, well drilled, smoothly functioning team are essential to ensure this.

(*d*) The time for the dive added to the 10 minute increment must be such that decompression is completed within the limits of Table I.

4. In effect, this method of surface decompression can be used for any dive that is, at least 10 minutes shorter than the limits of duration of Table I.

5. *Use of Oxygen.*—The use of oxygen to accelerate decompression using the new procedure has not been tested. No attempt should therefore be made to reduce Table I. stoppage times by the use of oxygen until trials have been conducted and instructions issued.

6. Admiralty has advised that paragraphs 0319 and 0320 of B.R. 155 (C) will be amended in due course.

(DW 1624/11/3.)

UNCLASSIFIED.

457.—Alteration and Addition Item—Aircraft Carrier, H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE—

Class List Item No. 128. *Classification* " *A* ".

Item: " To revise the Main Exchange Telephones in accordance with Schedule D.N.E. 1/c 196 M7 ".

References:

(*a*) Navy Office Letter No. C.590 dated 15th May, 1959.

(*b*) FOICEA memorandum N20/14/41 dated 16th October, 1959.

(DCNTS 1213/52/69.)

UNCLASSIFIED.

458.—Alteration and Addition Item—Boom Defence Vessels.

The following alteration and addition item is approved for H.M.A.S. KIMBLA—

Class List Item No. 131. *Classification* " *A* ".

Item: " To replace the existing 10 K.W. diesel generator with a 25 K.W. diesel generating set and control panel in accordance with Navy Office Drawings numbers 213/282 and B.V. 1281, and Garden Island Drawing 538/212 ".

References:

(*a*) H.M.A.S. KIMBLA's proposed alteration and addition item, temporary distinguishing letter " A ".

(*b*) FOICEA memorandum of 5th March, 1959.

(*c*) Navy Office letter No. 62758 of 28th May, 1959.

(*d*) FOICEA memorandum N20/12/15 of 13th January, 1960.

Note: This item is not applicable to H.M.A. ships KANGAROO, KOALA, KARANGI and KOOKABURRA.

(DCNTS 1232/57/14.)

UNCLASSIFIED.

459.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 36. *Classification* " *A* ".

Item: " To fit the following sound power telephone lines—

(*a*) from wheelhouse—to tiller flat T.C.B. direct;

(*b*) from engineer's workshop—to " A " engine room T.C.B.;

(*c*) from forward air conditioning and refrigeration machinery compartment—to " A " engine room T.C.B. compartment;

(*d*) from forward switchboard T.C.B.—to electricians workshop ".

References:

(*a*) H.M.A.S. VENDETTA's proposed alteration and addition item, temporary distinguishing letter " B ".

(*b*) FOICEA memorandum N20/23/59 of 24th March, 1959.

(*c*) Navy Office letters Nos. 62145 and 68817 of 19th May and 29th July, 1959.

(*d*) GMWD memorandum 238/63/31 (1496) of 18th June, 1959.

(*e*) FOICEA memorandum N20/23/59 of 22nd March, 1960.

(DCNTS 1215/57/23.)

UNCLASSIFIED.

460.—Naval Stores (General) (Class B, Group 9, Part G)—Aluminium Rivets to Spec. AA54S–O—Introduction of Additional Sizes.

(*A.F.O.* 736/1960.)

It has been decided to introduce into the Rate Book and Authorized List of Naval Stores (B.R. 810) under class B, group 9 (G), the following additional sizes of aluminium rivets—

Rivets, Aluminium—To Spec. AA54S–O.

Pattern No.	*Description.*	*Diameter. ins.*	*Length under Head. ins.*	*Denomination of Quantity.*
14795	Pan head, straight neck ..	$\frac{1}{8}$	$\frac{1}{4}$	lb.
14796	Pan head, straight neck ..	$\frac{3}{16}$	$\frac{1}{4}$	lb.
14797	Pan head, straight neck ..	$\frac{3}{16}$	$\frac{5}{16}$	lb.

2. Admiralty has advised that the relevant publications will be amended.

(DNAS 506/51/38.)

UNCLASSIFIED.

461.—Naval Stores (General) (Class B, Group 10, Part D)—Ashbowls, Pattern 12129—Revised Allowances—H.M.A. Ships.

(*A.F.O.* 2012/59.)

The allowances of ashbowls, pattern B10D/12129 have been revised and are now as follows—

Carriers	72 No.
Destroyers (Daring Class)	16 No.
Destroyers (Other Classes)	14 No.
Frigates (Type 12)	16 No.
Frigates (Other Classes)	10 No.
Survey Vessels	10 No.

2. Demands should be lodged by H.M.A. ships concerned with the appropriate (Suptg.) Naval Store Officer to complete to the above allowances. Supply to ships under construction or restoring after conversion, &c., will be arranged by the respective storing yard in the normal manner.

(DNAS 506/61/22.)

UNCLASSIFIED.

462.—Planned Maintenance—Dockyard Component.

Instances have occurred of equipments being taken in hand for planned maintenance by dockyards with undisclosed major defects outstanding. These defects may cause an abnormal increase in the cost of overhaul. Ships officers are to ensure that all known defects are reported in accordance with current instructions, notwithstanding the fact that the equipment is coming into hand for complete overhaul.

(DCNTS 1209/51/2.)

UNCLASSIFIED.

463.—Presentations, Relics and Trophies in Tenders and Services—Use of Form A.S. 146.

It has been reported that the provisions of A.B.R. 4, article 2201 (*b*), which provide, *inter alia*, that " tenders or services concerned should also maintain a record of all items held on forms A.S. 146 which should be inserted in the tender's or service's copy of the Inventory Account " are not being complied with in certain cases.

2. Inventory Accounts are to be checked and forms A.S. 146 raised as necessary.

(DNAS 37/51/64.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

464.—Books—B.R. 1636, Interservice Catalogue of Electric Components.

Holders of the undermentioned documents will arrange disposal in accordance with paragraph 2513 (B) of A.B.R. 4—

R.C.C. 1, Issue No. 1, May, 1947—(Including Errata).
R.C.C. 3, Issue No. 1, September, 1947.
R.C.C. 14, Issue No. 2, April, 1951.

(DNAS 465/52/251.)

UNCLASSIFIED.

465.—Forms A.S. 376Z—Polar Diagram Forms for Use at Communication Positions.

Form A.S. 376Z has been introduced for use at the operating positions of V-UHF radio nets.

2. Completed forms give ten horizontal polar diagrams of V-UHF aerials thus showing an operator any directional limitations of a net using a particular aerial.

3. Forms are completed by copying the horizontal polar diagrams from the master copies of forms A.S. 376Y held in the Radio Equipment Log.

4. An initial issue of twenty forms to each ship, will be effected without demand.

(DNAS 464/54/150.)

UNCLASSIFIED.

466.—Form A.S. 548a—Navigating Officer's Note Book—Misuse of.

Attention is drawn to the continual misuse of form A.S. 548a—Navigating Officer's Note Book. As its title implies the book is specially designed for the use of Navigating Officers, and should not be used indiscriminately in the Service.

2. Two sizes of Commonwealth of Australia note books are available from the Superintending Naval and Air Store Officer, Sydney and these should be used as general purpose note books. The smaller book contains 48 leaves and measures 6½-in. x 4-in., while the large size measures 8-in. x 5-in. and contains 96 leaves.

(DNAS 464/54/205.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
15th June, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

467.—Books—Distribution of Non-accountable Publications During April, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series, contained in the appendix to this Order, have been distributed to ships and services during April, 1960. Section 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments referred to in the appendix to this order are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	5th February, 1960.
Aeroplane	12th February, 1960.
Aeroplane	19th February, 1960.
Aeroplane	26th February, 1960.
Aeroplane	4th March, 1960.
Aircraft	Volume 39, No. 7, April, 1960.
Commonwealth Naval Ship—Shore Organization and A Guide to Optimum Frequencies (S.7/60)	Supplement, May, June, July, 1960.
Flight	5th February, 1960.
Flight	12th February, 1960.
Flight	19th February, 1960.
Flight	26th February, 1960.
Flight	4th March, 1960.
Journal of the Royal Naval Medical Service	Volume XLV., No. 4, Autumn, 1959.
Lloyd's Rules and Regulations for the Construction and Classification of Steel Ships, 1959	Notice No. 2153.
Manual of A.B.C. Supply Classification Cataloguing in Australia	Amendment No. 4.
Manual of the Audit Act and Treasury Regulations	Issue No. 24 dated 24th January, 1960, Pages 1–5.
Manual of the Audit Act and Treasury Regulations	Issue No. 25 dated 10th February, 1960. Pages 1–3.
Manual of the Audit Act and Treasury Regulations	Issue No. 26 dated 10th February, 1960. Pages 1–7.
Missiles and Rockets—Magazine of World Astronautics	8th February, 1960.
Missiles and Rockets—Magazine of World Astronautics	15th February, 1960.
Missiles and Rockets—Magazine of World Astronautics	22nd February, 1960.
Missiles and Rockets—Magazine of World Astronautics	29th February, 1960.
N.A.M.A.N.	N2052–N2064.
Post Office Guide	Supplement No. 55, January, 1960.
Post Office Guide	Supplement No. 56, February, 1960.
Post Office Guide	Supplement No. 57, March, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
ATP. 10	Correction No. 1.
B.R. 70, 1959 Edition	December Supplement.
B.R. 125, Volume 1, 1959–60	Supplement No. 8, February, 1960.
B.R. 125, Volume 1, 1959–60	New Entries No. 8, February, 1960.
B.R. 129 (3) (2), 5th Edition	Supplement No. 8.
B.R. 129 (4) (1), 17th Edition	Supplements Nos. 1 and 2.
B.R. 129 (4) (2), 17th Edition	Supplements Nos. 1 and 2.
B.R. 209	Amendment No. 2.
B.R. 227 (1)	2.
B.R. 227 (7)	2.
B.R. 227 (9)	2.
B.R. 227 (10)	2.
B.R. 227 (11)	1.
B.R. 333 (1)	12.
B.R. 333 (2)	56.
B.R. 664	36.
B.R. 674	Chapter 11.
B,R. 763	Supplement No. 2 to the Preface.
B.R. 763, Volume I., 6th Edition	Supplement No. 2.
B.R. 763, Volume III., 6th Edition	Supplement No. 2.
B.R. 1077	Amendment No. 12.
B.R. 1077	Erratum to A.F.O. (P) 359/59 (Amendment No. 12).
B.R. 1152/58	Amendment No. 2.
B.R. 1557 (2) A	3.
B.R. 1557 (2) B	3.
B.R. 1644 (2) (A)	2.
B.R. 1644 (2) (D)	1.
B.R. 1692	70.
B.R. 1837 (7), Division J, Introduction	18.
B.R. 1837 (8), Division M, Introduction	18.
B.R. 1837 (8), Division M, Section MB	9.
B.R. 1837 (8), Division M, Section MC	9.
B.R. 1837 (8), Division M, Section MD	8.
B.R. 1837 (8), Division M, Section ME	7.
B.R. 1837 (8), Division M, Section ML	10.
B.R. 1837 (8), Division M, Section MR	11.
B.R. 1837 (8), Division M, Section MZ	7.
B.R. 1891	17.
B.R. 1917 (S)	3.
B.R. 1925	10.
B.R. 1943/58	2.
B.R. 1950	44, 45.
B.R. 1991/59	1.
B.R. 2050 (653)	1.
B.R. 2050 (656)	1.
B.R. 2065 (7)	5.
B.R. 2065 (9)	3.
B.R. 2101 (1)	9.
B.R. 2101 (3)	8.
B.R. 2101 (4)	6.
B.R. 2101 (5)	10.
B.R. 2105	2.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
R.N. Supplement No. 1 to A.C.P. 129	S.C. 8/60, Correction No. 3.
B.R. 1971	S.C. 9/60, Correction No. 9.
B.R. 1978	S.C. 4/60, Correction No. 8.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
1086, Book 12, Part 1 (2nd Edition)	A.L. 170, 171, 172, 173, 174 and 175.
1086, Book 12, Part 2 (2nd Edition)	A.L. 1, 2, 3, 4, 5, 6, 7, 8 and 9.
1455	(A.L. 272)–P.12 (Issue 2) (A.L. 271)–P.21 (Issue 4) (A.L. 270)–Q.3 (Issue 1) (A.L. 266)–Q.4 (Issue 1) (A.L. 268)–Q.5 (Issue 2) (A.L. 269)–Q.6 (Issue 5) S.15 (Issue 5).
2533C, Vol. 2, Part 1	Mod. No. Radio/RAN. 8 (Feb., 1960) Mod. No. Radio/RAN. 11 (Feb., 1960).
4303C, Vol. 2	RAN/1 (Issue 2) (Feburary, 1960).
4360C, Vol. 1	A.L. 32 and 33.
4360C, Vol. 2	B.22.
4401, Vol. 2	A.L. 1.
4487A, Vol. 2	RAN/7 (March, 1960) RAN/8 (February, 1960) RAN/9 (A.L. 1) (March, 1960) RAN/44 (March, 1960).
4487B, Vol. 2	RAN/7 (March, 1960) RAN/8 (February, 1960) RAN/9 (A.L. 1) (March, 1960) RAN/44 (March, 1960).
A.P. (N) 377	A.L. (RAN) 27.
A.P. (N) 378	A.L. (RAN) 25.
A.P. (RAN) 140 (2nd Edition)	A.L. 7.
A.P. (RAN) 400 (G.A.)	A.L. 3.
A.P. (RAN) 400 (V.A.) (2nd Edition)	A.L. 3.
A.M.P. 326C (Issue 6)	
R.A.N.A.M.O. Engines General	STI/Propeller/RAN.3 (February, 1960).
R.A.N.A.M.O. Gannet	A.24 (January, 1960) R.5 (February, 1960) STI/RAN/69 (Issue 2) (February, 1960) STI/RAN/77 (Issue 2) (February, 1960) STI/RAN/79 (Issue 2) (March, 1960) SI/RAN/31 (February, 1960) SI/RAN/33 (February, 1960).
R.A.N.A.M.O. General	A.L. 14 I.2 (Issue 4) (February, 1960) I.46 (Issue 2) (February, 1960) I.51 (February, 1960) I.52 (March, 1906) STI/RAN/3 (February, 1960) STI/RAA/RAN/34 (March, 1960).
R.A.N.A.M.O. Ghost	No. 9 (January, 1960) SI/RAN/5 (February, 1960).

AMENDMENTS TO AIR PUBLICATIONS.—*continued.*

A.P. No.	*A.L. or Leaflet.*
R.A.N.A.M.O. Goblin	No. 3 (March, 1960).
R.A.N.A.M.O. Leonides	SI/RAN/4 (February, 1960).
R.A.N.A.M.O. Sea Venom	A.27 (Issue 2) (March, 1960) A.41 (February, 1960) STI/RAN/72 (February, 1960) STI/RAN/73 (February, 1960) STI/RAN/76 (March, 1960) SI/RAN/27 (February, 1960).
R.A.N.A.M.O. Vampire Trainer	C.1 (Issue 4) (March, 1960) STI/RAN/45 (Issue 2) (February, 1960) STI/RAN/47 (March, 1960) SI/RAN/20 (March, 1960).
Alvis Leonides Modification Bulletins	Explanatory Sheet (January, 1960) Index Issue 12 (January, 1960) (4th Edition) Index Issue 14 (January, 1960) (4th Edition) No. 115 (Mod.) (120) (January, 1960) (2nd Edition) No. 263 (Service) (26) (January, 1960) (3rd Edition) No. 428 (Mod.) (280) (January, 1960) (4th Edition) No. 483 (Mod.) (398) (January, 1960) (4th Edition) No. 504 (Mod.) (422) (January, 1960) (4th Edition) No. 508 (Mod.) (413) (January, 1960) (4th Edition) No. 514 (Mod.) (425) (January, 1960) (4th Edition) No. 515 (Mod.) (426) (January, 1960) (4th Edition) No. 524 (Service) (61) (January, 1960) (4th Edition).
Aviation Studies (International) Ltd.	Replacement Sheets dated February, 1960 (with Binder) to Armament Data Sheets.
D.C.A. Aeronautical Information Circulars	1/1960 2/1960 4/1960.
D.C.A. Aeronautical Information Publications	C.O.M. A.L. 27.
Sperry Field Service Bulletins	No. 13A (15.10.59), Electric Gyro Horizon, Type H.L. 5 No. 58 (31.8.59), Gyrosyn Compass, Type C.L. 1/1A No. 59 (5.8.59), Gyrosyn Compass, Type C.L. 1/1A No. 85 (31.8.59), Gyrosyn Compass, Type C.L. 2 No. 86 (5.8.59), Gyrosyn Compass, Type C.L. 2.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Standardization Design Memorandum Leaflets	No. 5 (Issue 3) No. 20 (Issue 3) No. 32 (Issue 3) (Cancellation) No. 148 (Issue 3) No. 152 (Issue 2) No. 256 (Issue 3) (Correction) No. 310 (Issue 1).
A.A.P. No. 2, Group F, Section 3 (12th Edition)	Sub A.L. 57 (A.L. 10625).
A.A.P. No. 2, Group F, Section 14H (12th Edition)	Sub A.L. 56 (A.L. 10837).
A.A.P. No. 2, Group G, Section 5A, Vol. 3 (4th Edition)	Sub A.L. 23 (A.L. 10762).
A.A.P. No. 2, Group G, Section 5C (13th Edition)	Sub A.L. 40 (A.L. 10718).
A.A.P. No. 2, Group G, Section 6A (13th Edition)	Sub A.L. 45 (A.L. 10728).
A.A.P. No. 2, Group G, Section 6D (8th Edition)	Sub A.L. 38 (A.L. 10745).
A.A.P. No. 2, Group G, Section 6F (6th Edition)	Sub A.L. 22 (A.L. 10744).
A.A.P. No. 2, Group H, Section 28C (7th Edition)	Sub A.L. 32 (A.L. 10642) Sub A.L. 33 (A.L. 10824).
A.A.P. No. 2, Group H, Section 128F, Vol. 1 (3rd Edition)	Sub A.L. 40 (A.L. 10643) Sub A.L. 41 (A.L. 10836).
A.A.P. No. 2, Group H, Section 128F, Vol. 2 (3rd Edition)	Sub A.L. 37 (A.L. 10645).
A.A.P. No. 2, Group H, Section 128F, Vol. 2A (3rd Edition)	Sub. A.L. 23 (A.L. 10644) Sub A.L. 24 (A.L. 10833) Sub A.L. 25 (A.L. 10861).
A.A.P. No. 2, Group H, Section 128F, Vol. 4 (3rd Edition)	Sub A.L. 31 (A.L. 10635).
A.A.P. No. 2, Group H, Section 128F, Vol. 5 (3rd Edition)	Sub A.L. 26 (A.L. 10636).
A.A.P. No. 2, Group J, Section 12A (7th Edition)	Sub A.L. 38 (A.L. 10538).
A.A.P. No. 2, Group K, Section 4 (16th Edition)	Sub A.L. 66 (A.L. 10953).
A.A.P. No. 2, Group T, Section 27A (7th Edition)	Sub A.L. 25 (A.L. 10862).
A.A.P. No. 2, Group T, Section 27D (8th Edition)	Sub A.L. 24 (A.L. 10621).
A.A.P. No. 2, Group T, Section 27H (8th Edition)	Sub A.L. 29 (A.L. 10604). Sub A.L. 30 (A.L. 10692) Sub A.L. 31 (A.L. 10802).
A.A.P. No. 2, Group T, Section 32C (11th Edition)	Sub A.L. 23 (A.L. 10696).
A.A.P. No. 2, Group Y, Section 10A (8th Edition)	Sub A.L. 43 (A.L. 10533).
A.A.P. No. 2, Group Y, Section 10C (7th Edition)	Sub A.L. 39 (A.L. 10509).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group Y, Section 10E (11th Edition)	Sub A.L. 38 (A.L. 10823).
A.A.P. No. 2, Group Y, Section 110D, Vol. 1 (4th Edition)	Sub A.L. 45 (A.L. 10750).
A.A.P. No. 2, Group Y, Section 110SB (6th Edition)	Sub A.L. 23 (A.L. 10722).
A.A.P. 702.1, Part 1, Section 1	A.L. 88.
A.A.P. 716.30, Vol. 3, Part 1	A.L. 6.
A.A.P. 717.00, Vol. 2, Part 2	A.L. 26.
A.A.P. 721.79, Vol. 2, Part 1	A.L. 14.
A.A.P. 721.79, Vol. 2, Part 2	A.L. 167, 169, 170, 171, 172, 173, 174, 175, 177 and 178.
A.A.P. 742.20, Vol. 3, Part 1 (2nd Edition)	A.L. 7.
A.A.P. 750.00, Vol. 2, Part 1	A.L. 52, 53, 54, 55, 56, 57, 58 and 59.
A.A.P. 750.00, Vol. 2, Part 2	A.L. 124, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137 and 138.
A.A.P. 750.01, Vol. 3, Part 1	A.L. 14.
A.A.P. 752.24, Vol. 3, Part 1	A.L. 2.
A.A.P. 753.20, Vol. 3, Part 1	A.L. 2.
R.A.F. Flight Information Publication Catalogue of Charts Terminal Approach Procedure	A.L. 13.
R.A.F. Flight Information Publication Terminal Approach Procedure Charts Far East Area, High and Low Altitudes	A.L. 9 to T.A.P. Check List (31.10.59).
R.A.A.F. Special Technical Instructions ..	Ammunition and Explosives/15 Ammunition and Explosives /16 Bombing Equipment/12 Dakota/6 Escape Facility/20 Escape Facility/21 Fuel Equipment /5 Fuels and Lubricants/12 Goblin/19 Gunnery Equipment/10 Gunnery Equipment/11 Helicopter/26 Rocket Equipment/8 Vampire/30 Vampire/32 Vampire/33 Vampire/34 Winjeel/19.
R.A.A.F. Summary of Defects	Serial No. 4–1959, Quarter ending 30.11.59.
Air Diagrams	S.R. 1407/N.B. (Issue 2) S.R. 1408/N.B. S.R. 1409/N.B.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

Lloyds Shipping Index	28th March, 1960.
Lloyds Shipping Index	11th April, 1960.
Lloyds Shipping Index	18th April, 1960.
Lloyds Shipping Index	25th April, 1960.

(DNAS 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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C.N.O.'s 468-481/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
20th June, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

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CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED.

468.—Absentees on Sailing—Accounting Procedure.

The following procedure is to be followed by all H.M.A. ships on ratings being discharged absent on sailing, and on subsequent recovery—

(*a*) *Absent on sailing.* The rating's ship is to—

(i) Report by signal all details of absentee to the local Naval Authority, and in the case of tenders, repeated to parent ship.

(ii) Inform Director of Navy Accounts by signal of allotments to be suspended (A.B.R. 18, article 0213, clause 5).

(iii) Check rating to absence.

(iv) Ships carrying accounts are to retain Pay Account Cards and Certificates of Service.

(*b*) *Absentee reporting from absence to other than own ship*—

(i) Recovering ship is to inform rating's ship and the local authority to whom absence was first reported.

(ii) Rating's ship is to make the necessary signal to the Director of Navy Accounts lifting the allotment suspension (A.B.R. 18, article 0213, clause 5) and raise an amended check sheet checking him to ship or establishment in which he is recovered.

(iii) If it is obvious that he cannot rejoin his own ship immediately the receiving ship is to request disposal particulars of rating, Pay Account Card and Certificate of Service, from the rating's ship.

(*c*) *On expiration of seven days from date of absence*—

(i) The rating's ship is to take action in accordance with A.B.R. 18, article 0213.

(ii) The Pay Account Card and statement of account and Certificate of Service are to be forwarded to the Director of Navy Accounts.

(iii) Certificates of Service of ratings who desert from ships based on Sydney are to be forwarded to H.M.A.S. PENGUIN. All other Certificates of Service are to be forwarded to Navy Office.

2. Warrants for arrest are to be issued in accordance with Navy Order 901 of 1959.

3. A.B.R. 18, Manual of Instructions for the Pay Accounting System—will be amended.

(DNA 201/53/6.)

(*Navy Order* 901 *of* 1959.)

UNCLASSIFIED.

469.—Courses in Moral Leadership.

The programme of courses in Moral Leadership as contained in the appendix to Navy Order 189 of 1960 is to be amended as follows:—

(*a*) *Delete* " For men (15 from Navy, 25 from Army) at either 5R.D., Randwick or North Head ".

Insert " For men (15 from Navy, 25 from Army) at either Area Command, Bundock Street, Randwick or North Head ".

(*b*) Against course number's 35, 36 and 37—
Delete " Naval Board ".
Insert " C.S.T., F.N.D.".

(HPB 323/1/2.)

(*Navy Order* 189 *of* 1960.)

UNCLASSIFIED.

470.—Fees Payable to Medical Practitioners.

The scale set out in Appendix " A " to this order, lays down the maximum rates of payment of fees to medical practitioners both general practitioners and specialists, under agreement with the Department, in respect of medical examination and treatment of Naval Personnel.

2. Where the treatment, &c., is by a District or Port Division Naval Medical Officer or by a practitioner with whom the Department has reached agreement as to fees for services covered in the scale, the agreed fees are the fees which should be met. Where there is a dispute as to the fees payable in these circumstances, the matter should be referred to Navy Office.

3. Where treatment, &c., is necessary and a District or Port Division Naval Medical Officer is not available, agreement with a medical practitioner as to the fee payable should be settled prior to treatment having regard to rates in the approved scale, but if circumstances do not permit prior agreement as to fees, and the fee claimed is in excess of the scale, the matter should be referred to Navy Office.

4. Where specialist treatment is required and is not available from Service sources, the fees payable will be those specified in the scale hereunder. In this respect there would normally be time in which to negotiate with the specialist, and with more than one specialist, if necessary, as to the fee payable. Where, however, it has not been possible to arrange specialist services at fees in accordance with the scale, or where a specialist service not provided for in the scale is given, the full circumstances are to be reported to Navy Office.

5. In each case where it is necessary to refer a claim to Navy Office, the full circumstances are to be advised, including comments of the Medical Officer as to the reasonableness or otherwise of the fees charged, taking into account the services rendered by the practitioner.

6. In order to observe the strictest possible economies in the services of civilian practitioners, members, particularly those on leave or otherwise living out, are to be informed of the correct procedure requiring them to seek medical attention only from the proper source and through the appropriate channels.

7. Where without sufficient reason, a member has not adhered to the correct procedure he will be required to meet all medical costs in excess of those which would have been incurred as a Service responsibility.

8. Medical records are to be sufficiently comprehensive to enable a Medical Officer to furnish an independent certificate of correctness of the service rendered and at the same time exercise a check on claims passed by him. In all cases of personnel who have been treated whilst sick-on-shore, the Daily Medical Record Book —form A.M. 209z—is to be the basis of such record and check. With this object in view, the entries made therein should be comprehensive as to information and dates. Prescribed procedure in regard to preparation of the form in cases of sickness arising

in the ship or establishment and the provision in Consolidated Orders and Regulations regarding the necessity for prompt notification to the Commanding Officer by members sick-on-shore should ensure that the medical officer's record will enable him to furnish a certificate from his own records in the majority of cases.

9. It will perhaps occur that, due to failure of a member sick-on-shore to furnish the details required or for other reasons, form A.M. 209z will not have been completed to support a claim for (say) ambulance hire, received by the Medical Officer for scrutiny. In such cases, the medical record should be completed by a supplementary entry as of a specific date as necessary, after interrogation of the member and requisite inquiry, prior to the passing of the claim.

10. In this regard, it will be necessary for Commanding Officers of ships in which a Medical Officer is not borne to ensure that full information is supplied in all cases to the parent ship so that claims, when received, can be dealt with with a minimum of delay.

11. To obviate the possibility of a further claim received for the same service being passed, appropriate notation against the relevant entry in form A.M. 209z will be made by the Medical Officer after verification of the service covered by the claim and prior to completion of certificate of correctness thereon.

12. To enable this to be done, the Medical Officer will have before him, at the same time, the verified claim for his certificate, and form A.M. 209z showing the relevant entry to be endorsed as requisite as regards passing of the claim.

APPENDIX A.

Item.	*Nature of Service.*	*Fee.*
(i)	*Medical Boards*—	
	(*a*) General practitioners including District and Port Division Naval Medical Officers—Attendance as a member of a Medical Board—for each attendance irrespective of the number of persons examined by the Board	£2 12s. 6d. for attendance up to 1 hour with an additional 15s. 9d. for each subsequent half-hour provided the extra attendance is for a period of at least 15 minutes
	(*b*) *Specialists*—Attendance as a member of a Medical Board—for each attendance irrespective of the number of persons examined by the Board	£3 3s. for attendance up to 1 hour, with an additional £1 1s. for each subsequent half-hour provided the extra attendance is for a period of at least 15 minutes
(ii)	Attendance as a specialist at Service Head-quarters, or Head-quarters of a Command or Area—for each attendance	As for item (i) (*b*)
(iii)	Attendance as a specialist at a Service medical establishment — for each attendance	As for item (i) (*b*)

APPENDIX "A"—*continued.*

Item.	*Nature of Service.*	*Fee.*
(iv)	Attendance as a specialist in his professional rooms, on Departmental request, including medical examination of member and preparation of a written report of the examination or the issue of a certificate	£ s. d. First visit .. .. 3 3 0 Subsequent visits .. 2 2 0
(v)	*X-ray Examinations—* (*a*) Where interpretation of film is carried out by Service medical authority (*b*) Where the examining medical officer is required to interpret the film and submit a written report (*c*) Interpretation of film and submission of a written report thereon (each film to be considered as a separate examination)	15s. per film, provided that such rate is not applied for mass X-ray films As per Appendix B 15s. per film up to a maximum of four films. When the number of films interpreted at any one period (including mass X-ray) exceeds four films, payment is to be made on a sessional basis as follows— £ s. d. One hour .. 3 3 0 Two hours .. 4 4 0 Three hours .. 5 5 0 Four hours .. 6 6 0
(vi)	Attendance conducting medical examination for appointment to or enlistment in the Forces, or on medical duty at a drill hall, camp or depot, or course of instruction, bivouac, &c.	£ s. d. 1 member .. .. 1 11 6 2 members .. .. 2 2 0 3 members .. .. 2 12 6 Where more than 3 members are examined at any one time the practitioner will be paid a fee calculated on a sessional basis £2 12s. 6d. for attendance up to 1 hour, with an additional 15s. 9d. for each subsequent half-hour, provided the extra attendance is for a period of at least 15 minutes. Practitioners engaged on a sessional basis at Combined Recruiting Depots will be paid sessional rates regardless of the number of recruits examined.

APPENDIX "A"—*continued.*

Item.	*Nature of Service.*	*Fee.*
(vii)	Medical examination of candidates for enlistment where the examination cannot be performed at a Service depot and has to be conducted at the practitioner's surgery	As for item (vi)
(viii)	Special medical examination of a member involving a written report of the examination	£ s. d. 1 1 0
(ix)	*Domiciliary Treatment of a Member—* (*a*) Per visit to practitioner's surgery (*b*) Per visit by practitioner to member's home	£ s. d. 0 12 6 0 15 0

2. Mileage allowances are to be calculated at the rate of 2s. 6d. for each half mile (one way only) beyond a radius of 3 miles from the practitioner's surgery and will apply in all cases whether involving city or country journeys, but are not payable to District or Port Division Naval Medical Officers attending naval establishments in the normal course of their duties.

APPENDIX B.

SCHEDULE OF X-RAY FEES.

	Approved Fees. (Maximum.) £ s. d.
1. Alimentary Tract	6 11 6
2. Alimentary Tract and Gall Bladder	9 4 0
3. Ankle	3 1 6
4. Chest—Screen and Film	3 1 6
5. Chest—Screen and Stereo	3 14 6
6. Colon—Barium Enema	5 14 0
7. Digits	1 19 6
8. Dental—Minimum	0 18 6
Full Mouth	4 12 0
9. Elbow	3 1 6
10. Eye	3 1 6
11. Localization	4 12 0
12. Forearm	3 1 6
13. Foot	2 17 0
14. Gall Bladder—Cholecystography	4 12 0
15. Hand	2 8 0
16. Hip (one)	3 1 6
(both)	3 14 6

APPENDIX " B "—*continued.*

	Approved Fees. (Maximum.) £	s.	d.
17. Knee (one)	3	1	6
(both)	3	14	6
18. Leg	3	1	6
19. Mandible	3	1	6
20. Maxilla	3	1	6
21. Mastoid	3	14	6
(with Stenvers Projections)	3	14	6
(Stereo)	3	14	6
22. Nasal Sinuses	3	1	6
(full series)	4	12	0
23. Oesophagus	3	14	6
24. Pelvis	3	14	6
25. Pituitary Fossa	3	1	6
26. Ribs	3	1	6
27. Sacrum or Coccyx	3	14	6
28 Shoulder	3	1	6
29. Skull (lateral stereo only)	3	14	6
(full series)	4	12	0
30. Spine—Cervical	3	14	6
Thoracic	3	14	6
Lumbar	3	14	6
Lumbo-sacral	5	1	0
Complete	9	4	0
31. Thigh	3	1	6
32. Urinary Tract	3	14	6
Urinary Tract and Pyelogram	6	11	6
Urinary Tract and Urography	6	11	6
33. Wrist	3	1	6

(MDG 327/251/11.)

UNCLASSIFIED.

471.—Operation of New Design Combustion Equipment—Engineer Officers' Responsibilities.

The combustion equipment fitted to the boilers of H.M.A.S. MELBOURNE and being fitted in the new A/S Frigates Type 12 is of the " suspended flame " type. This equipment is more accurately made and better finished than that fitted in other H.M.A. ships It relies upon correct operation and maintenance for its much improved performance.

2. It is the responsibility of the Engineer Officers of ships fitted with this equipment, that all officers and ratings having charge of this improved type of equipment are thoroughly familiar with its detailed operation, and are also aware of all precautions necessary for its safe handling, referring as necessary to the handbooks issued to ships concerned.

3. Attention is drawn to B.R. 16 (50), Engineering Manual, article 448.

(DCNTS 1213/201/10.)

UNCLASSIFIED.

472.—S.L. Aircrew Officers—Extension of Service and Permanent Commissions.

Owing to the rundown of the Fleet Air Arm, it is unlikely that any further extensions of service or awards of permanent commissions, under the terms of Navy Order 863 of 1958 (paragraphs 21, 22 and 23) will be offered.

(DOA 303/201/5.)

(*Navy Order* 863 *of* 1958.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

473.—Radar—Type 944 (1) and Type 944 (2)—Loss of Power in Transmitter-Receiver RT—194A/UPX-1.

A report has been received of a defect in transmitter-receiver RT-194A/UPX-1 which caused a drop in R.F. output power. Normal testing procedures failed to reveal the reason for the loss of power.

2. The defect was found to be in the R.F. head sub-assembly (Z.212). When opened for inspection it was found that the plating in V201 cavity had deteriorated, was beginning to lift and showed signs of corrosion. There was evidence of burning on the rough edges from corona discharge.

3. The remedial action to be taken by ships suffering from this defect should be confined to cleaning V201 cavity with a soft cloth and carbon tetrachloride. Abrasives are not to be used.

(DEE 1213/52/141.)

RESTRICTED.

474.—Ballistics—List of Range Tables, Fuze Scales and Trajectory Charts.

Navy Order 251 of 1960 is to be amended as follows—

Page 7—

(*a*) Range tables 369, 370 and 371, column 8—
Amend: " F.C.B. Marks 2, 2*, 6, 6* Mark 8* ".
To read: " F.C.B. Marks 2, 2*, 6, 6* M, 8*."

(*b*) Range table 497, column 8—
Insert: " F.P.S. Mark 1."

(*c*) D.N.O. 10, column 9—
After: " (Spiral rails) ".
Add: " All ships fitted ".

Page 11—

Delete: " 342 6-in. Mark 23 ", and all other reference in columns 3 and 4.

(DW 700/70/13.)

(*Navy Order* 251 *of* 1960.)

UNCLASSIFIED.

475.—Gun Mountings—4.5-in., Mark 6 and 6* Mountings—Modification No. 89—4.5-in., Mark 6* Mod. 1 Mountings—Modification No. 30 —Access to Rammer Throttling Plugs.

(*A.F.O.* 2731/1959.)

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Types and marks of mountings*	4.5-in. R.P. 41, marks 6, 6* and 6* mod. 1 mountings.
(*c*) *Part of mounting affected*	Rammer cylinder guard cover (item 5/N.36322).
(*d*) *Purpose of modification* ..	To provide an easier access to the throttling plug at the forward end of the rammer cylinder.
(*e*) *Nature of modification* ..	A 4-in. square hole to be cut in the rammer cylinder guard cover and an access plate and joint to be made and fitted. The access plate is to be secured by 4 in No. ⅜-in. dia. whit., hexagon head, steel screws.
(*f*) *Drawing or diagram* ..	Drawing number N.36322, sheets 1 and 2.
(*g*) *By whom to be done* ..	Ship's staff with dockyard assistance if necessary.
(*h*) *When to be done* ..	At first convenient opportunity. Authorities should report on completion.

(DW 736/59/38.)

UNCLASSIFIED.

476.—Gun Mountings—4.5-in. R.P. 41, Mark 6 Series Mountings—Securing Arrangements of Tacho-Generator, Mark 1.

(*A.F.O.* 880/1960.)

Attention is drawn to the details of securing the tacho-generators when fitting replacement units.

2. The training unit is secured by 4 in No. ⅜-in. dia. bolts (Drawings N37328 and N37330 refer). In this case, the fitting of a replacement unit is a straightforward exchange.

3. The elevating unit, however, is secured by 2 in No. ⅜-in. dia. bolts and 2 in No. 0.5625-in. dia. fitted bolts to maintain the correct meshing location (Drawings N36597 Revised and N46104 refer). Replacement units therefore will require drilling and reaming to suit and the following procedure should be adopted—

(*a*) Line up the new tacho-generator in correct position and secure with 2 in No. ⅜-in. dia. bolts.

(*b*) Remove the 3 in No. bolts securing the bracket (N46104 item 1) and detach the bracket with tacho-generator for drilling and reaming to suit the fitted bolts.

(*c*) Assemble and secure bracket.

4. Admiralty has advised that B.R. 2014B will be amplified accordingly in due course.

(DW 736/59/60.)

UNCLASSIFIED.

477.—Starters A.C., Mark 6 AW Series for Metadyne in Various Gunnery Equipments—Identification.

(*A.F.O.* 973/1960.)

Starters manufactured by Messrs. Allen West Ltd. for use with gunnery equipment have in the past been allocated mark numbers in the mark 6AW series, according to the type of contactor fitted and to the internal circuit. In order to use certain of these starters in different applications, alterations have been made to the rating of the overload relays.

2. To avoid confusion between starters having the same mark number, but suitable for different services, it has been decided to extend the series to take into account the rating of the overload coil fitted, and the services for which the starter is to be used.

3. The new mark numbers are given in the table below. Ships and establishments are to amend their drawings and starter tallies accordingly.

4. Admiralty has advised that the relevant lists of spare gear contained in B.R. 226 (B) will be amended in due course.

Old Mark No.	*Drawing No.*	*Service.*	*Contactor Type.*	*Overload Coil Rating.*	*New Mark No.*
Mark 6AW	19891	Mark 7 FSM ..	MA 35	4.5 amps	Mark 6AW Mod. 0
Mark 6AW	19891	40-mm. Mark 5*	MA 35	5.6 amps	Mark 6AW Mod. 1
Mark 6* AW	19891	Mark 6* Director	MA 35	5.6 amps	Mark 6*AW Mod. 0
Mark 6*AW	108147	Mark 6* Director	A 31	5.6 amps	Mark 6*AW Mod. 1
Mark 6*AW	108147 Mod.	40-mm. Mark 5*	A 31	5.6 amps	Mark 6*AW Mod. 2
Mark 6**AW	121101	Mark 7 FSM ..	SCF	4.5 amps	Mark 6**AW Mod. 0
Mark 6**AW	121101	40-mm. Mark 5*	SCF	5.6 amps	Mark 6**AW Mod. 1
Mark 7AW	121904	Mark 7 FSM ..	SCF Modified	4.5 amps	Mark 7AW Mod. 0

Note.—The modification required to starter Mark 6*AW Mod. 1 to convert it to Mark 6*AW Mod. 2 is to short the contacts of the Interlocking Relay, 1R2.

(DW 736/52/47.)

RESTRICTED.

478.—A/S Weapons—A/S Mortar Mk. 10 Control Equipment Emergency Firing Supply—Failure Depth Setting Control Panel Mk. 2.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted; Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	A/S Mortar mk. 10.
(*c*) *Part of equipment affected*	Depth setting control panel mk. 2.
(*d*) *Purpose of modification* ..	To facilitate testing of the "Emergency" firing supply.

(*e*) *Nature of modification* .. Disconnect fuse " W " in the D.S.C. panel from the 60v bus and reconnect directly to the " live " side of fuse " P " in the 60v supply instead of through contactor " PR ". The " EMERGENCY FIRING " supply would then be shown as correct if the " SALVO " lamp burned when the " SAFE-TEST-FIRE " switch was put to " TEST " and the " NORMAL/EMERGENCY " switch to " EMERGENCY ".

(*f*) *Drawings* .. .. Relevant Key Diagrams.

(*g*) *By whom to be done* .. Ships staff and dockyards.

(*h*) *When to be done* .. At the earliest opportunity.

(*i*) *How to be recorded* .. As modification A.N.1. to depth setting control panel mk. 2 (assembly F).

(DW 707/51/2.)

UNCLASSIFIED.

479.—U.Q. 041 Charge, Cavity, Demolition 5-lb. RDX/TNT Mark 1—Withdrawal.

(*A.F.O.* 1076/1960.)

UQ 041 Charge, Cavity, Demolition 5-lb. RDX/TNT mark 1 is to be withdrawn from service, because the re-entrant angle forming the cavity charge is unsealed. This may result in the explosive being pinched and detonating if the charge is dropped on a hard surface. There is no risk if the charges are properly handled and in the approved package (box W.130).

2. H.M.A. ships are to return all charges held in their packages, to the nearest R.A.N. Armament Depot. If any charges are held on board loose, packages are to be drawn from an Armament Depot and the charges carefully packed in them before their return.

3. Armament Depots are to keep all charges pending the issue of disposal instructions. They are not to be transported except in their packages.

4. A further Navy Order will be issued when new design charges are available.

(DW 715/51/113.)

UNCLASSIFIED.

480.—Naval Stores (General) (Class B, Group 10, Part D)—Accounting—Re-classification of Certain Plugs.

(*A.F.O.* 799/1960.)

It has been decided that the accounting classification of the " spares " of the undermentioned items shall be changed from " permanent " to " consumable ". First outfit quantities will be as for permanent allowances.

Class/Group	*Pattern No.*	*Description.*
B10D	4198	Plug, hard black rubber $1\frac{3}{4}$-in. dia. at top fitted with ring and complete with 18-in. brass chromium plated chain ($\frac{9}{16}$-in. x 13 S.W.G.—brazed links) and eye bolt for securing to baths.
B10D	7895	Plug, hard black rubber $1\frac{1}{2}$-in. dia. at top fitted with ring and complete with $8\frac{1}{2}$-in. brass chromium plated chain ($\frac{9}{16}$-in. x 13 S.W.G.—brazed links) and eye bolt for securing to washbasins.
B10D	9185	Plug, hard black rubber $1\frac{3}{4}$-in. dia. at top fitted with ring and complete with 14-in. brass chromium plated chain ($\frac{9}{16}$-in. x 13 S.W.G.—brazed links) and eye bolt for securing to sinks.

2. Naval Store Accounts should be adjusted in accordance with A.B.R. 4, article 1812 (*d*).

(DNAS 506/61/63.)

UNCLASSIFIED.

481.—Ships Navigation Lights—Failure of Tapped Filament Lamps—Modification of Lanterns—Reports.

(*A.F.O.* 1022/1960.)

Reports from sea indicate that the tapped filament lamps in the navigation lanterns of R.N. Frigates are failing at an excessive rate. The most common forms of failure are breakage of the filament and separation of the glass envelope from the base of the lamp.

2. The failures are, in general, attributed to excessive vibration coupled with certain weaknesses in the lamps and the use of incorrect lamps.

3. Steps are being taken to improve the design of the lamp, whilst keeping within the strict limits imposed by the International Regulations for Preventing Collisions at Sea.

4. As an interim measure to improve the life of the lamps, a shock/vibration mounting has been designed. This is shown in Navy Order Diagram Issue 11/60.

5. The modified mounting employs minor items obtainable from Naval Stores and brass inserts and washers which should be made by ships' staff.

6. Commanding Officers of Frigates or other classes experiencing trouble due to excessive failures of navigation lamps should arrange for the modifications to be carried out as soon as possible. Ships' staffs should be instructed to ensure when fitting new lamps that they are pushed well home and that the spring retaining clips are properly engaged and clamped by the screw collar on the lampholder. The correct lamp for 115-volt ships is I.S. No. 996–9604 and for 220-volt ships I.S. No. 996–9602.

7. Reports should be forwarded six months after completion of the modifications stating to what extent the measures taken have been effective.

(DEE 519/75/3.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

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C.N.O.'s 482-503/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
2nd July, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

4408/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL:

RESTRICTED. Cancelled e N O 48/62

482.—Australian Joint Anti-Submarine School.

In the event of war, the closest Royal Australian Navy/Royal Australian Air Force co-operation will be essential to keep open our sea communications, if they become seriously threatened by submarine attack. The two Services should therefore, in peace, study common doctrine, practice joint tactics, and integrate joint requirements for weapons and equipment. For these purposes a Joint Anti-Submarine School has been established.

Title.

2. The school is known as the " Australian Joint Anti-Submarine School " (short title AJASS) and is established at the Royal Australian Naval Air Station, Nowra, New South Wales.

Functional Control.

3. The functional control of the AJASS is vested in the Joint Directors—one Naval Commander, and one Air Force Wing Commander.

Administration and Discipline.

4. (*a*) The Naval administrative authority is the Flag Officer-in-Charge, East Australia Area. The AJASS is authorized to communicate direct with Naval authorities concerned on routine training and technical matters affecting the school. Matters of policy are dealt with through the normal service channels. The Naval officers and ratings of the school are borne on the books of H.M.A.S. ALBATROSS and their Captain for disciplinary purposes is the Commanding Officer, H.M.A.S. ALBATROSS.

(*b*) The Joint Director (R.A.A.F.) is the Officer Commanding the R.A.AF. Element, which is a detachment of R.A.A.F. Headquarters, Home Command.

(*c*) Signals and correspondence should be addressed to AJASS.

Aims of the School.

5. The aims of AJASS are—

(*a*) Training of ships and aircraft crews (both Royal Australian Navy and Royal Australian Air Force) in Anti-Submarine operations.

(*b*) Instruction of Naval and Air Force officers in the broader aspects of Anti-Submarine Warfare with emphasis on joint tactics.

(*c*) The development and application of Joint Anti-Submarine tactics (including inshore A/S operations).

(*d*) The investigation of specific joint problems as directed by the Naval or Air Board.

Courses.

6. The types of courses held at AJASS are—

(*a*) *Joint Anti-Submarine Unit Training Course* (*Short Title JUC*).—A course for instructing formed units of ships and aircraft in Joint Anti-Submarine Warfare. This course is intended only for units which have completed their basic Anti-Aubmarine training. For air crews this will be 4 weeks; for ships, 3 weeks.

(*b*) *Joint Anti-Submarine Tactical Course* (*Short Title JTC*).—A two weeks course for instructing Royal Australian Navy and Royal Australian Air Force officers in the tactical employment of sea and air forces in Anti-Submarine Warfare.

(*c*) *Junior Officers Course* (*Short Title JOC*).—A one week course for instructing Junior Royal Australian Navy and Royal Australian Air Force officers in the basic principles of Joint Anti-Submarine Warfare. This course is open to Junior Lieutenants, Sub-Lieutenants, Midshipmen and Branch Officers of the Royal Australian Navy and equivalent ranks of the Royal Australian Air Force.

(*d*) *Maritime Headquarters Course* (*Short Title MHQ Course*).—A two weeks course for instructing Naval and Air Force officers in the functions of a Maritime Headquarters and the duties of the staff of the Joint Operations Room.

(*e*) *Senior Officers Study Period* (*Short Title SOSP*).—A five day course for Senior Naval and Air Force officers to study and discuss Anti-Submarine Maritime Warfare. This course is open to officers of the rank of Captain, Group Captain and above but Senior Commanders and Wing Commanders may be accepted if numbers allow.

Application for Courses.

7. (*a*) (i) *JUC* (*Ships*).—A/S ships are to be made available as required by the Flag Officer Commanding H.M. Australian Fleet to undertake this course. It is desirable that ships should complete this course as soon as possible after commissioning or recommissioning.

(ii) *JUC* (*Air*).—The Flag Officer-in-Charge, East Australia Area is to nominate Naval Aircrews to undertake this course after consultation with the Flag Officer Commanding H.M. Australian Fleet.

(*b*) *JTC, JOC, and MHQ*.—ACNB will call for nominations from each command approximately one month before the commencement of the courses. Names of officers selected will be promulgated by signal. Suitably qualified Reserve Officers are eligible for the JTC and MHQ Courses.

(*c*) *SOSP*.—ACNB will select Senior Officers for this course.

Provision of Facilities.

8. (*a*) *Aircraft*.—Naval aircraft will normally be provided by 723 Squadron except that aircraft for JUC (Air) will be provided by the squadrons to which the aircrew undergoing the course belong.

(*b*) *Ships*.—Ships for JUC (Ships) and for practical exercises during other courses, are to be made available by the Flag Officer Commanding H.M. Australian Fleet.

Programme of Courses.

9. After consultation with the Flag Officer-in-Charge, East Australia Area, the Flag Officer Commanding H.M. Australian Fleet and the Air Officer Commanding Home Command Headquarters, the Joint Directors are to submit a proposed list of courses for the following half year. Every endeavour should be made to submit these programmes by 1st April and 1st October in order that the courses may be promulgated in good time. Dates of courses will be promulgated by Navy Orders.

(DOA 2/4/33.)

RESTRICTED.

483.—Diving—Authority to Supervise.

The scope and importance of diving has increased greatly since the last war and, in addition to the service activities of divers of all types, underwater swimming as a recreational sport has achieved widespread support.

2. As the freedom of divers to move in both depth and direction is improved, and the variety of their equipment increases, so the task of adequate supervision becomes more difficult. Whilst it is not desired to over-emphasize the hazards involved in these activities, it must be borne in mind that the quality of supervision and the attention paid to the regulations governing the conduct of diving operations must increase in proportion to their scope if accidents are to be avoided.

3. Constant exercise is necessary if ships' divers are to be kept in practice and are to carry out their duties with consistent efficiency. It is therefore essential that the regulations be followed in the spirit as well as in the letter of their provisions.

4. In clearance diving operations it is essential that supervising officers should themselves be qualified to dive in the same equipment as the divers they control. In normal diving operations it is most desirable for supervising officers to be qualified divers, and they should have, at some time, dived in the type of equipment being used by the personnel they are supervising. It is, however, essential that before taking charge of any operations they should have carried out the full supervisory course at the Diving Section of the T.A.S. School, H.M.A.S. WATSON.

5. All ships and establishments in which Clearance Divers are borne by complement should have included in the complement at least one officer qualified in diving supervision in addition to any Clearance Diver 1st Class (who is himself qualified to supervise within the limits stated in B.R. 155C, Part II., Chapter 14). Where this officer is also qualified to dive, the presence of a second officer qualified in supervision will ensure that the most efficient use of the services of the first can be made, since he himself could not dive without this supervision. It follows that some ships and establishments in which divers are borne although not allowed by complement, will require either an officer or rating suitably qualified in diving supervision.

6. A list showing the current qualifications of officers and ratings is shown in the appendix to this order. Commanding Officers of ships and establishments are to take steps to ensure that all diving in their command takes place under an officer or rating who is qualified according to this list, taking note of the exceptions which follow.

7. Officers and ratings covered by the appendix are considered to be fully trained for the duties shown. It is, however, the duty of such personnel to keep themselves abreast of the regulations concerning diving and to acquire a working knowledge of any apparatus which should come within their authority.

8. Commanding Officers of ships and establishments in which divers are borne but which have no qualified officer, are to select a suitable officer for this duty and make him available for training. Vide Appendix, paragraph (*d*).

9. Commanding Officers concerned should arrange for the training of personnel as in paragraphs 7 and 8 by direct liaison with the Captain H.M.A.S. WATSON, who will report the names of officers who so qualify, to the Naval Board.

APPENDIX.

OFFICERS AND RATINGS QUALIFIED IN DIVING SUPERVISION.

Diving Supervisor is the name given to those officers and ratings who are qualified to supervise certain diving activities as follows:—

(*a*) Clearance Diving Officers are qualified to supervise all forms of diving activities except Deep diving.

(*b*) S.D. Officers with (Q.D.D.) qualification, are qualified to supervise all forms of diving activities except Clearance diving.

(*c*) General List TAS Officers are qualified to supervise all forms of diving activities except Clearance diving and Deep diving.

(*d*) All officers who successfully complete a Diving (three weeks) or Supervision Course (one week) at the Diving Section of the T.A.S. School are qualified to supervise all forms of diving activities except Clearance diving and Deep diving. This qualification is restricted to five years duration unless a refresher supervision course is taken.

(*e*) Clearance divers, 1st Class, are qualified to supervise all forms of diving activities (except Deep diving), within the limits laid down in B.R. 155C, Part II., chapter 14.

(DOA 311/201/7.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

484.—Annual Examination in Foreign Languages, December, 1960.

(*A.F.O.* 1200/1960.)

The Admiralty Annual Examination in Foreign Languages will take place on Tuesday, 6th December, 1960.

2. The regulations for the competition are contained in Q.R. & A.I., Appendix I., part 5, section V., and the examination is open to officers of the R.A.N. and W.R.A.N.S. for the award of Certificates of Merit.

3. Candidates who wish to be examined should forward their names through Commanding Officers to the Director, Naval Education Service, Victoria Barracks, Melbourne, S.C.1, from whom copies of past question papers can be obtained.

4. Candidates should name the language in which they wish to be examined.

5. Navy Order 968 of 1959 is hereby cancelled.

(DNES 38/6/5.)

(*Navy Order* 968 *of* 1959.)

UNCLASSIFIED.

485.—Painting Training—Fleet Painting Instructor.

A Fleet Painting Instructor is available, in the Port of Sydney to carry out the following duties—

(*a*) To instruct painting classes in H.M.A. ships.

(*b*) To make recommendations to ship's officers concerning painting problems encountered.

(*c*) To supervise trial applications of special paints and coatings.

(*d*) To report to the Paint Committee and advise on practical painting problems encountered.

2. Painting classes should consist of four to six men who are available for training during one working week. Classes should normally be formed during periods of availability for refit or maintenance, and preferably on occasions when there is some definite job to be done and the class can perform useful work. The ship's equipment will normally be used for instruction as in this way ratings will learn the capabilities of their own equipment, and defects found can be remedied by the instructor.

3. When manpower commitments preclude a 4 or 5 day course, arrangements should be made for the Fleet Painting Instructor to give short lectures on painting to officers and to senior ratings.

4. Ships in Sydney requiring the services of the painting instructor for any of the duties stated above are to make arrangements direct with the Fleet Painting Instructor or the Assistant to the Fleet Engineer Officer, Garden Island Dockyard.

5. It is emphasized that time spent in training will be amply repaid by a reduction in the manhours consumed by inefficient techniques. Ships are encouraged to use the services of the Instructor, whenever practicable, and thus build up a nucleus of ratings skilled in painting, and other maintenance techniques.

6. Navy Order 380 of 1959 is hereby cancelled.

(DNC 311/51/10.)

(*Navy Order* 380 *of* 1959.)

UNCLASSIFIED.

486.—Ratings—Communication Branch—Intake, Training and Advancement of Radio Special Ratings.

In order to meet present day requirements for Radio (Special) ratings and to provide a more stable branch structure, it has been decided to vary the method of intake of ratings into the Radio (Special) category and their training and advancement up to the Leading rate.

2. The existing system of selected volunteers from the Radio Communication category carrying out a 17 week course which qualifies them professionally for Leading Radio Operator (Special), *vide* A.B.R. 10, article 1324, is to cease at the end of 1960.

Intake.

3. In future the main method of intake will be by selection on completion of the Recruit (C.O.) Professional Course, as is the normal means of entry into the Tactical and Radio Communication categories. The general provisions of A.B.R. 10, articles 1316 and 1317 apply. Numbers to be selected for each category will be decided by the Naval Board.

4. Action in accordance with A.C.B. 0328, article 205, is to be taken for Recruit Radio Operators (Special).

5. An alternative method of intake is described in paragraph 12.

Training and Advancement.

ORO (S).

6. On selection for the Radio (Special) category, ratings will undergo the Part 1 Professional Course at H.M.A. Signal School of 19 weeks duration. The general provisions of A.B.R. 10, articles 1318 and 1319, are to apply to the training of ORO (S). Standards of Knowledge for the above course are held by CST FND and will be incorporated in A.B.R. 5009.

7. Qualifications for advancement to ORO (S) are laid down in A.B.R. 10, article 1301.

RO (S).

8. On successful completion of their Part 1 Professional Course, ratings will be drafted to sea where they are to be employed on Radio Communication duties as well as Radio (Special) duties, so that they acquire general practical experience. During this period, their Part 2 examination is to be carried out, in accordance with the general provisions of A.B.R. 10, article 1320. Standards of Knowledge will be incorporated in A.B.R. 5009. If required before this they will be forwarded to examining authorities.

9. On completion of their sea training ratings will be drafted to H.M.A.S. HARMAN.

10. Qualifications for advancement to RO (S) are as laid down in A.B.R. 10, article 1302.

11. Should an Ordinary Radio Operator (Special) be considered by the Captain to be unsuitable for the Radio (Special) category but suitable for the Radio Communication category, his name is to be reported to the Naval Board, with a view to transferring him to the latter category. Such transfer will be in accordance with the provisions of A.B.R. 10, article 0703.

RO–RO (S) Conversion.

12. An alternative method of intake for the Radio (Special) category, which will only be used when specially authorized by the Naval Board, will be by transfer from Radio Communication operator to Radio Operator (Special), after a 13 week conversion course at H.M.A. Signal School and H.M.A.S. HARMAN. Standards of Knowledge are held by CST FND and H.M.A.S. HARMAN.

13. When this procedure is required, the Naval Board will call for volunteers to undergo the conversion course. To be eligible to volunteer, ratings must—

(*a*) Be rated Radio Communication Operator.

(*b*) Be of VG Character.

(*c*) Be of not less than Sat. efficiency.

(*d*) Have 12 months to serve of their current engagement on completion of the course, or be willing to re-engage in accordance with current Navy Orders.

14. Names of recommended volunteers are to be forwarded to Navy Office with their certificates of service and forms A.S. 264. Action is to be taken in accordance with article 205 of A.C.B. 0328 if this has not already been done. On successful completion of the course candidates will be transferred to the Radio (Special) category retaining their existing seniority in the Able rate.

LRO (S).

15. The professional examination for LRO (S) will consist of a Fleet Board examination plus a special examination.

16. The Fleet Board examination is to be in accordance with A.B.R. 10, article 1328 varied as follows—

(*a*) The Lieutenant (C) or Lieutenant or Sub-Lieutenant (SD) (C) as a member of the board is optional and a Signal School officer is not required at boards not convened by CST FND.

(*b*) NOIC NA and the Commanding Officer H.M.A.S. HARMAN are also convening authorities.

Standards of Knowledge will be incorporated in A.B.R. 5009. If required by convening authorities before this, they will be forwarded.

17. The special examination referred to in paragraph 15 is to be taken at H.M.A.S. HARMAN or at H.M.A.S. MELVILLE (Darwin Naval Radio Station) any time after being rated RO (S), either before or after the Fleet Board. Standards of Knowledge will be forwarded to these two establishments. On passing, forms A.S. 161a are to be forwarded to Navy Office and the rating's history sheet is to be noted " Passed shore Operating Examination for LRO (S) ".

18. Qualifications for advancement to LRO (S) are as laid down in A.B.R. 10, article 1303, as modified above.

Amendments to Publications.

19. A.B.R.'s 10 and 5009 will be amended.

(DSD 303/250/1.)

UNCLASSIFIED.

487.—R.A.N.R. Officers—Examination to Qualify for Command of Small Ships.

1. Navy Order 175 of 1960 is to be amended as follows:—

2. *Amend* paragraph 11 to read—

" *Radio.*

11. An outline knowledge is required of—

(*a*) propagation of radio waves and systems of transmission, with particular reference to fleet radio-communication organization, radio policy, and considerations involved in breaking radio silence;

(*b*) world-wide station and fleet radio-communication organization;

(*c*) the capabilities and limitations of the radio-communication equipment fitted in small ships. (No technical knowledge is required);

(*d*) electronic warfare methods and fleet electronic warfare organization;

(*e*) how to use a voice circuit. (A detailed knowledge of procedure is not required)."

3. *Amend* paragraph 12 to read—

" *Signal Books and Visual Signalling.*

12. A good knowledge is required of—

(*a*) Allied Naval Manoeuvring Instructions, chapters 2 to 8 inclusive.

(*b*) A.N.S.B., chapters 1 to 3 inclusive.

(*c*) Captain's responsibility and procedure of Recognition.

(*d*) V.S. instructions. Executive Signals.

An outline knowledge is required of—

(*a*) The names and uses of Signal Books.

(*b*) Allied Manoeuvring Instructions—A/S operations and Enemy Reporting."

4. *Delete* paragraph 16 as reference to Executive Signals is contained in paragraph 12.

5. *Amend* paragraph 38 to read—

" (*a*) Period to which ship should be stored; emergency stocks.

(*b*) Sources of supply and preparation of demands; payment for supplies from contractors.

(*c*) Stowage of dry and refrigerated stocks.

(*d*) General and repayment messing and outline of system of accounting.

(*e*) Victualling and checking; preparation of A.S. 257C—Daily Numbers Victualled; A.S. 81—Mess Sheet.

(*f*) Extra issues."

6. *Amend* paragraph 39 to read—

" (*a*) Outline of system of accounting for loan clothing.

(*b*) Sale of cap ribbons; disposal of cash."

7. *Amend* paragraph 40 to read—

" (*a*) Scale allowances.

(*b*) Outline of accounting.

(*c*) Replacements—permanent and consumable; replacement allowance."

8. *Amend* paragraph 41 by *deleting*—

(*h*), (*j*) and (*k*) and *alter* (*i*) to (*h*) and (*l*) to (*j*).

9. *Amend* paragraph 42 by *deleting*—

" Q.R. & A.I.—B.R. 1950."

(DNR 311/52/11.)

(*Navy Order* 175 *of* 1960.)

UNCLASSIFIED.

488.—R.N. Personnel Serving with the 4th Submarine Squadron or with the R.A.N. on Loan—" Own Way " Passage Arrangements.

In accordance with the provisions of Q.R. & A.I., article 1714 (8) and A.F.O. 190/60 R.N. personnel or their families who are permitted to make their own passage arrangements although entitled to officially arranged passages at public expense, are required initially to meet the full cost of the passages arranged and to render subsequently a claim for reimbursement limited to the cost of their officially arranged passages. The requirement is strictly enforced by Admiralty on R.N. Officers on Exchange Service with the R.A.N.

2. Although passages of R.N. personnel appointed or drafted for service with the 4th Submarine Squadron or with the R.A.N. on loan, or the families of these personnel, are granted subject to R.N. conditions, the costs of these passages are not the liability of the Admiralty, and, in consequence such personnel who have been permitted to arrange passages for themselves and/or their families have not been required in the past to meet the cost initially. It has been the practice to issue warrants for the cost of the " own way " passages arranged up to the amounts of normal Departmental liability.

3. This practice will be approved by the Naval Board in future only in cases where evidence can be furnished that compassionate reasons exist which would justify the departure from R.N. principles. In all other cases the R.N. policy outlined in paragraph 1 above will be followed implicitly.

(HPB 187/51/24.)

RESTRICTED.

489.—T.A.S. Tactical Courses—H.M.A.S. WATSON.

The T.A.S. tactical courses to be held at H.M.A.S. WATSON using the action speed tactical teacher are intended for the following categories of R.A.N. officers—

(*a*) Seaman specialists appointed to ships of H.M.A. Fleet, before taking up their appointments or as soon after as possible.

(*b*) Other Seaman specialists as convenient.

(*c*) Electrical and Engineer specialists appointed to Darings, Destroyers and Frigates as in (*a*).

2. Where possible an officer's appointment will include directions for him to undergo the course; when this provision is not made in an appointment the Captain of his new ship should make arrangements direct with H.M.A.S. WATSON (info. PENGUIN).

3. Reserve officers may carry out the course as part of their A.C.T.

4. A minimum number of six nominations is required for each course.

5. In general, it will be of benefit for officers to repeat the course at one to two yearly intervals.

(DOA 311/3/10.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

490.—Radar—Aerials—Radiating and Reflecting Elements—Painting by Ship's Staff.

Reports from sea indicate that repeated painting of radiating and reflecting elements of radar aerials by ships' staffs can eventually cause a significant falling off in range performance and an increase in the side lobe level.

2. If the design performance is to be achieved and maintained, the preparation and repainting of such aerial surfaces should be carried out using the correct type and quantity of paint, applied in accordance with the approved technique. Such repainting can only be undertaken efficiently by dockyards.

3. When deterioration of radiating and reflecting elements of radar aerials occurs to an extent where performance of the set is likely to be impaired, an item is to be inserted in the next main defect list giving details of such deterioration. Defect list action is not to be taken on appearance grounds alone.

4. In anticipation of dockyard defect action, ships' staffs should take measures to arrest serious deterioration. In this case, where the existing paint or corrosion is to be removed, great care should be taken to minimise damage to the underlying surface. Chipping is not to be attempted; paint and varnish remover to specification D.N.C. S.P. 685A is to be used and the affected areas touched up by an application of "Swift Vulc" paint. This item is dealt with under class E, group 7, as a non pattern item. Such emergency treatment should be followed at the first opportunity by the correct treatment by dockyards.

5. These instructions are not intended to restrict the repainting of those parts of the radar aerials which do not affect technical performance. When such repainting is carried out either by ship's staff or dockyard, it should be done in consultation with the Electrical Officer (or senior Electrical Branch rating on board) or, in the case of dockyards, the appropriate professional officers.

6. In no circumstances are radomes to be painted or otherwise treated.

7. Navy Order 504 of 1958 is hereby cancelled.

(DEE 518/51/283.)

(*Navy Order* 504 *of* 1958.)

UNCLASSIFIED.

491.—Aircraft—Pyrotechnics—KG 015 Capsules Delay, Type C.8, Mark 1/1—Withdrawal of Lot 131, Filled 4/46.

(*A.F.O.* 1075/1960.)

As a result of a failure in service in the United Kingdom, all KG 015 capsules delay, type C.8, mark 1/1 of lot 131, filled 4/46 are to be withdrawn from service.

2. H.M.A.S. MELBOURNE and R.A.N. Air Station, Nowra, if holding any capsules of this lot should return them to the nearest R.A.N. Armament Depot, demanding replacements as necessary. These stores are classified category (ff) in accordance with B.R. 862, article 304 and B.R. 863, article 170, i.e., not dangerous, but may have a percentage of failures to function.

3. *R.A.N. Armament Depots only.*—Capsules of the lot detailed in paragraph 1, including any returned from service, should be disposed of in accordance with current instructions.

(DW 727/57/10.)

UNCLASSIFIED.

492.—Aircraft—Rocket Ammunition—Failure of Weak Link Leads in No. 1 Mark 4 Rocket Motors.

The weak link lead of a motor rocket 3-in. No. 1 mark 4, which had been re-issued after repair in an R.N. Armament Depot, fractured internally when the pull-out test was applied to the weak link adaptor.

2. It is probable that this motor rocket had been carried on an aircraft, that the weak link lead had been damaged by slip stream action and that the fracture was completed by the pull-out test.

3. A defect of this type cannot easily be detected in Naval Armament Depots. With a view to reducing the incidence of failures, arrangements are therefore to be made for any motors rocket which have been carried on aircraft and which cannot be expended subsequently, to be suitably marked so they may be readily identified on receipt in R.A.N. Armament Depots.

4. *R.A.N. Armament Depots only.*—Details of any motors rocket in this category received in future are to be reported to Navy Office.

(DW 727/60/21.)

UNCLASSIFIED.

493.—Cartridges, Q.F., 4-in., Mark 16* and 21 Guns, H.E. U.C.—Use for SU Practice Firings.

(*A.F.O.* 530/1960.)

The Admiralty have decided in the interests of economy, to use cartridges Q.F. 4-in. mk. 16* and 21 guns, H.E. U.C., suitably plugged, for SU practice firings over deep water.

2. Plugging of H.E. rounds for use in SU practice firings has not yet been adopted in the R.A.N. but consideration is being given to the plugging of H.E. non U.C. cartridges for this purpose.

3. As it is possible that H.M.A. ships mounting 4-in. mk. 16* and 21 guns and serving in the Strategic Reserve, could be issued with H.E. U.C. cartridges plugged for SU practice, the following information is promulgated.

4. Rounds supplied for SU practice will have their existing H.E. markings modified by (*a*) "**PLGD**" being stencilled in 1-in. white letters on the nose, and a 2-in. yellow band, outlined in black, painted round the body of the shell, (*b*) the existing mark of cartridge on the base of case being obliterated and new mark N32, N33 or N34 (as applicable), monogram of converting depot and date applied. The existing Government Explosive Classification remains unaltered.

5. The converted rounds will be held under the following nomenclatures—

JH 605 cartridges, 4-in., practice—H.E. U.C. (35-lb.), filled TNT, RDX/TNT, propellant MNF/S, NF/S, fitted plug representing fuze 230, for SU fire only—marks N32, N33.

JH 618 cartridges, 4-in., practice—H.E. U.C. (31-lb.), filled RDX/TNT, propellant MNF2P/S, fitted plug representing fuze 230, for SU fire only—mark N34.

6. Conversion of H.E. U.C. rounds to or from practice will be carried out by Armament Depots and is not to be undertaken by ship's staff.

7. The use of converted H.E. U.C. rounds for practice firings by shore Gunnery Schools, or by ships in shallow water, is prohibited.

8. Issue of JH 618 cartridges, 4-in., practice, is at present limited to ships fitted with the MRS.8 fire control system; as such they are not applicable to ships of the R.A.N.

(DW 726/59/33.)

RESTRICTED.

494.—Guns Q.F. 2-pdr. Sub-Calibre.

There are now sufficient 2-pdr. sub-calibre guns held to enable all ships mounting a 4-in. mk. 16* gun to be provided with one sub-calibre gun each.

2. All such ships should therefore demand a single sub-calibre gun from the nearest Armament Depot. Warrants will be amended accordingly.

(DW 704/252/13.)

UNCLASSIFIED.

495.—A/S Mortar, Mark 10—Stabilizer A/S 854—Re-siting of Torque Motor Resistances.

(*A.F.O.* 1488/1960.)

(*a*) *Ships and establishments concerned* — Ships and establishments so fitted and Gunnery Equipment Depots.

(*b*) *Type of equipment* .. Stabilizer A/S 854.

(*c*) *Part of equipment affected* — Torque motor resistance (athwartships mounted). Items SP.94, SP.100, SP.64, SP.15 on drawing 1304/301 sheet 2.

(*d*) *Modification No.* .. .. To be known as modification No. 5 to stabilizer A/S 854. B.R. 1709 (1) will be amended to show this modification in "List of Modifications" included in Chapter I.

(*e*) *Purpose of modification* .. To reduce the possibility of physical damage and oil fouling of the resistance, when topping up the Gyro bottom bearing oil reservoir.

(*f*) *Nature of modification* .. To re-site the resistance nearer the forward edge of the pedestal base.

(*g*) *How to be done* .. .. Securing holes, 2 in No., 2 B.A., for the resistance are at present situated 8¼ inches in from the inside face of the Gyro pedestal end plate.

Using the athwartships centre line of the Gyro stop ring as datum "A" and the *inner* face of the Port side pedestal plate as datum "B" drill, 2 in No., securing holes drill No. 25 (.150-in. diameter) and tap them 2 B.A. on the following centres:—

One hole at 4 inches from datum "A" and 1¾ inches from datum "B";

and the other hole at 11¼ inches from datum "A" and 1¾ inches from datum "B".

(*h*) *By whom to be done* .. Dockyards.

(*i*) *When to be done* .. At earliest opportunity.

(*j*) *How to be treated* .. As a defect.

2. Navy Order 1033 of 1959 is relevant.

(DW 707/51/32.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

496.—Diving—Pattern 3380 Swim Suit with C Type Hood, Pattern 3382, and Face Mask, Pattern 3384—Comfort in Use at Depth beyond 33 ft.—Suit Inflation.

(*A.F.O.* 2571/1959.)

It has been found possible to relieve the difficulty of ear-clearing experienced when wearing the C type hood, by fitting to the suit a suit inflation outfit. This consists of an emergency cylinder assembly, pattern 6220, which is housed in a belt and connected to the suit by a tube, pattern 5586A, and elbow connection, pattern 5574. The method of fitting this outfit is described in paragraph 4.

2. The outfit is used by gently "cracking" the cylinder valve during descent and thus allowing a small quantity of gas to enter the suit. This gas reaches the outside of the ears, thus preventing "reversed ears". In addition, provided that "woollens" and/or cotton stockinette combination, pattern 3415, are worn, some of this gas is trapped inside the suit; this forms a layer which tends to prevent "pinching" and also acts as a heat insulator.

3. The emergency cylinder assembly, pattern 6220, must always be charged with oxygen. When undressing after using suit inflation, the oxygen trapped in underwear will dissipate rapidly, but there will be a period when the underwear can be ignited more easily than usual. Appropriate care must be taken at such times.

4. Underwater suits, pattern 3380, are to be modified by users with professional assistance from Sailmakers when practicable, to incorporate suit inflation. The method to be adopted is as follows—

(*a*) For each suit the following outfit will be required—

Class E, group 5, pattern 6220, emergency cylinder assembly.
Class E, group 5, pattern 5586A, tube.
Class E, group 5, pattern 5574, elbow connection.
Class E, group 5, pattern 5578, blank.
Class E, group 5, pattern 6214, 2-in. buckle.
Suitable length of No. 2 canvas.
¼-in. grommets (brass eyelets), 18 in No.

(*b*) Make up a 4-ft. long belt using a double thickness of No. 2 canvas 2-in. wide. House the buckle at one end of the belt, and at the other end fit the 18 grommets at approximately 1¼-in. spacing (centre to centre). To this belt attach a canvas pocket made to house the pattern 6220 cylinder. The near end of this pocket, which should be approximately 6-in. long, should be 4 to 5-in. from the centre bar of the buckle, in a horizontal position.

(*c*) The pattern 5574 elbow connection is to be fitted on the suit in a position approximately 6-in. below the bottom of the yoke seat in the front and 7½-in. to the right-hand side of the centre of the suit. The 6-in. dimension is to be adjusted in individual cases so that the connection comes below the seam round the suit. Reinforce the suit in this position by affixing a 4-in. piece of patching material with rubber solution, pierce the suit through the patch and insert the connection elbow down, making all water-tight with the locking nut.

(*d*) The belt should be adjusted round the waist so that the oxygen cylinder is in front, with the valve to the right-hand, and connected to the elbow by the pattern 5586A tube.

(*e*) When suit inflation is not being used the elbow connection is to be blanked with the pattern 5578 blank.

5. Stores required for modifying pattern 3380 swimsuits are to be demanded from SNSO, Sydney.

6. The restriction on the use of pattern 3382 C type hood contained in article 2411 (4) of B.R. 155C will not apply when suit inflation has been fitted.

(DNAS 512/74/27.)

UNCLASSIFIED.

497.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition is approved for Daring Class Destroyers—

Class List Item No. 37. *Classification* " *A* ".

Item: " To fit battery fed emergency navigation lanterns as follows—

Pattern 17248 Port Bow (single tier type).
Pattern 17249 Stbd Bow (single tier type).
Pattern 17250 steaming light (with remote switching arrangement as shown on DEE Drg. No. B36507.
Navy Order Diagram Issue 2/59.
4 of pattern 17251 lanterns for emergency NUC lights and anchor light ".

References:

(i) Navy Orders 139 and 1039 of 1959.
(ii) H.M.A.S. VOYAGER's proposed alteration and addition item, temporary distinguishing letter " P ".
(iii) FOCAF memorandum A.F. 1931/24 (3699) dated 18th July, 1959.
(iv) Navy Office letter No. 71073 dated 26th August, 1959.
(v) FOICEA memorandum N20/23/126 dated 7th October, 1959.
(vi) GMWD memorandum 238/63/102 (618) dated 21st March, 1960.

(DCNTS 1215/55/12.)

(*Navy Orders* 139 *and* 1039 *of* 1959.)

UNCLASSIFIED.

498.—Boats—14-ft. Sailing Dinghies—Modifications for Racing Purposes.

The following modifications to all 14-ft. sailing dinghies in service and in store have been approved—

(*a*) 2 in No. spotted gum thumbcleats 6-in. x ¾-in. are to be screwed to the mast at the level of the top of the thwart, 1 in No. port and 1 in No. starboard.

(*b*) Fit a stainless steel block to the sternhead.

(*c*) Keelband, pattern B9b/10356, consisting of twin ¾-in. x ¼-in. Naval brass segmental, is to be fastened by ¾-in. No. 8 brass countersunk screws 6-in. apart.

(*d*) Remove stretchers.

(*e*) The tiller is to be 3-ft. 9-in. long with an elbow extension 1-ft. 6-in. long with a ball end and 5-in. x ⅜-in. diameter cross piece. The hinged joint is to be recessed into the tiller and extension, the combined diameter of both being 1½-in. with the extension hinged back. A cord strop is to be seized to the tiller for securing the extension at the crosspiece.

(*f*) 2¼-in. diameter throat and peak halyard sheaves are to be fitted vertically one above the other in the centre line of the mast instead of the sheaves either side of the mast externally as at present.

(*g*) 2 in No. additional jamb cleats, pattern B9b/9719, are to be fitted for securing jib sheets and spinnaker guy when sailing single handed.

(*h*) Long stout canvas toe straps 2-in. wide are to be secured under the thwarts port and starboard of the centre case and 3-in. from it, each end being fastened with 6 in No. 1-in. No. 12 gauge brass round-head screws on brass washers.

(*i*) Provide a spinnaker halyard 1-in. sisal, pattern D5/C.3203, 27-ft. long.

(*j*) Fit 2 in No. single stainless steel blocks for the fore and spinnaker halyards in lieu of the single block now fitted.

(*k*) Provide a spinnaker sheet and ¾-in. spinnaker guy length 50-ft. with a spring clip fitted 18-ft. from each end.

(*l*) Provide a spinnaker boom of oregon 8-ft. 6-in. long 1⅛-in. diameter.

(*m*) Provide a strop with a spring clip for securing the inboard end of the spinnaker boom.

2. The set of sails comprising a spinnaker and additional foresail with a combined boom and bearing-out spar (class E, group 3), together with the Naval Store items required to carry out the modifications detailed in paragraph 1, should be demanded from SNSO, Sydney. Demands should not be hastened. The existing sets of sails pattern E3/6974, at present issued with 14-ft. sailing dinghies will remain unaltered, and will continue to be held by services receiving the additional sets referred to above.

3. Experience with 14-ft. sailing dinghies has pointed to the necessity of fitting an additional buoyancy tank in the fore sheets to enable the boat to be righted should it capsize. It has therefore been approved to fit an additional buoyancy tank concurrently with undertaking the modifications referred to above. Ships and services undertaking these modifications are to demand accordingly on SNSO, Sydney.

4. The modifications are to be undertaken in accordance with Navy Office Drawing 111A/164B Ships and authorities are to raise defect list items as necessary.

5. Navy Order 537 of 1958 is hereby cancelled.

(DNC 1275/53/42.)

(*Navy Order* 537 *of* 1958.)

UNCLASSIFIED.

499.—Naval Stores (General) (Class B, Group 11, Part H)—Connections, Instantair—Patternization and Introduction of New Range.

(*A.F.O.* 804/1960.)

The following items have been introduced as naval stores to replace, on the same scale, patterns B11H/8069, 8070 and 8084 connections, Instantair which are no longer being manufactured—

Pattern No.	*Description.*	*Ship's Accounting Classification.*
16155	Plugs, male, swivelling, ½-in.	Consumable.
16156	Socket, male, ½-in.	Consumable.
16157	Socket, female, ½-in.	Consumable.

2. The items being replaced will be marked " O " in the Rate Book and stock will be expended.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 506/71/66.)

UNCLASSIFIED.

500.—Naval Stores (General) (Class F, Group 3)—Pocket Watches for Use with Meters, Survey, Radiac—Allowances—H.M.A. Ships.

(*A.F.O.* 664/1960.)

To facilitate timing the instant that dose rate measurements are made and for timing the passing of reports to Headquarters, H.M.A. ships are to be allowed pocket watches, pattern F3/308 on the same scale as meters, survey, radiac, No. 2, pattern F3/911-0130 (JSC6665-110130), allowances of which are laid down in Navy Order 97 of 1960.

2. Ships concerned should forward their demands to the appropriate (S)N.S.O. who will arrange supply.

3. Supply to ships under construction or restoring after conversion, &c., will be arranged by the respective storing yards in the normal manner.

(DNAS 519/53/84.)

(*Navy Order* 97 *of* 1960.)

Cancelled vide N.O. 457/62.

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

RESTRICTED.

501.—Books—B.R. 100 (1958) (CD Pamphlet No. 11D (1958)) Rules for the Arrangement of Structures and Fittings in the Vicinity of Magnetic Compasses and Chronometers.

B.R. 100 (1958) (C.D. Pamphlet No. 11D (1958)) " Rules for the Arrangement of Structures and Fittings in the vicinity of Magnetic Compasses and Chronometers " has been distributed.

2. This publication supersedes B.R. 100 (1956). Considerable changes have been made in the main text, the figures for " Safe distances " of a number of items tested in the past two years have been included, and in the case of B.R. 100 minor alterations and additions have been made to Appendix IV.

3. B.R. 100 is restricted.

4. Navy Order 99 of 1960 is hereby cancelled.

(DNAS 465/52/188.)

(*Navy Order* 99 *of* 1960.)

UNCLASSIFIED.

502.—Committal Orders (A.S. 245)—Completion.

(*A.F.O.* 1155/1960.)

Attention is drawn to Q.R. and A.I., Article **2024**, regarding the need for complete accuracy in the completion of committal orders (forms A.S.245) for sentences of imprisonment and detention.

2. Under Section 85(2) of the Naval Discipline Act, 1957, a summary sentence of imprisonment or detention which is not postponed or suspended begins to run on the day on which the warrant is formally read unless the offender has been kept in (close) custody since the actual date on which the submission for approval of punishment was signed when the sentence runs from that date. In order to leave no room for doubt regarding the date from which a sentence runs, the commencement date of a sentence which is not being postponed under Section 85(3) of the Act is in future to be recorded on line 6 of the text of form A.S.245 in the terms " from.....(*date*).....(N.D.A.1957, S.85(2)) ".

3. In addition, the certificates which are completed on the committal order when sentence has been postponed under Section 85(3) of the Act are in future to account for the whole period between the date the sentence was awarded and the date of the offender's arrival at the prison or detention quarters in which he is to undergo his sentence. Each person who has charge of an offender who is under a postponed sentence is to complete a certificate recording the inclusive dates for which he was responsible and whether or not the offender was in confinement in respect of his sentence during any part of that period.

4. In all cases in which a sentence of imprisonment or detention runs from a date other than that of the punishment warrant, the date on which it is deemed to have begun under either Section 85(2) or Section 85(3) is the date to be recorded in the " Time Forfeited " column on page 4 of the service certificate with the date of the warrant inserted in brackets. Appropriate notations are also to be made in the remarks column of the ledger. All other punishments awarded on the same warrant as imprisonment or detention are effective from the date on which the warrant is read and they should be so recorded.

(CNJA 26/51/3.)

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

503.—Accidents—Overhead Cables—Danger from Siting Equipment Nearby.

(*A.F.O.* 1153/1960.)

Experience in civil work has shown that the risks attendant upon bringing any equipment near to an overhead electric line are not generally known. It is not necessary for equipment actually to touch the overhead line for dangerous conditions to be created; it may well be made live even if it is only brought within the vicinity of the conductors; the extent of the danger area is in proportion to the voltage.

2. In the interests of safety, therefore, all temporary structures, the jibs of mobile machines and wireless aerials from mobile and static wireless stations should be kept well clear from all overhead lines.

3. Navy Order 604 of 1958 is hereby cancelled.

(DEE 177/51/22.)

(*Navy Order* 604 *of* 1958.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar (Mb).

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O. 504/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
13th July, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

4702/60.

RESTRICTED.

504.—Officers' Courses—Short Courses for Officers of the R.A.N. and Reserves.

Appendix " A " to this order gives the courses available for R.A.N. and reserve officers.

2. *Courses for R.A.N. Officers.*—The Naval Board attaches great importance to the refresher courses available for officers in the specialist schools. With the present rapid changes in equipment and procedure, officers' knowledge rapidly becomes obsolete unless periodical refresher courses are undertaken.

3. *Courses for Reserve Officers.*

(*a*) Reserve Officers' Indoctrination Course (D3) to be carried out by all newly appointed reserve officers, as early as practicable, after first appointment.

(*b*) *R.A.N.R. Officers qualifying for Lieutenant—*

Course.	*Duration.*	*Code No.*
(1) Navigation and Direction	2 weeks	N3
(2) A.B.C. Course	1 week	A3
(3) D.C. Course	1 week	A2
(4) Communications	1 week	C2

(*c*) *R.A.N.R. Officers qualified for Lieutenant—*

(5) Gunnery	2 weeks	G3
(6) T.A.S.	2 weeks	T3
(7) Communications	2 weeks	C3

To be eligible for Courses 1, 5 and 6, officers must have passed an examination, set by the appropriate specialist school, after carrying out the preliminary course (e.g., T1) in a reserve training establishment. To be eligible for course 7, officers must have completed either course C1 or C2.

(*d*) *To Qualify Reserve Officers in Specialist Appointments—*

Specialization.	*Duration.*	*Code No.*
(1) **Gunnery** — To qualify a reserve officer to be Gunnery Officer in ships other than major Fleet units.	4 weeks	G4
(2) **Communications** — To train officers as reserve (CE) officers.	6 weeks	C4
(3) **Navigation** — To qualify reserve officers for appointment as Navigating Officers of ships other than major Fleet units.	4 weeks	N4

The specialist course may be taken outright. If carried out in two or three parts of two weeks each, they must be taken in successive years.

(*e*) *Preparation of Reserve Officers for Small Ship Command Training.*—The following are recommended refresher courses:—

Course.	*Code No.*	
Navigation/Direction	N3	
Communications	C3	
Gunnery	G4	Part I.
	G3	Part I.
T.A.S.	T4	
D.C.	A2	
A.B.C.	A3	
Supply	M6	

(*f*) *Other Courses Open to R.A.N.R. Officers.*—Recommended reserve officers are also eligible for certain other courses as promulgated in this order, each appointment being considered on its merits.

4. Navy Orders 838 of 1958 and 269 of 1959 are hereby cancelled.

APPENDIX A.

No.	Title.	Place.	Duration.	Officers for whom course is applicable.	R/A (See Note).	Remarks.
A.B.C.D. Subjects.						
A1	Junior A.B.C.D. Course	A.B.C.D. Schools, F.N.D. and H.M.A.S. PENGUIN	1 week	Officers without previous A.B.C.D. knowledge	A	Details of PENGUIN's courses are promulgated by Navy Order 270 of 1960
A2	Standard D.C. Course	A.B.C.D. School, H.M.A.S. PENGUIN	1 week	All officers	R	
A3	Standard A.B.C. Course	A.B.C.D. School, H.M.A.S. PENGUIN	1 week	All officers	R	
A4	Passive Defence Officers' Course	A.B.C.D. School, H.M.A.S. PENGUIN	2 weeks	Naval and civilian officers designated as P.D.O.'s in R.A.N. establishments	R	
A5	Advanced D.C. Course	A..B.C.D. School, H.M.A.S. PENGUIN	1 week	All officers	R	Should be taken immediately after course A2. Courses A2 and A5 are always run consecutively. Officers cannot be accepted for course A5 if more than twelve months has elapsed since completion of A2
A6	Advanced A.B.C. Course	A.B.C.D. School, H.M.A.S. PENGUIN	1 week	All officers	R	Should be taken immediately after Course A3. Courses A3 and A6 are always run consecutively. Officers cannot be accepted for course A6 if more than twelve months has elapsed since completion of A3
Communications Subjects.						
C1	Subordinate Officers R.A.N.R. Communications Course	Reserve Training Establishment	20 No. 2 hour periods	R.A.N.R. Subordinate Seaman Specialist officers qualifying for the rank of Lieutenant	—	Examinations set and marked by C.S.T. F.N.D.
C2	Subordinate Officers R.A.N.R. Communications Course	Signal School, F.N.D.	1 week	As for Course C1. An alternative for those officers who may be available for continuous instruction (A.C.T.)	R	
C3	R.A.N.R. Lieutenants' Communications Course	Signal School, F.N.D.	2 weeks	(*a*) R.A.N.R. Seaman Specialist officers who have qualified for rank of Lieutenant (*b*) Refresher course for Reserve Officers qualifying for command	R	
C4	Reserve (CE) Officers' Course	Signal School, F.N.D.	6 weeks. Parts 1, 2 and 3, each 2 weeks	Selected Reserve Seaman Specialist and Special Branch Officers	A	
C5	Commanding Officers' Course	Signal School, F.N.D. S.T.C. Sydney	3 days	Small ships' Commanding Officers and Commanding Officers designate	A	Refresher course covering fleetwork and radio

APPENDIX A.—*continued.*

No.	Title.	Place.	Duration.	Officers for whom course is applicable.	R/A (See Note).	Remarks.
Communications Subjects—*continued.*						
C6	Small Ship Signal Officers' Course	Signal School, F.N.D. S.T.C. Sydney	3 days	General List officers carrying out these duties in small ships	A	
C7	Cryptographic Course	Signal School, F.N.D. S.T.C. Sydney	3 days	Officers of ships' emergency crypto teams	A	Initial training
C8	Cryptographic Refresher Course	Signal School, F.N.D. S.T.C. Sydney	2 days	Any officers	A	
C9	Basic Communications Course	Signal School, F.N.D.	1 week	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualified	R	
Divisional Subjects.						
D1	Officers' Indoctrination Course	F.N.D.	9 weeks	(*a*) Officers newly promoted in Australia to Special Duties and Supplementary Lists (except S.S Aircrew Officers up to N.A.C. 29) (*b*) Newly promoted or entered R.A.N.R.(S) Officers (*c*) Officers newly entered in the Instructor Branch	R	Indoctrination Course—8 weeks Instructor Technique Course—1 week (to be followed by Sports Acquaintanceship Course (D5)—5 days)
D2	Officers' Modified Indoctrination Course	F.N.D.	3 weeks	(*a*) Officers newly entered in the Medical and Dental Branches and as Chaplains (*b*) Short Service Aircrew Officers up to N.A.C. 29	R	
D3	Reserve Officers' Indoctrination Course	F.N.D.	2 weeks	(*a*) Newly promoted R.A.N.R. Officers (*b*) Newly promoted R.A.N.V.R. Officers	R	
D4	R.A.N. Divisional Course	F.N.D.	3 weeks	(*a*) General List Sub-Lieutenants on return from training in the U.K. (*b*) Special Duties List Officers promoted in the U.K. on return to Australia	R	Divisional Course—2 weeks I.T. Course—1 week (to be followed by Sports Acquaintanceship course (D5)—5 days The Divisional Course is designed to— (*a*) familiarize officers with current R.A.N. regulations pertaining to Divisional matters (*b*) provide instruction in management
D5	Sports Acquaintanceship Course	F.N.D.	5 days	(*a*) Officers undergoing Indoctrination (D1) and Divisional (D4) Courses (*b*) Officers on application	R/A	This course is designed to fit officers to carry out efficiently the duties of Sports Officer (C.N.O. 518/1959)

APPENDIX A.—*continued.*

No.	*Title.*	*Place.*	*Duration.*	*Officers for whom course is applicable.*	*R/A (See Note).*	*Remarks.*
Gunnery Subjects.						
G1	Preliminary Gunnery Course	Reserve Training Establishment	20 No. 2 hour periods	R.A.N.R. Subordinate Seaman Specialist officers		
G2	Basic Gunnery Course	Gunnery School, F.N.D.	1 week	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualified	R	
G3	R.A.N.R. Lieutenants' Gunnery Course	Gunnery School, F.N.D.	2 weeks	(*a*) R.A.N.R. officers who have completed course G1 (*b*) Refresher course for reserve officers qualifying for command	R	Facilities for examination of officers requiring to qualify for Lieutenant R.A.N.R.
G4	Reserve Officers' (g) Course	Gunnery School, F.N.D.	4 weeks Part 1—2 weeks Part 2—2 weeks	(*a*) Reserve officers qualifying as reserve (g) officers (*b*) Part 1 may be taken as refresher course for reserve officers qualifying for command	R	Officers successfully completing full course will be entitled to the notation (g) against their names
G5	D.G.O.'s Course ..	Gunnery School,	4 weeks	R.A.N. General List officers ..	A	Examinations will be held on completion
G6	Gunnery Refresher Course	Gunnery School, F.N.D.	1 week	General List officers ..	A	
G7	Gunnery Refresher Course	Gunnery School, F.N.D.	As arranged	Commanding Officers and Commanding Officers designate	A	
Joint Anti-Submarine Subjects.						
J1	Senior Officers' Study Period	A.J.A.S.S. Nowra ..	1 week	General List Captains and above	R	C.N.O. 482/1960 refers
J2	Joint Tactical Course ..	A.J.A.S.S. Nowra ..	2 weeks	(*a*) R.A.N. General List and S.D. List Seaman Specialist officers, Commanders, Lieutenant-Commanders or senior Lieutenants (*b*) Reserve officers qualified for command (*c*) Reserve (A/S) officers	—	C.N.O. 482/1960 refers
J3	Maritime Head-quarters Course	A.J.A.S.S. Nowra ..	2 weeks	(*a*) R.A.N. General List Seaman Specialist Lieutenant-Commanders or Lieutenants (*b*) Lieutenant-Commanders R.A.N.R. (*c*) Lieutenant-Commanders and Lieutenants (S.D.) R.A.N.R.	R	C.N.O. 482/1960 refers
J4	Joint Unit Course ..	A.J.A.S.S. Nowra ..	4 weeks	(*a*) Ships' command teams (including appropriate ratings) (*b*) Maritime and A/S aircraft crews	R	C.N.O. 482/1960 refers
J5	Junior Officers' Course	A.J.A.S.S. Nowra ..	1 week	(*a*) R.A.N. General List and S.D. List Seaman Specialist Junior Lieutenants and Sub-Lieutenants (*b*) Reserve officers who have completed course No. T1	R	

APPENDIX A.—*continued.*

No.	*Title.*	*Place.*	*Duration.*	*Officers for whom course is applicable.*	*R/A (See Note).*	*Remarks.*
Miscellaneous Subjects.						
M1	Senior Officers' Land/Air Warfare Course	R.A.A.F. Station, Williamtown	2 weeks	General List Commanders and above	R	
M2	Air Support Course ..	R.A.A.F. Station, Williamtown	3 weeks	General List or Lieutenant-Commanders and above	R	
M4	Armament Maintenance Course	Gunnery School, F.N.D., and T.A.S. School, H.M.A.S. WATSON	3½ to 5½ weeks	R.A.N. General List and S.D. Engineering Specialist officers appointed as E.O.'s of destroyers and below	A	
M5	Instructional Technique Course	F.N.D. or H.M.A.S. PENGUIN	1 week	Officers appointed for instructional duties	A	
M6	Small Ships' Victualling Course	Supply School, F.N.D.	2 weeks	Officers other than Supply Specialist carrying out victualling duties in small ships	A	
M7	Examination Service Officers' Course	A.B.C.D. School, H.M.A.S. PENGUIN and H.M.A.S. KUTTABUL	2 weeks	Reserve officers designated for Examination Service	R	
M8	Duties of O.O.W. ..	F.N.D.	1 week	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualified	R	
M9	Seamanship	F.N.D.	1 week	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualified	R	
M10	Combat Survival ..	J.T.C. Canungra ..	8 days	(*a*) Aircrew .. .. (*b*) Selected officers	—	Confidential Navy Order 2 of 1960
ND Subjects.						
N1	Preliminary ND Course	Reserve Training Establishment	20 No. 2 hour periods	R.A.N.R. Subordinate Seaman Specialist officers	R	
N2	Basic ND Course ..	N.D. School H.M.A.S. WATSON	3 weeks	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualiffed	R	
N3	R.A.N.R. Lieutenants' ND Course	N.D. School H.M.A.S. WATSON	2 weeks	(*a*) R.A.N.R. officers who have completed course N1 (*b*) Refresher course for reserve officers qualifying for command (*c*) Refresher course for R.A.N. General List officers	R	Facilities for examination of officers requiring to qualify for Lieutenant R.A.N.R.

APPENDIX A.—*continued.*

No.	*Title.*	*Place.*	*Duration.*	*Officers for whom course is applicable.*	*R/A (See Note).*	*Remarks.*
ND Subjects—*continued.*						
N4	Reserve (n) Course ..	N.D. School, H.M.A.S. WATSON	4 weeks Part 1—2 weeks Part 2—2 weeks	Reserve officers qualifying for reserve (n) officers	R	Officers successfully completing full course will be entitled to the notation (n) against their names
N5	Small Ship N.O.'s Course	N.D. School, H.M.A.S. WATSON	1 week	R.A.N. officers designated as N.O.'s of destroyers and below	A	
N6	ND Refresher Course..	N.D. School, H.M.A.S. WATSON	As arranged	Commanding Officers and Commanding Officers designate	A	
N7	Instructor Officers' ND Course	N.D. School, H.M.A.S. WATSON	8 weeks	All Instructor Officers during initial training	R	
N8	(d) Course	N.D. School, H.M.A.S. WATSON	9 weeks	Selected R.A.N. General List Seaman Specialist Lieutenants	R	
TAS Subjects.						
T1	Preliminary TAS Course	Reserve Training Establishment	20 No. 2 hour periods	R.A.N.R. Subordinate General List Officer		
T2	Basic TAS Course ..	T.A.S. School, H.M.A.S. WATSON	1 week	(*a*) Supplementary List officers of Seaman Specialization (*b*) Reserve officers engaged for full time service in P.N.F. if not already qualified	R	
T3	R.A.N.R. Lieutenants' Course	T.A.S. School, H.M.A.S. WATSON	2 weeks	(*a*) R.A.N.R. officers who have completed course T1 (*b*) Refresher course for R.A.N. General List officers	R	
T4	R.A.N.R. Commanding Officers' Course	T.A.S. School, H.M.A.S. WATSON	2 weeks	Refresher course for reserve officers qualifying for Command	A	
T5	Tactical Course ..	T.A.S. School, H.M.A.S WATSON	1 week	*R.A.N. Officers:* (*a*) Seamen specialists appointed to H.M.A. Fleet, before taking up their appointments or as soon after as possible (*b*) Other seamen specialists as convenient (*c*) Electrical and Engineer specialists appointed to destroyers and frigates as in (*a*) *Reserve Officers:* (*d*) As part of their A.C.T. ..	R	C.N.O. 489/1960 May be combined with T3
T6	TASCO Course ..	T.A.S. School, .. H.M.A.S. WATSON	3 weeks	Officers performing duties of T.A.S.C.O. in destroyers and frigates	A	
T7	Asdic Control Officers' Course	T.A.S. School, H.M.A.S. WATSON	2 weeks	Officers performing duties of Asdic Control Officers in destroyers and frigates	A	
T8	TAS Refresher Course	T.A.S. School, H.M.A.S. WATSON	As arranged	Commanding Officers and Commanding Officer designate	A	

APPENDIX A—*continued.*

No.	*Title.*	*Place.*	*Duration.*	*Officers for whom course is applicable.*	*R/A (See Note).*	*Remarks.*
TAS Subjects—*continued.*						
T9	Diving Course ..	T.A.S. School, H.M.A.S. WATSON	3 weeks	All officers who are medically fit. Medical standard B.R. 1750A	A	Medical Standard B.R. 1750A
T10	Diving Supervision Course	T.A.S. School, H.M.A.S. WATSON	3 weeks	All officers	A	
T11	Diving Supervision Refresher Course	T.A.S. School, H.M.A.S. WATSON	1 week	General List T.A.S. officers SD List (TAS) (G) (B) (PR) officers. Shipwright and Engineers. Other officers qualified in diving supervision	A	C.N.O. 483/1960, paragraph 10
T12	Diving Acquaintance Course	T.A.S. School, H.M.A.S. WATSON	1 week	Sub-Lieutenants (SD) (PR) (N) (PT) (C) Shipwright Sub-Lieutenant and (ME) officers	A	C.N.O. 483/1960, paragraph 12
T13	Minesweeping Course	T.A.S. School, H.M.A.S. WATSON	As arranged	Captains and First Lieutenants designate of minesweepers	A	

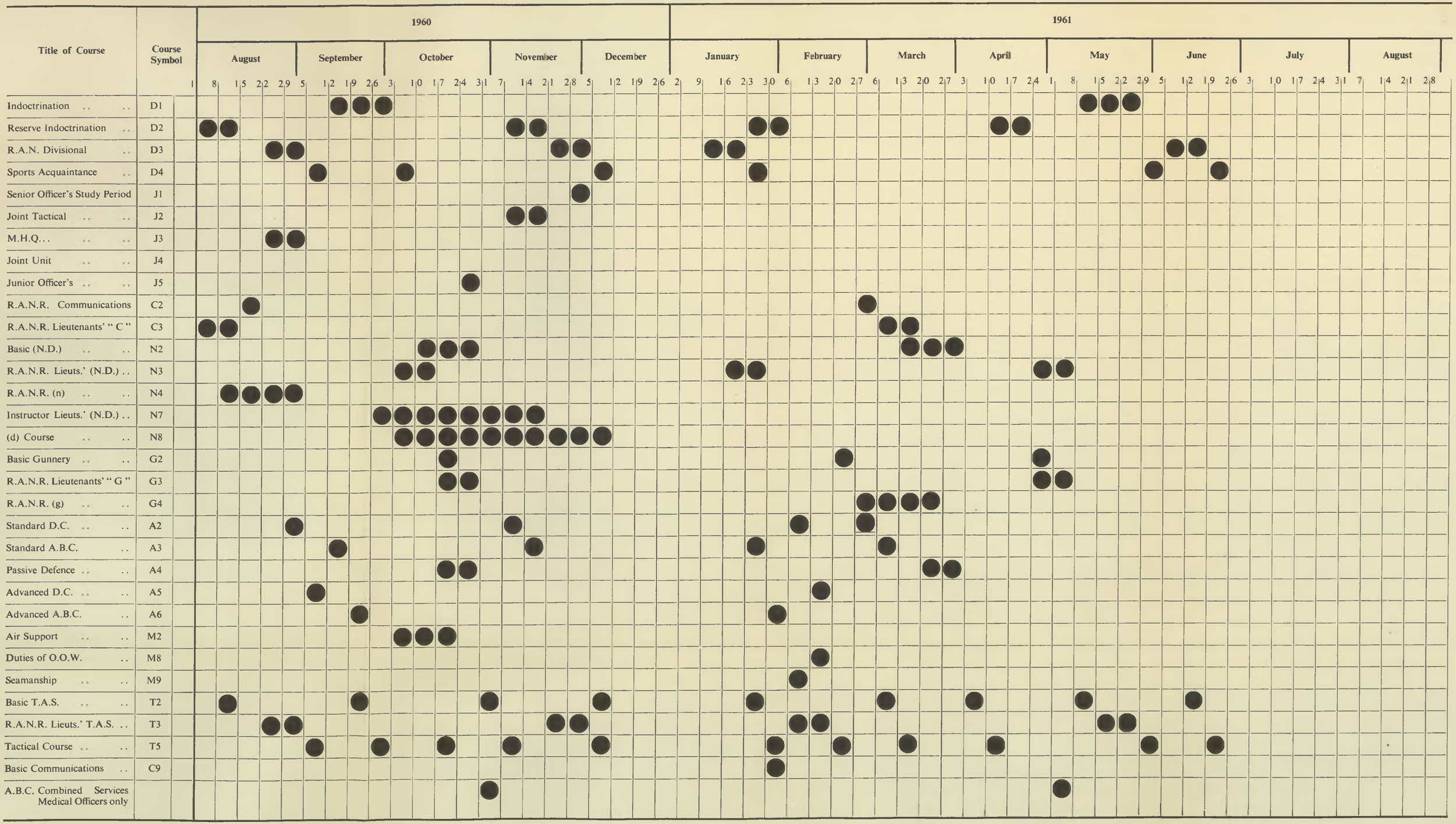
Note: R = Routine courses for which programmes are promulgated.
A = Courses for which application should be made to the establishment concerned.

(DOA 312/3/7.)

(*Confidential Navy Order* 2 *of* 1960 *and Navy Orders* 838 *of* 1958, 269 *and* 518 *of* 1959 *and* 270, 482, 483 *and* 489 *of* 1960.)

APPENDIX B.

OFFICERS' COURSE PROGRAMME 1960–61.



Notes: 1. A.B.C.D. Courses. Only those courses especially allocated for officers are shown.
2. T5 and all J series courses for the first half of 1961 will be promulgated separately.

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C.N.O.'s 505-521/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
22nd July, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

5117/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

505.—H.M.A.S. BASS—Commissioning.

H.M.A.S. BASS commissioned on Thursday, 26th May, 1960, under the command of Lieutenant J. Atkins.

(HNB 1236/1/6.)

UNCLASSIFIED.

506.—Signalling with Merchant Ships—Quarter Ending 31st March. 1960.

The returns of signalling with Merchant Ships and R.F.A.'s during the quarter ending 31st March, 1960 show a total of 315 successful exercises and fourteen reports of failure to establish communication.

2. Exercises reported by H.M.A. ships were as follows. No exercises with R.F.A.'s were reported.

H.M.A. Ship.	*British.*	*Other Seato/Nato.*
VENDETTA	55	68
QUEENBOROUGH	29	30
QUICKMATCH	21	8
VOYAGER	17	2
DIAMANTINA	12	1
KIMBLA	9	2
MELBOURNE	9	2
QUIBERON	10	—
SWAN	4	5
TOBRUK	8	—
VAMPIRE	3	2
ANZAC	5	—
BARCOO	5	—
GASCOYNE	4	—
WOOMERA	4	—

3. There were seven cases of merchant ship signalling reported as worthy of special mention. These have been communicated to the shipping companies concerned.

4. The appendix to this order lists merchant ships worthy of special mention.

APPENDIX.

LIST OF MERCHANT SHIPS WORTHY OF SPECIAL MENTION.

Shipping Company.	*Merchant Vessel.*	*Date of Exercise.*	*H.M.A. Ship.*	*Remarks.*
Shaw Savill	MV. DOMINION MONARCH	27.2.60	DIAMANTINA ..	Very good signalling at 8 words per minute and at 4 miles distance
Ocean S.S. Co. Ltd. ..	SS. IXION	23.2.60	ANZAC ..	Light well trained and good procedure at 9 words per minute
Huddart Parker	SS. ADELONG	30.3.60	MELBOURNE ..	Extremely good morse at 8 words per minute
Howard Smith Australia S.S. Pty.	SS. AGE	11.2.60	QUIBERON ..	Flashing and procedure very good at 8 words per minute
Department of Shipping and Transport	SS. RIVER MURRUMBIDGEE	2.2.60	QUIBERON ..	Excellent flashing and procedure at 8 words per minute
P. & O. Steam Nav. Co. ..	SS. PATONGA	23.3.60	TOBRUK ..	Exceptionally good morse and procedure at 10 words per minute
Clan Line	MV. CLAN MALCOLM ..	27.3.60	TOBRUK ..	Answered promptly with very good procedure and morse at 8 words per minute

(DSD 77/5/2.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

507.—Care of Hearing—Protection from High Intensity Noise.

(*A.F.O.* 2770/1959.)

The Naval Board wish to draw attention to the great importance of protecting men's ears, by the use of ear protectors, against the many sources of high intensity noise which now exists in the Fleet and which can be injurious to health.

2. It is not possible to give an accurate scientific definition covering every situation, of the degree of noise intensity which may involve danger.

3. It has therefore been decided that for the present a simple practical rule for determining a " noise-dangerous " position will be applied to all positions, whether enclosed or open, which may be affected by high intensity noise both afloat and ashore. This rule is as follows—

> If the noise is such that spoken orders cannot be clearly heard when a distance of 2 feet separates the mouth of the speaker and the ear of the listener and the listener has his back to the speaker (that is, he cannot lip read) or when shouted orders cannot be heard at a distance of about 5 feet, then ear defenders should be worn by all in the vicinity.

4. In future inspections, the Captain is to produce for the Inspecting Officer a list of " noise-dangerous " positions in his ship; forms S.425, 427 and 428 will be amended accordingly. Officers and men are to be instructed that ear defenders should be worn at these positions at all times when high intensity noise may be experienced.

5. The wearing of ear defenders need not prejudice communication; indeed, in certain circumstances in high noise levels, voice communication is actually improved by their use.

6. The following examples of potential " noise-dangerous " positions, which will vary in importance from ship to ship and on shore, are given for guidance in drawing up individual lists. These examples are by no means exhaustive and in cases of doubt Captains should seek advice from the Naval Board.

(*a*) *In Aircraft Carriers when operating jet aircraft*—

Compass Platform.
Admiral's Bridge.
Flying Control Positions.
Aircraft Control Room.
Flight deck close against island and catwalk opposite island, and the whole flight deck during aircraft launching operations.
Catapult Controls.
Chockmen.
Mirror Control Officer's Positions.
Flight deck handlers ready room.
Gun direction platform.
Gun-deck on island.
Upper-hangar.

(*b*) *Ships in general—positions close to—*
Guns and rocket launchers.
Gas turbines.
Modern high speed diesels.
Boiler room and other high duty fans, or trunking orifices.
Air compressors.
Main and auxiliary machinery when at high power.
Submarine engine rooms.
Diesel generator rooms.

(*c*) *Ashore—*
Small Arms Ranges.
Air Stations and aircraft yards, when close to aircraft engines at full power.

7. The danger to hearing in these and similar positions can be largely avoided by the use of the various forms of ear protectors, viz.; helmets, noise excluding, flight deck and ear pads; ear defenders, mark 1 (plugs); and ear defenders, mark 3 (muffs) or a combination of these.

(*Note:* Helmets, noise excluding and ear pads have not been formally adopted in the R.A.N. but stocks obtained *ex* R.N. sources and held on board H.M.A.S. MELBOURNE may continue in use. Mark 3 muffs are not yet available but are being obtained.)

In the highest noise fields it may be desirable to wear both the mark 3 muffs and the mark 1 plugs simultaneously.

8. Officers and men are to be instructed that when working at the "noise-dangerous" positions referred to above, also other similar positions that may be decided upon, ear defenders either as ear-plugs, or noise excluding helmets or ear-muffs, are to be worn at all such times.

9. Personnel who are required to wear ear defenders, either because their action, defence or cruising stations are at any of the positions named in the preceding paragraph or because their efficiency is dependent on their sense of hearing, e.g., T.A.S. ratings, are entitled to receive ear defenders gratuitiously in the case of mark 1 plugs or on loan in the case of mark 3 muffs and noise excluding helmets. Details of gratuitous issues made to ratings of the mark 1 plugs are to be recorded on form A.S. 105 and on the Service Certificates of the personnel concerned. The price applicable to replacement issues is promulgated in the Clothing Price List.

10. Stocks of mark 1 ear defenders are maintained in three sizes, viz., large, medium, and small. They are packed in metal cases, each set comprising a pair of defenders, a tube of antiseptic ointment, a pair of inserters and a set of instructions.

11. At the initial issue the fitting of any of the defenders mentioned should be carried out under medical supervision and the medical officer supervising the fitting should give the wearer a brief explanation of the principles of hearing protection and its necessity. The fact that damage to the ears can be caused without pain being felt should be emphasized. It should be explained that a simple and effective means of protection for short periods when ear defenders are not to hand is to place the fingers in the ears.

12. The wearing of cotton wool, either dry or greased, is not a satisfactory substitute for ear defenders, and its use should be discouraged.

13. Instructions concerning the issue and use of ear defenders are contained in B.R. 93 (51) Victualling Manual, Appendix 62 (iv).

14. Cases of loss of hearing arising through neglect to wear proper hearing protection may prejudice a claim to a disablement award.

15. Attention is drawn to the issue of posters (S.1587 (1 to 6)) for display in noise-hazardous working positions. These are available by demand on the Superintending Naval Store Officer, Sydney.

16. Navy Order 889 of 1958 and Confidential Navy Order 82 of 1958 are relevant.

(MDG 177/51/8.)

(*Navy Order* 889 *of* 1958 *and Confidential Navy Order* 82 of 1958.)

UNCLASSIFIED.

508.—Employment of Petty Officer Engineering Mechanics and Leading Engineering Mechanics in Maintenance Tasks.

During the Mechanical Training Course, Leading Engineering Mechanics are taught the basic principles of fitting and at the end of the course are capable of carrying out the tasks described in A.B.R. 10, article 1451.

2. The skill acquired during this course should enable all LM(E)'s and POM(E)'s to carry out the majority of minor maintenance tasks required by planned maintenance schedules.

3. The tendency to employ skilled artificers on tasks which are well within the capabilities of POM(E)'s and LM(E)'s prevents these latter ratings from increasing their ability by practical application. Correct employment of POM(E)'s and LM(E)'s will ensure that the more highly skilled artificer ratings are available for the more complex maintenance and repair tasks.

4. Engineer Officers are to study their planned maintenance schedules and ensure that POM(E)'s and LM(E)'s are employed to the limit of their skill.

(DMT 312/25/2.)

UNCLASSIFIED.

509.—Communication Fleet Boards—Refresher Training.

Refresher courses of 4 weeks duration will be held at H.M.A. Signal School, Flinders Naval Depot and at the Signal Training Centre, Sydney, as follows. General details are given in Navy Order 273 of 1960.

Starting Date of Course.	*Date of Associated Fleet Board.*	*Convened by.*	*Location of Fleet Board.*
15th August, 1960 ..	During week commencing 12th September, 1960	FOICEA	Sydney
14th November, 1960	During week commencing 12th December, 1960	FOICEA CST FND	Sydney. F.N.D.
13th February, 1961	To be promulgated later		

(DSD 312/24/1.)

(*Navy Order* 273 *of* 1960.)

RESTRICTED.

510.—Malaria and Scrub Typhus—Measures for Prevention and Control.

All Naval personnel in or about to be drafted to malarious areas, as defined hereunder, are to be thoroughly instructed in anti-mosquito and anti-malarial precautions. Medical Officers are to advise and assist in such training.

2. Before embarking for a malarious area, the Commanding Officer of the ship or establishment from which members are being moved is to ensure that each member is issued with the following items of anti-malarial supplies and equipment—

Tablets oral Paludrine	No. 12,
Mosquito Repellent lotion	Bottle 1,

and that he possesses the regulation long protective clothing. Mosquito nets will be issued upon arrival at the destination in malarious areas.

3. All Naval parties proceeding to a malarious area, other than H.M.A.S. TARANGAU, are also to be supplied with sprayers, hand, small, 20 per cent. of unit strength and anti-mosquito spray fluid, pattern 4293 before leaving. Continuity of supply of these items to the parties is to be ensured in accordance with Scale Allowances. These are to be demanded from the appropriate (Suptg.) Naval Store Officer. In H.M.A.S. TARANGAU stocks are already carried and issues will be made on arrival of the drafts. (Paragraph 18 refers.)

4. The Commanding Officer of a ship, establishment or party in a malarious area is to ensure that the following precautions for personal protection are carried out—

(*a*) From sunset to sunrise, every member, except when protected by a mosquito net, is to wear slacks, boots, web gaiters, and long sleeved shirt or jacket with sleeves down and buttoned at the wrist.

(*b*) Guards and sentries are to be provided with veils and gloves, in addition to the items shown in paragraph 4 (*a*), which also are to be worn from sunset until sunrise.

(*c*) Every member is to carry a container of mosquito repellent lotion, and is to apply the lotion to exposed skin surfaces as described in paragraph 17.

(*d*) Every member sleeping on deck or on shore within 1 mile to windward of and 2 miles to leeward of a malarious area is to sleep under a mosquito net.

The types of net supplied are—

(i) Nets, mosquito, green, ring top—for men stationed at anti-aircraft gun positions or on bridge watch keeping duties.

(ii) Nets, mosquito, white—for use in shore establishments. Supplied either with a ring top or calico rectangular top as desired.

(iii) Nets, bush, green—for shore parties and men sleeping on the upper deck. These nets are a type of a small one-man tent having calico top and bottom, sides of fine netting and fitted with stay ropes for erecting.

All nets are accountable as loan clothing.

(*e*) In establishments all occupied quarters, tents or bivouacs, as well as native huts and buildings, are to be closed and sprayed each night and each morning with anti-mosquito spray. The Medical Officer is to advise the Commanding Officer as to appropriate instructions for methods of spraying to be used locally and will be required to advise as to priority and method of screening buildings to render them mosquito proof.

5. Anti-mosquito measures to be adopted for H.M.A. ships in malarious or potentially malarious areas are as follows—

(*a*) The ideal anchorage for a ship in harbour in a malarious area is not less than 1 mile to windward of the shore. Malaria bearing mosquitoes have been known to fly almost this distance up wind and much greater distances down wind. Mosquitoes may also be brought on board on clothing or in ship's boats, lighters, water tanks, native craft, &c., and have been known to multiply on board during a wet season in insufficiently protected accumulations of water, e.g., in hold-alls for water, the drip pan of scuttles, unstoppered water bottles, &c. They tend to cling to dark corners of cabins or other accommodation, under clothing or bunks during daylight hours, but are attracted by bright light. In the morning mosquitoes which have entered compartments or flats during the night should be driven out, hanging clothing and curtains disturbed, and corners, clothing and under bunks sprayed with insecticide.

(*b*) No member is to be allowed to sleep on deck unless a mosquito net is used (*vide* paragraph 4 (*d*)), if the ship is within mosquito range.

(*c*) Care is to be taken that no uncovered pools of stagnant rain water (e.g., in boats and awnings) are allowed to remain.

(*d*) Leave should be completed by sundown as far as possible and any men remaining on shore must have suitable regulation clothing and mosquito repellent lotion, in the use of which they should be fully instructed. The danger of allowing mosquitoes to bite them, should also be fully explained. Sentries on gangway and wharf duty are particularly vulnerable. Anti-malaria prophylaxis is to be taken by the whole crew in accordance with the instructions laid down in paragraph 6.

Suppressive Treatment (Prophylaxis) for Malaria.

6. Anti-malaria prophylaxis is to be demanded from the Medical and Dental Store Officer, No. 24 Shed, Bundock Street, Randwick, New South Wales.

7. Paludrine is the routine anti-malaria drug used generally in the R.A.N., but, in order to offset any tendency to create drug resistant strains of mosquito in certain areas, other drugs will be introduced from time to time. These are to be administered in the area concerned, in accordance with the specific instructions issued concurrently with the drug.

8. The Commanding Officer of each land based naval party or the Captain of an establishment or of a ship in harbour in malarious areas, is responsible for the administration of malaria prophylaxis to every officer and rating under his command. Whenever possible the drug is to be given under the supervision of an officer. Strict supervision is necessary to guard against failure to swallow the tablets.

9. For all personnel proceeding to a Land Base in a malarious area, Paludrine suppressive treatment need commence only one day prior to arrival in the malarious area and then be continued under supervision. Treatment will consist of one tablet of Paludrine (0.1 gm.) taken daily immediately after food (the evening meal) with a drink of water and is to be continued in accordance with paragraph 10.

10. The suppressive dosage of Paludrine will be one tablet (0.1 gm.) daily.

11. Only those prophylactic drugs ordered for any particular location are to be used, except by order of a medical officer when other drugs are considered necessary for a particular member for medical reasons.

12. Personnel moving from a malarious area to a non-malarious area are to continue on suppressive treatment for 30 days after leaving the area. The dose of Paludrine is one tablet (0.1 gm.) daily. If another malaria prophylactic drug is being taken, the continued use is to be that laid down for the particular drug.

13. Movements of R.A.N. personnel from a malarious area to a potentially malarious area are also to continue on suppressive prophylaxis for 30 days after leaving the malarious area, at the same dosage of one tablet, (0.1 gm) daily, of Paludrine or the prescribed dosage of other types of prophylaxis permitted from time to time.

14. Movements of R.A.N. personnel from a malarious area to a potentially malarious area are only to be made for urgent military necessity, and then due notice is to be given by the Commanding Officer of the malarious area to the Commanding Officer in the potentially malarious area of the impending arrival of personnel. All such advices are to be repeated for the information of the Naval Board.

15. For Naval purposes, the following definitions are made of the Australian region—

(*a*) *Malarious Area*—within 1 mile to windward of and 2 miles to leeward of land in New Guinea and associated islands lying West of 170° East Longitude, and North of 20° South Latitude, with the exception of Thursday Island and Horn Island.

(*b*) *Potentially Malarious Area*—within 1 mile to windward of and 2 miles to leeward of land in that part of the continent of Australia lying North of a line drawn between Townsville and Broome, but excluding—

(i) Establishments in Townsville and Broome.

(ii) Horn Island and Thursday Island and ancillary stations.

(iii) That portion of the Atherton Plateau lying above 2,000 feet elevation. (*Note:* The town of Atherton is above this level, and the town of Mareeba is below it.)

These definitions do not apply to H.M.A. ships operating in the waters of either area provided a medical officer is borne.

16. Personnel proceeding to Australia for leave or duty from a malarious area, with the intention of returning to that area after leave or duty, are to be given sufficient tablets to carry out suppressive treatment throughout the period until return to the area. They are to be impressed with the importance of regular dosage. Members are to be particularly instructed that should illness occur whilst on leave or duty, they are to report to the nearest Service Medical Officer, or, should one not be available, to the nearest qualified medical practitioner. A certificate should be obtained from the Medical Officer treating the illness, as to the exact nature, type of malaria if present, and the treatment employed.

Mosquito Repellent Lotion—Use.

17. Mosquito repellent lotion is to be used in malarious areas according to the following procedure—

(*a*) The lotion is to be applied by each member at sundown and again on rising, if before sunrise.

(*b*) Members on night duty are to apply the lotion on commencing duty, and renew applications at three-hourly intervals, or more often if necessary.

(*c*) Method of application:

A small quantity, not more than half a teaspoonful, is poured on to the palm and after rubbing the hands together, smeared all over all exposed portions of the face, neck and arms.

18. *Allowances.*—Demands for requirements are to be prepared in accordance with the following allowances—

Pattern.	*Item.*	*Denomination of quantity.*	*To be demanded from.*	*Allowance.*
E7/4293	Mosquito spray	Gallons ..	(S)N.S.O.	*Malarious Areas*—9 gallons per 100 men for 28 days. *Potentially Malarious Areas or areas where there is an outbreak of dengue fever*—6 gallons per 100 men for 28 days—issue to be made on authority of Medical Officer

Note: Mosquito spray, pattern 4293, must never be allowed to come into contact with food or cooking utensils. The spray has an immediate knock down and lethal effect against insects, but has only minimal residual capacity.

Pattern.	*Item.*	*Denomination of quantity.*	*To be demanded from.*	*Allowance.*
B10/like 12127	Sprayers, hand	Number ..	(S)N.S.O.	*Malarious Areas*—20 per cent. of unit strength. *Other areas where mosquito spray is issued*—10 per cent. of unit
485/7 ..	Insect repellent lotion (DMP)	(*a*) 4-oz. bottles (individual) (*b*) Drum, gallons (bulk)	M. & D.S.O.	1 No. 4-oz. bottle per man (2½ gallons per 100 men) per 28 days to be issued in *malarious and potentially malarious areas only*. For scrub typhus, 5 gallons per 100 men for 28 days on authority of Medical Officer.
	Anti-malaria oil (Comprises—Diesel Fuel 47 Cetane—i.e., Automotive Diesel Oil, with 5 per cent. of Pattern 6980 Creosote added)	Gallons ..	(S)N.S.O.	*Malarious Areas*—50 gallons per 100 men for 28 days. *Potentially Malarious Areas*—25 gallons per 100 men for 28 days. *Non-malarious Areas, Dengue*—10 gallons per 100 men for 28 days. (The authority of the Medical Officer is required for supply to potentially malarious and non-malarious areas)

Note: Requirements of Diesel Fuel and Creosote should be demanded as separate items from the (S)N.S.O. concerned and mixed in the Establishment as required.

Pattern.	*Item.*	*Denomination of quantity.*	*To be demanded from.*	*Allowance.*
—	Nets, mosquito, green, ring top	No.	S.V.S.O. R.E.V.Y. Sydney	Three for each anti-aircraft gun or bridge watchkeeping position
—	Nets, mosquito, white	No.	S.V.S.O. R.E.V.Y. Sydney	One per man
—	Nets, bush ..	No.	S.V.S.O. R.E.V.Y. Sydney	One for each member of a shore party or for each man required to sleep on the upper deck
—	Veils, mosquito	No.	S.V.S.O. R.E.V.Y. Sydney	One for each guard or sentry

Note: Supply Officers are authorized to carry a reserve stock of nets sufficient to provide for normal replacements and for drafts, visitors and emergent purposes.

19. *Scrub Typhus.*—For protection against mites, for the prevention of scrub typhus, the outside of the socks, inside and outside of gaiters, inside of the shirt at neck, wrist, front opening and armpit region, should be lightly smeared with the lotion. The lotion is first smeared on the hands, which are then rubbed over the parts of clothing just indicated. Thorough treatment of the upper part of the socks is particularly important. Treatment should be repeated each time the clothes are washed. While the application on the skin passes off within a few hours, the lotion remains effective on clothing for about three days. Paragraph 18 refers to supply.

20. Navy Orders 53 and 511 of 1960 are relevant.

21. Navy Order 559 of 1959 is hereby cancelled.

(MDG 327/53/4.)

(*Navy Orders* 559 *of* 1959 *and* 53 *and* 511 of 1960.)

UNCLASSIFIED.

511.—Malaria—Treatment.

The attention of members leaving malarious areas is to be drawn to the need to continue prophylactic measures conscientiously. Treatment should be continued for the full period according to instructions, after return to the mainland (Navy Order 510 of 1960—Malaria and Scrub Typhus—Measures for Prevention and Control). The dangers of discontinuing the prophylaxis are to be stressed to members during the draft-out routine. Members proceeding on leave should also be fully instructed.

2. The measures taken locally to clear the area of mosquitoes and thus lower the infection rate are to be vigorously pursued.

3. In the event of a break-through case of malaria occurring in spite of all precautions taken, the case is to be admitted to hospital and the following routine instituted—

(*a*) *Identification.*—The diagnosis of the type of malaria should be confirmed by microscopic examination of blood films for malarial parasites at the earliest possible moment.

(*b*) *Treatment*—

(i) *Pure M.T. Infections.*—Chloroquine diphosphate—5 days' course.

1st day. 600 mgm. of base, followed 8 hours later by 300 mgm. of base.

2nd day. 300 mgm. base b.i.d.

3rd–5th day. 300 mgm. base daily.

(ii) *B.T. with Fever.*—Chloroquine diphosphate—3 days and primaquine diphosphate 14 days. (To be taken concurrently.)

1st day. Chloroquine 600 mgm. base, followed in 8 hours by 300 mgm. base. Primaquine diphosphate 15 mgm. of base or 22.5 mgm. base.

2nd day. Chloroquine 300 mgm. base b.i.d. Primaquine 15 mgm. base or 22.5 mgm. base.

3rd day. Chloroquine 300 mgm. base. Primaquine 15 mgm. base or 22.5 mgm. base.

4th–14th days. Primaquine 15 mgm. base or 22.5 mgm. base daily.

(iii) *B.T. without Fever.*—Primaquine diphosphate 15 mgm. base or 22.5 mgm. base daily for 14 days.

(iv) *Mixed or doubtful Infections.*—Treat as for B.T. with fever.

Note: Various manufacturer's tablets may have differing base contents.

4. M.T. malaria may rapidly fulminate and give rise to grave complications frequently due to obstruction of small blood vessels by parasitized red cells, particularly in the brain. In pernicious malaria the patient often is vomiting; he may be mentally deranged or comatose. In such cases speed and certainty in the control of the infection are imperative. Parenteral treatment is then necessary. Therefore, in the presence of clinical evidence of acute, pernicious or cerebral manifestations, or laboratory evidence of hyperinfection by M.T. parasites, intravenous quinine therapy should be used. Quinine dihydrochloride in a dose of 10 grains is given intravenously, slowly, over a period of 10–15 minutes, well diluted in normal or glucose saline, minimum quantity 10 cc.'s, and an intravenous saline drip is set up. A second injection of quinine dihydrochloride is given when necessary after 4–6 hours, the same dosage and dilution factors being observed.

5. The advocated methods of oral treatment are entirely satisfactory if the patient is conscious and he can swallow and absorb the drugs. Oral treatment should replace the parenteral treatment at the earliest opportunity.

6. After radical cure of an attack of malaria, if the patient is to remain in a malarious area, the relevant suppressive prophylaxis is to be re-instituted.

7. Navy Order 836 of 1958 is hereby cancelled.

(MDG 327/54/23.)

(*Navy Orders* 836 *of* 1958 *and* 510 *of* 1960.)

UNCLASSIFIED.

512.—Ratings—Training and Employment of Artificer Apprentices on Leaving the Royal Australian Navy Apprentice Training Establishment.

The third year of training of Naval Artificer Apprentices at the R.A.N. Apprentice Training Establishment H.M.A.S. NIRIMBA was completed in June, 1959. Accordingly, the first group of apprentices entered into the scheme in July, 1956, have now commenced the Advanced Training Phase which comprises a further twelve months' training.

2. E.A. apprentices pass out from H.M.A.S. NIRIMBA at the end of 3½ years' training and E.R.A., O.A. and N.S. apprentices at the end of the fourth year.

3. On completion of the fourth year of training in June, 1960, the first Artificer Apprentices were advanced to the 5th Class rate.

4. It is desirable that all concerned should be acquainted with the progress of the Naval Artificer Apprentice training scheme and be fully aware of the commitment of ships and establishments to take an active part, in due course, in the responsibility for furthering the training of these ratings subsequent to their passing out from H.M.A.S. NIRIMBA.

5. Ex-apprentices will be appropriated to undergo the Petty Officer's Leadership course and the standard A.B.C.D. course after advancement to the Petty Officer rate.

6. The following is a brief summary of the training and employment of the various categories of Artificer Apprentice—

(*a*) *Naval Shipwright.*

(i) Ratings undergo four years' training as an apprentice at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated Naval Shipwright 5th Class.

(iii) After advancement to 5th class they will be appropriated to sea for a minimum of twelve months.

(iv) During service in the 5th class, ratings will be borne additional to complement for training and experience in practical application of their trade. If considered capable of passing during the period ratings will be permitted to take the examination for award of a Certificate of Competency appropriate to the Acting 4th Class rate. (*See* A.B.R. 10, Article 1522.)

(v) Ratings will be eligible for advancement to Acting Naval Shipwright 4th Class on satisfactory completion of a minimum of one year's service as Naval Shipwright 5th Class, and have completed a minimum of five years' apprenticeship from date of commencement of training at the Royal Australian Naval Apprentice Training Establishment.

(*b*) *Engine Room Artificer.*

(i) Ratings undergo four years' training as apprentices at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated E.R.A. 5th Class.

(iii) After advancement to 5th Class they will be appropriated to sea for a minimum of twelve months.

(iv) During service in the 5th Class, ratings will be borne, additional to complement, for training and experience in accordance with a prescribed syllabus relating primarily to Auxiliary Machinery Watchkeeping and Boiler Room Watchkeeping. If considered capable of passing during this period, ratings will be permitted to take the examination for award of an Auxiliary Machinery Watchkeeping Certificate and a Boiler Room Watchkeeping Certificate. (*See* A.B.R. 10, Articles 1467 and 1468 respectively.)

(v) Ratings will be eligible for advancement to Acting Engine Room Artificer 4th Class on passing the prescribed oral examinations and on completion of a minimum of one year's service as an Engine Room Artificer 5th Class, and have completed a minimum of five years' apprenticeship from date of commencement of training at the Royal Australian Naval Apprentice Training Establishment.

(*c*) *Ordnance Artificer.*

(i) Ratings undergo four years' training as apprentices at H.M.A.S. NIRIMBA.

(ii) Subject to " passing out " from H.M.A.S. NIRIMBA at the end of the fourth year they will be rated Ordnance Artificer 5th Class.

(iii) After advancement to the 5th Class they will undergo twelve months' training as supernumeraries. This training will include five months application training divided between the firing ranges at H.M.A.S. CERBERUS (West Head) and H.M.A.S. WATSON.

(iv) Ratings will be eligible for advancement to Acting Ordnance Artificer 4th Class on completion of training and on completion of a minimum of one year's service as an Ordnance Artificer 5th Class and have completed a minimum of five years' apprenticeship from date of commencement of training at the Royal Australian Naval Apprentice Training Establishment.

(v) Successful completion of training at (iii) above qualifies ratings professionally for subsequent confirmation as Ordnance Artificer 4th Class and for advancement up to and including Ordnance Artificer 1st Class.

(*d*) *Electrical Artificer.*

(i) Ratings undergo three years and six months' training as apprentices at H.M.A.S. NIRIMBA.

(ii) During the first half of the fourth year training, apprentices will undergo final trade test, Junior A.B.C.D. (at H.M.A.S. PENGUIN) and " passing out ".

(iii) Subject to " passing out " at the end of 3½ years, apprentices will be appropriated to H.M.A.S. CERBERUS and will undergo advanced training. The first group of E.A. apprentices joined H.M.A.S. CERBERUS in January, 1960. At the end of the fourth year, apprentices will be rated Electrical Artificer 5th Class.

(iv) After advancement to the 5th Class, they will remain at H.M.A.S. CERBERUS and will be borne, additional to complement for training and experience in their trade, for a period of nine months. Ratings will then be appropriated as supernumeraries to sea-going ships for practical experience for a minimum period of three months.

(v) Ratings will be eligible for advancement to Acting Electrical Artificers 4th Class on completion of one year's service as an Electrical Artificer 5th Class and have completed a minimum of five years' Apprenticeship from date of commencement of training at the R.A.N.A.T.E.

7. The appropriate chapters of A.B.R. 10 will be amended in due course to provide instructions for the advancement of apprentices.

8. Navy Order 59 of 1960 is hereby cancelled.

(HPB 303/35/8.)

(*Navy Order* 59 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

513.—Gun Mountings—4.5-in. Twin R.P. 41 Mountings Mks. 6 and 6* (Mod. No. A.N. 100)—Drill Loading Tray Doors at Rear of Turret Replaced by Bolted Cover Plates.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted except Flinders Naval Depot.
(*b*) *Type and mark of equipment*	4.5-in. Mk. 6 and 6* mountings fitted with drill loading tray doors, Drawing N.37310. *Note:* In later mountings these doors have been omitted in manufacture.
(*c*) *Reason for modification* ..	These doors are now redundant due to the provision of new type drill loading chutes which operate through the W.T. doors in the gunhouse floor.
(*d*) *Nature of modification* ..	To remove existing doors and fittings and to replace by $\frac{3}{8}$-in. mild steel cover plates and $\frac{1}{8}$-in. O.R.S.R. gaskets, secured by 12 No. $\frac{3}{8}$-in. set screws. Redundant holes to be plugged.
(*e*) *Drawing No. or N.O. diagram*	Not required—Dockyards are to provide the necessary cover plates and gaskets 12-in. x $11\frac{1}{4}$-in.
(*f*) *By whom to be done* ..	Ships' staffs. Dockyards to provide material on demand.
(*g*) *When to be done* ..	As convenient.
(*h*) *How to be recorded* ..	Mod. No. A.N. 100.

2. Navy Order 406 of 1960 and B.R. 2014B are relevant.

(DW 736/259/14.)

(*Navy Order* 406 *of* 1960.)

UNCLASSIFIED.

514.—Weapon Trials—Responsibilities of Officers Standing by Ships.

The responsibilities of " G ", T.A.S., and O/E officers standing by ships are laid down in B.R. 1921. Article 13, paragraph 4 is particularly relevant.

2. When, in special circumstances, trials are carried out by ships' officers on behalf of the user school, results of these trials are to be presented to the user school trials officer who will incorporate them in his trial report in the normal way. B.R. 1921, Article 150A, which is specifically intended for Gunnery Trials, is also, in general, equally applicable to T.A.S. trials.

3. Navy Order 518 of 1958 is hereby cancelled.

(DW 1211/51/143.)

(*Navy Order* 518 *of* 1958.)

RESTRICTED.

515.—A/S Weapons—A/S Mortar Mk. 10 CH043 Contact—Modification.

(*A.F.O.* 2732/1959.)

Weapon	A/S Mortar mark 10.
Part affected	CH043 Contact, Pressure—Assembly.
Drawing	UCW 6466/10.
Modification	CH655 Diaphragm and CH557 Spring are to be replaced by CH733 Diaphragm (Drawing UCW 6466/28) and CH596 Spring (Drawing UCW 380/134). A limited number of contacts were fitted with fibre sealing rings (CH684 Ring). These are to be replaced by rings of graphited asbestos (CH827 Ring Drawing UCW 32/55). After modification the item will be known as CH095 Contact, pressure and assembly.
Purpose	To eliminate variations in operating pressure and improve the pressure tight joint to ensure water tightness.
By whom to be done ..	R.A.N. Armament Depots who will carry out requisite pressure and electrical tests after assembly.
How to be treated ..	As a defect.
When to be done	Contacts in store are to be modified before issue. A/S Mortars in service are to be fitted with CH095 Contacts, pressure-assembly at first convenient opportunity.

Distribution of new items .. CH733 Diaphragms, CH596 Springs, CH827 Rings and CH095 Contacts, pressure assembly will be issued to ships to replace, *pro rata*, CH655 Diaphragms, CH557 Springs and CH684 Rings in CJ016 Chests and CH043 Contacts in CJ042 Chests. Supply will be made without demand by the nearest Naval Armament Depot when supplies are available.

R.A.N. Armament Depots only Details of the modification were promulgated in UW(A) 41/59 dated October, 1959.

2. Navy Order 391 of 1959 is hereby cancelled.

(DW 716/251/119.)

(*Navy Order* 391 *of* 1959.)

UNCLASSIFIED.

516.—Common Range Electrical Test Equipment—Introduction and Allowances—Amendment to.

Navy Order 740 of 1959 is to be amended as follows—

Appendix—

Amend item—

" F19/943-3267—CT217 (previously) F1A/1/62275 Indicator, standing wave ratio (previously) Reflection coefficient meter 125 and 280 Mc/S."

to read 1,1 and 1 respectively in columns headed " Darings ", " Tribal and Battle Class " and " Frigate ".

(DNAS 517/51/37.)

(*Navy Order* 740 *of* 1959.)

UNCLASSIFIED.

517.—Naval Stores—Stocktaking in H.M.A. Ships and Commissioned Establishments.

In accordance with the provisions of A.B.R. 4, article 1601, stocks of all descriptions of stores in the custody of the Supply Officer are to be mustered as follow—

(*a*) Valuable and attractive items—every six months.

(*b*) All other stores—at least once in every eighteen months.

2. Form A.S. 148 (Outside) provides for the insertion thereon of percentages of stores mustered during the last eighteen months period. In the event of the total percentage falling appreciably below 100 per cent., the report is to be suitably endorsed with the reason for the full muster not being maintained, and the action taken to ensure future compliance.

3. A.B.R. 4 will be amended.

(DNAS 400/57/78.)

518.—This Order will not be issued.

UNCLASSIFIED.

519.—Ships' Complement of Boats—Amendment.

Navy Order 96 of 1960 is to be amended as follows—

(*a*) Under Class Heading " A/S Frigate (River) " insert—

Class of Ship.	Standard Range of Boats for Supply to Ships.												
	35-ft. Fast Motor Boat.	*30-ft. Fast Motor Boat.*	*32-ft. Motor Cutter.*	*27-ft. Motor Whaler.*	*25-ft. Motor Whaler.*	*34-ft. Survey Motor Boat.*	*17-ft. 6-in. Motor Dinghy.*	*17-ft. 4-in. Motor Boom Boat.*	*27-ft. Whaler (N.O. Spec. 111A/33B).*	*16-ft. Skiff Dinghy (N.O. Spec. 111A/19?).*	*14-ft. Sailing Dinghy (N.O. Spec. 111A/39B).*	*10-ft. Dinghy (N.O. Spec. 111A/62 and 63).*	*8-ft. 6-in. Pram Dinghy.*
GASCOYNE ..	—	—	—	—	1 1D	—	—	—	1	—	1	—	—

(*b*) Under Class Heading " Survey Vessels " insert—

PALUMA ..	—	—	—	—	1	—	—	—	—	—	1	—	1

(DNC 1275/51/44.)

(*Navy Order* 96 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

520.—Form A.M. 191—Out-patients Treatment Card.

Form A.M. 191 has been established and will be issued without demand from the Medical and Dental Store, Sydney.

2. This form is for use in all ships and establishments except Flinders Naval Depot.

(MDG 327/54/4.)

UNCLASSIFIED.

521.—Form A.S. 244—Naval Patrol Report.

Form A.S. 244—Naval Patrol Report has been revised and is available on demand from the Superintending Naval and Air Stores Officer, Sydney.

2. Existing stocks of form A.S. 244 are to be destroyed.

(HPB 464/54/9.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

C.N.O.'s 522-531/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
26th July, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

CONTENTS.

Section 2.

PERSONNEL.

UNCLASSIFIED.

522.—Applications for Payment in Lieu of Furlough and Extended Leave.

I.P.I. article 250/4 provides that—

(*a*) Applications for furlough and extended leave or payment in lieu thereof are to be rendered not later than three months before leave is desired or payment is due.

(*b*) True extracts of Certificates of Service are to be rendered with applications by ratings.

2. The provisions of this instruction are not being complied with in many instances, as applications are being received at Navy Office up to a few days prior, and in some cases subsequent to discharge and without true copies of Certificates of Service.

3. Compliance with the provisions of this instruction is essential if personnel are to be paid moneys due to them with as little delay as possible after discharge.

(HPB 267/1/7.)

UNCLASSIFIED.

523.—Attestation of Entries in Certificates of Service.

(*A.F.O.* 886/1960.)

The instruction in Q.R. & A.I., article 2017, clause 2, whereby Commanding Officers have been required to sign notations on page 4 of the Certificate of Service about the suspension of sentences of imprisonment or detention, remission of suspended sentences, and committal or re-committal following suspension of sentence or residue of sentence, is cancelled.

2. Admiralty has advised that Q.R. & A.I. will be amended.

(HPB 26/1/10.)

UNCLASSIFIED.

524.—Drafting, Compassionate Leave and Discharge Procedure.

It has been decided that H.M.A.S. CRESWELL will cease to be stabilized for drafting.

2. Navy Order 229 of 1959, paragraph 4, is to be amended as follows—

Delete " H.M.A.S. CRESWELL 12 months stabilized ".

(HPB 333/3/1.)

(*Navy Order* 229 *of* 1959.)

UNCLASSIFIED.

525.—Instructional Films and Film Strips—Serial No. A.539, " Coastal Navigation and Pilotage " (Revised)—Distribution ; Serial No. A.539, " Coastal Navigation and Pilotage "—Obsolete.

(*A.F.O.* 774/1960.)

Copies of the revised edition of the Admiralty instructional film, serial No. A.539, " Coastal Navigation and Pilotage " are being obtained and initial distribution will be made, without demand, by S.N.S.O., Sydney, on the following scale—

Service.	*No. of Copies.*
Flinders Naval Depot	1
H.M.A.S. WATSON	1
H.M.A.S. HUON	1
H.M.A.S. LEEUWIN	1
H.M.A.S. LONSDALE	1
H.M.A.S. MORETON..	1
H.M.A.S. RUSHCUTTER	1
H.M.A.S. TORRENS	1
R.A.N. Film Library, Sydney	1

2. This film is intended for those who possess a fair theoretical knowledge of coastal navigation and pilotage but lack practical experience. It covers the passage of a frigate from Fowey to Torbay, presenting the problem as far as possible through the eyes of the Navigating Officer. It shows his preparations for the voyage, how the ship is piloted out of harbour, the procedure during the voyage, and how the ship is brought to anchor.

3. The film has a running time of 34 minutes and is issued on one spool.

4. This film supersedes the original film A.539, " Coastal Navigation and Pilotage " copies of which are to be withdrawn from service and destroyed.

(DNAS 519/56/81.)

Cancelled vide N/O 449/62

UNCLASSIFIED.

526.—Refunds of Fares Paid in Cash—Leave Travel.

Where a member travels on leave and pays a fare in cash which is the liability of the Department under section 4, chapter XII. of I.P.I., it is necessary when applying for a refund, to submit proof of the amount spent on travel, e.g., where the member travels by air the used airline ticket should be submitted.

2. If it is not possible to submit actual proof of expenditure, a declaration signed before the Supply Officer should be forwarded in lieu.

3. I.P.I. 212/14 refers.

4. Many cases occur in which this requirement is not met and this causes considerable delay before reimbursement may be approved.

5. This order will be reprinted for posting on notice boards.

(HPB 187/1/42.)

UNCLASSIFIED.

527.—Resettlement in Civil Life—Employment of Naval Officers in Independent Schools.

At a recent meeting of the Headmasters' Conference of Independent Schools of Australia (New South Wales Section) consideration was given to the possible employment in Independent Schools of retired Service officers.

2. Any Officer who on retirement would be interested in employment in an Independent School as a school teacher, or in a position not necessarily connected with teaching such as a Bursar or Manager, should communicate with Mr. G. E. Hewan, Honorary Secretary of the Headmasters' Conference of Independent Schools of Australia (New South Wales Section), Cranbrook School, Bellevue Hill, New South Wales.

(HPB 347/1/12.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

528.—Fire Fighting Equipment—Allowance for H.M.A. Ships.

Allowances of Fire Fighting equipment to H.M.A. ships have been revised, and approved allowances of Naval Stores, Victualling Stores and Machinery items are given in Appendix " A " to this order. Revised allowances for particular items of Naval Stores which have already been promulgated in Navy Orders are incorporated in this order.

2. Allowances of similar Naval Store items *vide* the relevant Establishments of Sea Stores are to be disregarded. The allowances shown in Appendix " A " are total H.M.A. ship allowances and where in excess of those allowed by Admiralty they are to be regarded as R.A.N. special allowances.

3. In the introduction of this order, it has been assumed that all hose connections have been modified to No. 2 size R.A.N. special screw coupling.

4 Commanding Officers of ships in commission are to lodge demands to complete to the revised allowances of Naval Stores with the appropriate (S.)N.S.O. Demands should not be hastened. On receipt of the necessary equipment, those items rendered redundant are to be landed.

5. Fire Fighting equipment drawings with revised allowances will be made available upon request to the General Manager, Garden Island Dockyard.

6. This order does not affect the allowances of hoses and adaptors for engineering purposes, which are supplied in accordance with the Establishment of Sea Stores.

7. Any anomalies arising from this order are to be reported to the Naval Board through the appropriate administrative authorities.

8. Navy Orders 710, 900 and 1010 of 1958 are hereby cancelled.

Appendix A.

AUTHORIZED ALLOWANCES OF FIRE FIGHTING EQUIPMENT TO H.M.A. SHIPS.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Fire Extinguishers.										
B8C	Like 12727	CO_2 type, 2½ lb.	A	A	A	A	A	A	A	A	A	A
	7272	Water type (gas pressure), 2-gal., with hose, patt. 7273 or 7284	100B	36B	36B	36B	36B	36B	20B	18B	8B	10B
	4726	Foam type, 2-gal., with hose	G 12C 10D 20E	G 4C	G 10C	G 4C	G 8C	G 6C	G 14C	G 10C	G 4C	G 4C
	4726	Foam type, 2-gal., with metallic hose, 4-ft. long, patt. 4726A	3F H	— H	— H	— H	— H	— H	— H	— H	— H	— H
	4739	Knapsack, pressurized C.T.C. (without charge) complete with applicator	4J	—	—	—	—	—	—	—	—	—
	7261	CO_2, mobile unit	5	—	—	—	—	—	—	—	—	—
	14645	P.D. 150 dry chemical unit complete with discharge hose and CO_2 cylinder	6D	—	—	—	—	—	—	—	—	—

A — One for each compartment containing high voltage equipment (e.g., W/T radar). In compartments with more than one bay, one for each bay.

One for each galley, sick bay and dental surgery.

One for each power boat plus one additional for fast motor boats, 30-ft. and over.

Two for each fire post.

One for each signal or duplicating office where methylated spirits is used, except where a CO_2 extinguisher is already provided, *vide* the above.

One for each C.R.B.F. director and S.T.A.A.G. mounting.

B — For general distribution, including one for each cinema projection room, film winding room, switch board, power room, magazine and handling room. Also one for each A/S projectile room, handling room or combined projectile handling room in ships fitted with A/S mortar, mk. 10 or squid. These allowances include a margin for damaged extinguishers. All extinguishers to be fitted in stowages.

C — For compartments (other than magazines and boiler rooms) such as those adjacent to fuel tanks, paint stores, photographic rooms, &c.

D — For flight deck.

E — For hangars.

F — For petrol filling and control positions.

G — Two for each fire post.
Two for each galley. One fitted inside and one fitted outside.
One for each diesel steering compartment.
One for each power boat 20-ft. and over.
One for each oil operated gunhouse and pump space.
One for each motor-boat workshop.
One for each weather deck petrol stowage.
One for each aircraft component workshop.

H — One for each diesel generator and auxiliary machinery compartment and two for each boiler room.

J — For use on flight deck for carburettor and aircraft starting up fires.

APPENDIX—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Additional Charges, Racks, Holders, &c., for Extinguishers.										
B8C	7275	Charges, CO_2 for patt. 7272 extinguisher ..	4K	4K	4K	4K	4K	4K	4K	4K	4K	4K
	7276	Holders for patt. 7275 chargers	1K	1K	1K	1K	1K	1K	1K	1K	1K	1K
	4729	Charges for patt. 4726 extinguishers (in sets consisting of 1 blue tin and 1 yellow tin)	2K	2K	2K	2K	2K	2K	2K	2K	2K	2K
	4728	Refills, 1 quart, C.T.C., for use with extinguisher patt. 4739	64	—	—	—	—	—	—	—	—	—
	Like 12739	Holder for like patt. 12727 extinguisher ..	1K	1K	1K	1K	1K	1K	1K	1K	1K	1K
	14646	CO_2 cylinder P.D. 151, spare for patt. 14645 extinguisher	2K	—	—	—	—	—	—	—	—	—
	14648	Spare charges of dry chemical for patt. 14645 extinguisher	300 lb. K	—	—	—	—	—	—	—	—	—
	14647	Hose, discharge, complete with end fittings for use with patt. 14645	L	—	—	—	—	—	—	—	—	—
	13780	Bracket for pattern 4726 extinguishers	M	M	M	M	M	M	M	M	M	M
	13781	Bracket for pattern 7272, extinguishers.. ..	N	N	N	N	N	N	N	N	N	N
		Branch Pipes, Foam Making.										
B8C	Like 7235	FB2(P). To No. 2 R.A.N. (F) with 15-ft. suction pick up assembly, patt. 7244	36P 16Q 6R	2R	5RS	5RS	4RS	4RS	2RS	2RS	1S	2R
	Like 7233	FB2(S). To No. 2 R.A.N. (F) with 15-ft. suction pick up assembly, patt. 7244	12S	2S	—	—	—	—	—	—	—	—
	Like 7228	FBO. To No. 2 R.A.N. (F) with 15-ft. suction pick up assembly, patt. 7244	—	2T	2T	2T	2T	2T	2T	2T	1T	1T
		Foam Compound.										
—	7270	5-gal. drums	U	U	U	U	U	U	U	U	U	U

K — For each extinguisher allowed (excluding initial charge).
L — One per unit as spare.
M — One for each patt. 4726 extinguishers allowed.
N — One set per extinguisher allowed.
P — For flight.
Q — For hangar.
R — For locations adjacent to fuel stowages and for general distribution.
S — For use in connection with induction tubes to machinery spaces.
T — For use with two-man manual pump or on fire main when fixed pumping capacity is inadequate for other branch-pipes.
U — Four drums for each FB2 (P) branchpipe.
Three drums for each FB2 (S) branchpipe.
One drum for each FB0 branch pipe.
Two drums for each fire post.

APPENDIX—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Nozzles.										
B9B	Like 1563	Jet/spray type to No. 2 R.A.N. (F)	vx	—	—	—	—	—	—	—	—	—
	Like 10321	Spray/jet type to No. 2 R.A.N. (F)	w	wx	wx	wx	wx	wx	wx	wx	wx	wx
	Like 1552	Branchpipe with No. 2 R.A.N. (F) connection ..	—	1T	1T	1T	1T	1T	1T	2T	1T	1T
			47Y	14Y	10Y	14Y	—	10Y	2Y	5Y	2Y	2Y
	1560	¼-in. nozzle for like patt. 1552 branchpipe ..	—	1T	1T	1T	1T	1T	1T	1T	1T	1T
			—	14Y	10Y	14Y	—	10Y	2Y	5Y	2Y	2Y
	1558	⅜-in. nozzle for like patt. 1552 branchpipe ..	47Y	—	—	—	—	—	—	—	—	—
		Applicators, Fine Spray.										
—	NP	10-ft. long to No. 2 R.A.N. (F)	4	4	4	4	4	4	2	2	—	1
	NP	6-ft. long to No. 2 R.A.N. (F)	6	5	5	5	5	5	3	3	2	2
		Lockers.										
B3	7821	Fire party, large	8	2	—	—	—	—	—	—	—	—
	7827	Fire party, small	—	—	2	2	2	2	2	2	1	1
	31330	Breathing apparatus, Salvus	10	4	4	4	4	4	3	3	2	2
	31331	Breathing apparatus (patt. 5665 or 230) ..	50	10	10	10	10	10	10	6	3	3
		Hoses, Delivery.										
B8E	—	*Impermeable, No. 2 R.A.N. x 30-ft.	a e f	c e f	c e f	c e f	c e f	c e f	c e f	c e f	c e f	c ed f
		*Impermeable. (For prewetting. *See Note* below)	36	10	9	6	—	9	3	—	—	—
		*Impermeable. (For washdeck)	24	9	9	9	9	9	9	5	4	5
		*Impermeable. (For F.W. filling)	18	5	4	4	4	4	4	3	2	3
		Impermeable No. 2 R.A.N. x 60-ft.	b	—	—	—	—	—	—	—	—	—
		Canvas, No. 4 ASBJ x 30-ft.	g	—	g	g	g	g	g	—	—	g
	7328	Ventilating hose, 6-in. x 8-ft. } For use with portable electric fans	18	4	4	4	4	4	4	4	4	4
	7329	Ventilating hose, 6-in. x 16-ft. } For use with portable electric fans	27	—	—	—	—	—	—	—	—	—
	7323	Ventilating hose, 4-in. x 12-ft. } For use with portable electric fans	45	6	6	6	6	6	6	6	3	3

v — One for each hydrant connection on flight deck.
w — One for each hydrant connection, except on flight deck.
x — Two for each fire party locker.
y — For improvised prewetting arrangements.

a — Two for each hydrant connection except on flight deck.
b — One for each hydrant connection on flight deck.

c — One for each hydrant connection.
d — One extra for each hydrant connection on weather deck.
e — Four for each fire party locker.
f — Four for each diesel driven fire pump.
Two for each two-man manual pump.
Four for each 35 or 40 ton/hr. electric salvage pump.
Three for each air driven salvage pump.

APPENDIX A—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Hoses, Suction.										
	—	Rubber, wirewound, 3½-in. swing bolt x 15-ft. ..	2h	2h	2h	2h	2h	2h	2h	—	—	2h
	—	Rubber wirewound, 1½-in. x 10-ft. with 1½-in. connection one end, 3½-in. swing bolt the other	—	k	—	—	k	—	—	—	—	—
	7222	Rubber, wirewound, 1½-in. x 20-ft. with 1½-in. screwed connections	—	j	j	j	j	j	j	j	j	j
	—	Rubber, wirewound, 2-in. x 10-ft.	—	—	—	—	—	—	—	m	—	—
	—	Rubber, wirewound, No. 3 R.A.N. x 15-ft. ..	n	n	n	n	n	n	n	n	n	n
		Strainers.										
—	5898	Basket with canvas sleeve 3½-in. swing bolt ..	1h	1h	1h	1h	1h	1h	1h	—	—	1h
	5899	Cylindrical, 3½-in. swing bolt	1h	1h	1h	1h	1h	1h	1h	—	—	1h
	—	Vacuum cleaner type attachment with foot valve and strainer and with 1½-in. hose connection	—	k	—	—	k	—	—	—	—	—
B8C	7223	For Sigmund 2-man manual pump	—	j	j	j	j		j	j	j	j
		Portable Pumps										
B8C	7221	Pump, manual (Sigmund), complete	—	1	1	1	1	1	1	2	1	1
Machinery Item	—	Pump, air-operated, submersible (38 tons/hr.) ..	4	—	—	—	—	—	—	—	—	—
Machinery Item	—	Pump, diesel driven, fire (27 tons/hr.)	4	1	1	1	1	1	—	—	—	1
Machinery Item	—	Pump, petrol driven, fire (12 tons/hr.)	—	—	—	—	—	—	—	1	—	—
Machinery Item	—	Pump, electrically driven non-submersible, salvage (70 tons/hr.) (A.S.B.J. discharge coupling)	14	—	1	1	—	1	2	—	—	1
Machinery Item	—	Pump, electrically driven, non-submersible salvage (35 tons/hr.)	—	1	—	—	2	—	—	—	—	—
Machinery Item	—	Pump, electrically driven submersible salvage (40 tons/hr.)	—	2	—	—	2	—	—	—	—	—

g — Two for each 70 ton/hr. electric salvage pump.
h — For each portable diesel fire pump and portable non-submersible electric salvage pump. (8-ft. and 10-ft. length of of hoses, to be supplied to a total of approximately 30-ft. per pump until stocks are exhausted.)
j — One for each two-man manual pump.
k — one for each portable non-submersible 35-ton electric pump.
m — Two for each petrol driven pump.
n — One for each suction standpipe.

Note: These are to be specifically used for prewetting and are to supplement hoses other than F.W. hoses for this purpose.

* Hoses to be painted by ships staff for a length of 15-in. at each end, denoting services to which they are allocated as follows:—

Fire Fighting	Signal Red.
Prewetting	Light Grey.
Washdeck	Grass Green.
Freshwater	Azure Blue.

APPENDIX A—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Protective Clothing for Fire fighting.										
Victualling Stores	—	Fearnought jackets										
Victualling Stores	—	Fearnought trousers										
Victualling Stores	—	Fearnought gauntlets (pairs)	40	10	6	6	6	6	6	6	3	3
Victualling Stores	—	Fearnought hoods										
Victualling Stores	—	Foul weather hoods										
		Protective Clothing for Flight Deck Fire fighting.										
Victualling Stores	—	Boots (pairs)	20	—	—	—	—	—	—	—	—	—
Victualling Stores	—	Fearnought smocks	95	—	—	—	—	—	—	—	—	—
Victualling Stores	—	Fearnought trousers	95	—	—	—	—	—	—	—	—	—
Victualling Stores	—	Asbestos gloves (pairs)	30	—	—	—	—	—	—	—	—	—
Victualling Stores	—	Helmets with visors	20	—	—	—	—	—	—	—	—	—
		Miscellaneous.										
E5	5665	Breathing apparatus—ship fire fighting equipment	8q	2q	2q	2q	2q	2q	2q	2q	1q	1q
	or 230	with lifelines	42	8	8	8	8	8	8	4	2	2
	3485	Breathing apparatus " Salvus " type with spares ..	7	3	3	3	3	3	2	2	1	1
	3485	Breathing apparatus, " Salvus ", rigged for diving	3	1	1	1	1	1	1	1	1	1
E12	1022	Mallets	24	6	6	6	6	6	6	6	6	3
B11	6424	Spanners, wheel	n	n	n	n	n	n	n	n	n	n
—	NP	Spanners, hose, No. 2 R.A.N. connections ..	p	p	p	p	p	p	p	p	p	p

n — Three per fire party locker.
p — Two at each hydrant, four per fire party locker.

q — Breathing apparatus stowed in the vicinity of fire party lockers (*see* Appendix B) are to be fitted with patt. F.W.055 container, type E, mark 6—assembly.

APPENDIX A—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Adaptors, &c., for Hoses.										
—	N.P.	No. 2 R.A.N. (F) to No. 2 R.A.N. (F) (double female)	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*
	N.P.	No. 4 A.S.B.J. to 3½-in. swing bolt (F).. ..	r	—	r	r	r	r	r	—	—	r
	N.P.	No. 4 N. & S. to No. 2 R.A.N. (F)	—	—	—	—	—	—	—	y	y	y
	N.P.	No. 4 R.A.N. (F) to No. 2 R.A.N. (F).. ..	—	—	—	—	—	—	—	y	y	y
	N.P.	No. 4 R.A.N. (F) to 4—No. 2 R.A.N. (F) ..	st	—	—	—	—	—	—	—	—	—
	N.P.	No. 3 R.A.N. (F) to 2—No. 2 R.A.N. (F) ..	s	st	s	s	s	s	st	s	s	s
	N.P.	No. 2 R.A.N. (M) to No. 2 R.A.N. (M) (double male)	*b*	*b*	*b*	*b*	*b*	*b*	*b*	*b*	*b*	*b*
	N.P.	Breeching piece No. 2 R.A.N. (F) to 2—No. 2 R.A.N. (M)	*b*v	*b*v	*b*v	*b*v	*b*v	*b*v	*b*v	*b*v	*b*v	*b*v
	N.P.	Breeching piece No. 4 A.S.B.J. to 2—No. 2 R.A.N. (M)	*c*	—	*c*	*c*	—	*c*	*c*	—	—	*c*
	N.P.	Breeching piece, 3½-in. swing bolt (F) to 2—No. 2 R.A.N. (F)	u	u	u	u	u	u	u	u	u	u
	N.P.	Breeching piece, No. 3 A.S.B.J. to 2—No. 2 R.A.N. (F). (To connect two ships' hoses to shore hoses)	8	4	4	4	4	4	3	2	1	2
	N.P.	Breeching piece, No. 3 R.A.N. (F) to 2—No. 2 R.A.N. (M)	*f*	*f*	*f*	*f*	*f*	*f*	*f*	—	—	*f*
	N.P.	No. 3 R.A.N. (F) to No. 2 R.A.N. (F).. ..	8z	4z	4z	4z	4z	4z	3z	2z	1z	2z
	N.P.	3½-in. swing bolt (F) to No. 3 R.A.N. (F) ..	*d*	*d*	*d*	*d*	*d*	*d*	*d*	—	—	*d*
	N.P.	No. 4 A.S.B.J. to No. 3 R.A.N. (F)	*e*	—	*e*	*e*	—	*e*	*e*	—	—	*e*
	—	*Fans, &c.* (For removal of petrol vapour) air driven portable fan	4	—	—	—	—	—	—	—	—	—
	C2443	Hose, ¾-in. x 50-ft. rubber, for air driven fan, fitted with patt. 3770 spigots, patt. 3771 union nuts, patt. 3769 washers and ¾-in. jubilee clips	4	—	—	—	—	—	—	—	—	—
	—	Hose, light leather, 16-ft. for air driven fan ..	16	—	—	—	—	—	—	—	—	—
		Hose, light leather, 8-ft. for air driven fan ..	8	—	—	—	—	—	—	—	—	—
		Spare gear for fans	2 sets	—	—	—	—	—	—	—	—	—
		Fans. (For use in clearing smoke and fumes from ships compartments)										

r — One per 70 tons/hr. electric salvage pump to discharge through emergency sea suction.
s — One per F.W. deck connection and one per submersible pump.
t — One per emergency deck connection to rising main.
u — One per air or electrically driven pump to connect to discharge through emergency sea suction.
v — For prewetting purposes in accordance with drawings (prepared at G.I.).
w — One for KIMBLA.
x — SWAN and WARREGO only.
y — One per ship operating from Thursday Island.
z — { Ship to shore adaptor. / For connecting standpipe suction hoses to fire hydrant when using firemain as emergency main suction.

a — One per fire party locker to bye-pass fractured firemain.
b — One per fire party locker.
c — One per 70 tons/hr. salvage pump to run two No. 2 R.A.N. hoses.
d — One for each diesel and electric 35-ton portable pump to connect to suction standpipe.
e — One for each electric 70-ton portable pump to connect to suction standpipe.
f — One per air driven submersible pump .. / One per electrically driven 35-ton pump / One per electrically driven 40-ton pump / One per diesel driven pump .. .. } fitted on discharge side of pump to connect two delivery hoses.

APPENDIX A—*continued.*

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Class and Group.	*Patt. No.*	*Description.*	*Carrier.*	*Daring Class.*	*Battle Class.*	*Tribal Class.*	*Type 12 Frigate.*	*A/S Frigate Conv. Fleet.*	*River Class Frigate.*	*Ocean Mine Sweeper.*	*Boom Working Vessel.*	*Salvage Tug.*
		Adaptors, &c., for Hoses—continued.										
F1C	33108	Electrically driven flame proof, 4-in., 110 volts D.C.	—	—	—	—	—	—	x	—	1	1
	33109	Electrically driven flame proof, 4-in., 220 volts D.C.	9	—	2	1	—	1	1	1	w	—
	33003	Electrically driven flame proof, 4-in., 440 volts, A.C.	—	2	—	—	1	—	—	—	—	—
	33002	Electrically driven flame proof, 5-in., 110 volts D.C.	—	—	—	—	—	—	x	—	1	1
	33001	Electrically driven flame proof, 6-in., 220 volts D.C.	—	—	1	1	—	1	1	1	w	—
	33032	Electrically driven flame proof, 6-in., 440 volts A.C.	—	1	—	—	1	—	—	—	—	—

5118/60—2

APPENDIX B.

The following items are to be stowed in or near each fire party locker, like pattern 7821 (large) like pattern 7827 (small type). Quantities shown are not additional to the allowances given elsewhere.

Class and Group.	*Pattern No.*	*Description.*	*Quantity.*	*Remarks.*
		(a) To be stowed in each Fire Party Locker, Large or Small.		
B9B	Like 1563	Nozzle, jet/spray type	2	Carriers only
B9B	Like 10321	Nozzle, spray/jet type	2	Except Carriers
B8C	N.P.	Breeching piece, No. 2 R.A.N. (F) to 2 No. 2 R.A.N. (M)	1	To run two hoses from one hydrant connection
B9B	N.P.	Adaptor, No. 2 R.A.N. double male	1	
B9B	N.P.	Adaptor, No. 2 R.A.N. double female	1	
F2A	Like 160344	Headlamp	6	
F2A	17069	Floodlight	1	
		Consumable.		
B9D	184A	Whistle	3	
B11E	6424	Wheelspanner	3	
..	N.P.	Hose spanner, No. 2 R.A.N. size	4	
E6	3489A	CO_2 absorbent	2 tins	
E12	1022	Mallet	3	
F2	..	Torch hand, " Upson " Rugby, neoprene covered 2-cell, complete with lamp (x 951146) and battery (14074)	6	50% to be replaced by patt. 19570 in Carriers
..	4729	Charges for patt. 4726 extinguisher	6 charges	Each charge consists of 1 blue tin and 1 yellow

APPENDIX B—*continued.*

Class and Group.	Pattern No.	Description.	Quantity.	Remarks.
		Victualling Stores.		
..	..	Fearnought jackets	5 sets	For large type lockers
..	..	Fearnought trousers		
..	..	Fearnought gauntlets		
..	..	Antiflash hoods	3 sets	For small type lockers
..	..	Foul weather hoods		
		(b) To be stowed in each Large Type Fire Party Locker, and Outside each small Type Fire Party Locker.		
		Permanent.		
B8E	N.P.	Impermeable delivery hose, No. 2 R.A.N. x 30 ft. ..	4	
		(c) To be stowed Outside, but near each Fire Party Locker, Large or Small Type.		
		Permanent.		
B8C	4726	Extinguisher, foam type	2	
B8C	7272	Extinguisher, water type (gas pressure)	2	
B8C	Like 12727	Extinguisher, CO_2 type, 2½ lb.	2	
E5	5665	Breathing apparatus, ship fire fighting equipment with hose and strainer	2	
E5	3485	Breathing apparatus, salvus type	1	
E5	3519	Oxygen cylinder for patt. 3485 breathing apparatus, spare	1	
		Consumable.		
B8C	7275	Charges (in holder, patt. 7276) for patt. 7272 extinguisher	8	4 in each holder
B8C	7270	Foam Compound, in 5-gal drums	2 drums	

(*Navy Orders* 710, 900 *and* 1010 *of* 1958.) (DNAS 1446/51/4.)

UNCLASSIFIED.

529.—Naval Stores (General) (Class F, Group 20)—Telephones—Allocation of New Pattern Numbers to Modified Versions of Patterns 12686, 12687 and 12688, and introduction of Telephones, Patterns 197855 and 197879.

(*A.F.O.* 896/1960.)

The increasing use of the basic design of telephones patterns F20/12686, F20/12687, and F20/12688, with slight modifications, has created a situation whereby different designs are held under the same pattern number, e.g., with or without dummy dial. In order to distinguish these variants it has been decided to allocate separate pattern numbers to the modified instruments and to add them to the Rate Book and Authorized List of Naval Stores under class F, group 20, N.A.T.O. Group No. 5805, as follows—

Pattern No.	*Description.*
197850	Telephone, automatic, watertight, arranged for bulkhead mounting (without dial) for emergency. (Dwg. D.E.E. D.58110 series.)
197851	Telephone, automatic, desk type (without dial) for emergency. (Dwg. D.E.E. D.58113 series.)
197852	Telephone, C.B. desk type. (Dwg. D.E.E. A.24052.)
197853	Telephone, C.B., watertight, arranged for bulkhead mounting. (Dwg. D.E.E. A.24050.)
197854	Telephone, C.B. non-watertight, arranged for bulkhead mounting. (Dwg. D.E.E. A.24051.)

The telephones of basic design, which have been transferred from class F, group 1C to class F, group 20, are described as follows—

Pattern No.	*Description*
12686	Telephone, automatic, watertight type, arranged for bulkhead mounting. (Dwg. D.E.E. 17070.)
12687	Telephone, automatic, non-watertight type, arranged for bulkhead mounting. (Dwg. D.E.E. 17071.)
12688	Telephone, automatic, desk type. (Dwg. D.E.E. 17072.)

2. Arrangements should be made for stocks of telephones patterns F.20/12686, F.20/12687, and F.20/12688, at yards, depots, and in ships, to be surveyed and for the modified types to be suitably tallied or marked with the appropriate pattern number. Ledgers at yards and depots are to be adjusted accordingly. Ships' Naval Store Accounts for spare telephones on charge are to be adjusted in accordance with A.B.R. 4, article 1812 (*g*).

3. Consequent upon improvements in telephone transmission techniques and to allow use to be made of lighter and more efficient telephone handsets, the following instruments have also been introduced into the Rate Book and Authorized List of Naval Stores under class F, group 20, N.A.T.O. Group No. 5805—

Pattern No.	*Description*	*Ships Accounting Classification*
197855	Telephone, mark 26, non-watertight arranged for either desk or bulkhead mounting. For use with automatic telephone systems in ships.	Fitted stores
197879	Telephone, mark 27, non-watertight, arranged for either desk or bulkhead mounting. For use with non-automatic telephone systems in ships.	Fitted stores

4. These telephones are considerably more expensive than the older types and will be used, instead of patterns F.20/12687, 12688, 197851, 197852, and 197854, *only in new construction ships*. As the advantages of the new telephones would be largely diminishing by mixing the new types with the old it is intended to continue to stock the older types for replacement in those ships so fitted.

(DNAS 519/70/4.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

RESTRICTED.

530.—B.R. 1806—The Naval War Manual.

Navy Order 377 of 1960 is to be amended as follows—

Paragraph 5—

Delete " B.R. 1 " at end of paragraph and *insert* in lieu " paragraph 2513B of A.B.R. 4 ".

(DNAS 465/52/48.)

(*Navy Order* 377 *of* 1960.)

UNCLASSIFIED.

531.—Mail for H.M.A. Ships Outside Australian Waters.

Complaints have recently been received regarding delivery of mail to ships outside Australian waters.

2. In response to requests for an investigation, the Postmaster-General's Department has indicated that delay is attributable to both official and private mail being stamped with internal rates of postage only. This necessitates action to recover outstanding fees on official mail, and in the case of private mail, may result in transmission either to a later port of call in a ship's itinerary or by surface means instead of by air.

3. The area covered by the internal postage rates for Australia embraces Christmas Island, Cocos Island, Lord Howe Island, Norfolk Island, Nauru and the Territory of Papua-New Guinea.

4. It should be noted that postal concessions on private mail are available only—(*a*) in the area covered by internal postage rates and (*b*) for personnel serving in ships allotted to the Strategic Reserve. Full postal rates must be paid for all other places outside Australia. No concession is applicable to official mail.

5. Information regarding rates of postage is available from any post office.

(HNB 68/4/6.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar (Melb)

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 532-571/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
28th July, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

5 119/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

532.—Abbreviations—General and Medical.

The abbreviations listed in the appendix to this order are authorized for use as appropriate in communications. Unauthorized abbreviations are not to be used.

2. It should be noted that the previously authorized abbreviation "Comcar" has been superseded and that certain medical abbreviations have been altered to bring them into line with those in the British Supplement to A.C.P. 175.

3. Navy Order 944 of 1959 is hereby cancelled.

APPENDIX.

GENERAL ABBREVIATIONS.

(*A*) (*Listed in British Supplement to A.C.P.* 175 *and available for use within Commonwealth Navies.*)

PSB	Please send boat (for.....).
WSB	Will send boat now (or at.....).
ICU	Can I come and see you now (or at.....).
RPC	Request the pleasure of your company. Occasion, date, time, dress and other details to be added as applicable.
WMP	With much pleasure. In replying to Flag Officers and Captains only, the details signalled in the invitation are to be repeated in the reply.
MRU	Much regret I am unable to accept your kind invitation. (or to comply with your request).
VMT	Very many thanks.
RGA	Request ground allocation (for sport event, date and time as indicated).
RAG	Requested allocation granted.
GNA	Regret ground not available.
OSC	Open and signal contents of telegram (for.....).
RSC	Request despatch or disposal particulars of Service Certificates urgently required for.....
RPD	Request despatch or disposal particulars of pay documents for..... In the case of officers the relevant appointment list should be quoted where applicable.
RSP	Request despatch or disposal particulars of Service Certificates and pay documents urgently required for.....
UCM	Can you come and see me now (or at.....).

APPENDIX—*continued.*

(*B*) (*For use within R.A.N. only*).

PASSCOR	The ratings whose names appear below have successfully completed the course quoted and are available for draft from the date given.
FAILCOR	The ratings whose names appear below have failed the course shown but are available for draft from the date given.
NO DRAFT	The ratings whose names appear below are not available for draft for the reason and period shown in brackets beside their names.
HHLD	Having had leave due.
L and D	Leave and draft.
OCC	On completion of course.
FAO	First available opportunity.
TJB	To join by.....
ORJ	On relief joining.
DEE	Discharge engagement expired.
DTBR	Date to be reported.

MEDICAL ABBREVIATIONS.

(*A*) (*Listed in British Supplement to A.C.P.* 175 *and available for use within Commonwealth Navies*).

APPAR	Appointment arranged for.....
CCBR	Case can be received.
FECIC	Infectious cot case.
FECIN	Infectious non-cot case.
MEDIC	Medical cot case.
MEDIN	Medical non-cot case.
SURIC	Surgical cot case.
SURIN	Surgical non-cot case.
RADEN	Request dental appointment.
RUDEN	Request urgent dental appointment.
RAHOS	Request admission to hospital.
RAPSY	Request appointment with psychiatrist.
RADERM	Request appointment with dermatologist.
RAOPH	Request appointment with opthalmic specialist.
RAPAT	Request appointment with pathologist.

APPENDIX—*continued.*

RAXRY	Request appointment for X-ray.
RASUR	Request appointment with surgical specialist.
RAMED	Request appointment with medical specialist.
RAENT	Request appointment with ear, nose and throat specialist.
RAGUS	Request appointment with genito urinary specialist.
REDUR	Request estimated duration.
RECON	Request condition.
ESDUR	Estimated duration.
SERIL	Patient on seriously ill list.
DANIL	Patient on dangerously ill list.
CONUN	Condition unchanged.
CONIM	Condition improved.
RMD	Request despatch or disposal particulars of medical history documents urgently required for.....

(*B*) (*For use within R.A.N. only*).

FAMD	Forward by airmail or advise disposal MHD's of.....
HUMD	Are you holding MHD's for.....

(*Where information only is required*).

*MDAM	MHD's forwarded by air mail.
*MDBF	MHD's being forwarded.

(*Where it is wished to reply that MHD's will be forwarded but are not immediately available*).

*MDFOD	MHD's forwarded as requested by ordinary mail.
MDH	MHD's held.
NILMD	No record of MHD's in this ship or establishment.
RMDAL	Request forward all medical history documents including old system and attending list entries.
RFAME	Request forward report of annual medical examination of.....

* These replies are not to be made as a matter of routine, but only when acknowledgment is considered necessary.

(DSD 77/201/3.)

(*Navy Order* 944 *of* 1959.)

UNCLASSIFIED.

533.—A.B.C.D. Monitoring Officers—Future Organization.

(*A.F.O.* 924/1959.)

It has been decided that, because of their special training and maintenance responsibilities for radiac instruments, officers of the Electrical Specialization are most suitable to undertake the duties of Monitoring Officer both afloat and ashore.

2. In future, therefore, when detailing officers for A.B.C.D. duties in accordance with Q.R. & A.I., Article 2981 (3), Commanding Officers should normally nominate an officer of the Electrical Specialization as Monitoring Officer.

3. However, since contamination may be accompanied by action damage, the actual work of monitoring must be delegated to another officer, or exceptionally a senior rating, in any ship in which only one Electrical Specialist is borne, so that monitoring can, if necessary, proceed without the Electrical Officer's full-time supervision.

4. All officers of the Electrical Specialization will in future be instructed in Monitoring Officers' duties as part of their qualifying course. H.M.A. ships and establishments requiring monitoring training for their Electrical Officer employed on monitoring duties, should arrange for a suitable course with H.M.A.S. PENGUIN.

5. Admiralty has advised that Q.R. & A.I. will be amended.

6. Navy Order 605 of 1958 is hereby cancelled.

(DTSR 303/1/13.)

(*Navy Order* 605 *of* 1958.)

UNCLASSIFIED.

534.—Accidents—Naval Vehicles—Reports.

Accidents to Naval vehicles which do not involve injury to any person or damage to privately owned vehicles or property need not be reported to the Naval Board when the estimated cost of repair of the Naval vehicle does not exceed £20.

2. In the same circumstances, but where the estimated cost of repair is between £20 and £50, brief particulars only, viz. date of accident, registered number of vehicle involved and estimate of cost of repair of damage to the Departmental vehicle or property are required. Treasury Instruction 29/13 is relevant.

3. Where the estimated cost of repair exceeds £50, full particulars of the accident are to be reported on form N.M.T. 10.

4. The R.A.N. Motor Transport Instructions will be amended.

5. Navy Order 118 of 1959 is hereby cancelled.

(DNAS 459/71/168.)

(*Navy Order* 118 *of* 1959.)

UNCLASSIFIED.

535.—Accidents—Replenishment at Sea—Safety Precautions for Line-Throwing Guns.

During a recent replenishment at sea operation in the Royal Navy, a rating who had failed to take cover when ordered, was injured by the brass rod of a Coston gun line.

2. The attention of Commanding Officers is drawn to the need to obey to the letter the safety precautions laid down in A.T.P. 16, paragraph 220C, in particular the correct use of whistle signals, and that hands on the upper deck have taken cover before the receiving ship signifies that she is ready to receive the line.

3. This is of particular importance during night operation when the firer cannot be seen and also at times when of necessity, due to weather or overhead obstruction in the receiving ship, the trajectory must be low.

4. Navy Order 580 of 1958 is hereby cancelled.

(DTSR 177/1/6.)

(*Navy Order* 580 *of* 1958.)

UNCLASSIFIED.

536.—Fleet Broadcasts BLR and BL. Trial of Low Frequency Component.

Refitting of the 200 kilowatt low frequency transmitter at Belconnen, Canberra, is now almost complete. When operational it will, in addition to C.W., be capable of frequency shift keying for radio teletype transmissions. It should also be capable of a higher power output than before.

2. It is planned to share the transmitter between the C.W. broadcast BL and the RATT broadcast BLR, so as to provide needed extensions to the present high frequency coverage.

3. To determine the new limits of coverage, ships and certain establishments will be requested to forward readability reports on the L.F. component as well as the H.F. component reports at present made. It is expected that operational trials will start at the end of July and that the transmitter will radiate from 2000Z to 0400Z. The exact date of starting trials will be notified.

(DSD 518/251/197.)

RESTRICTED.

537.—Meteorological Information for Use of H.M.A. Ships.

The following regular sources of weather information are available to H.M.A. ships—

(*a*) Routine broadcasts of synoptic information, forecasts and gale warnings by civil meteorological authorities as detailed in A.L.R.S., Vol. III. and A.F.O. 'S' 3, Section "AS".

(*b*) Routine naval broadcasts of analyses and forecasts on Broadcasts BL and BLR at 0130Z, 0530Z, 1330Z, 0930Z and 2130Z daily.

Additional Information.

2. To augment these services, additional information is provided by R.A.N.A.S., Nowra, on request, as follows—

(*a*) Supplementary information for use in aircraft carriers, details of which are contained in Australian Fleet Technical Orders.

(*b*) Special information for use in H.M.A. ships when not in company with an aircraft carrier.

3. Details of special information referred to in paragraph 2 (*b*) are given in the following paragraphs.

4. The types of information available are—

(*a*) Weather reports—factual statements of weather which has been or is being experienced in a given location.

(*b*) Weather forecasts—forecasts of the weather expected in a given area over a stated period of time. Forecasts are issued normally for a period of 24 hours from the time of origin but the outlook for a further period may also be indicated. A confidence factor will normally be included if confidence in the accuracy of the forecast is moderate or low.

(*c*) Meteor reports, providing ballistic information for Surface or A.A. firings. The report will be coded as detailed in B.R. 1898 (10) (Gunnery Manual) and W7 (Radio Weather Messages).

5. Special weather information is to be requested by signal, giving as much advance notice as practicable. Requests are to be made as detailed in the Appendixes to this order.

Climatological Data.

6. A comprehensive range of climatological statistics is held in aircraft carriers, at R.A.N.A.S., Nowra and at Navy Office. Authorities requiring climatological data for operational planning may apply to any one of these sources.

Appendix A.

Requests for special weather information are to specify—

1. Type of information—
   - (*a*) Reports.
   - (*b*) Forecasts.
2. The Area or route for which this information is required.
3. The period of time to be covered.
4. Detail required, under the following headings—
   - (*a*) Inference (i.e. description of current synoptic situation).
   - (*b*) Surface wind.
   - (*c*) Upper winds (heights to be specified).
   - (*d*) Weather (i.e. rain, thunderstorms, &c.).
   - (*e*) Visibility.
   - (*f*) Amount, type and height of cloud.
   - (*g*) Barometric pressure at M.S.L.
   - (*h*) Sea and swell.
   - (*i*) Outlook for specified period.

APPENDIX A—*continued.*

EXAMPLE.

FROM:

TO: N.A.S. NOWRA

REQUEST WEATHER C.N.O. 537/60 PARAS.

1. BRAVO.
2. BASS STRAIT.
3. 150800K TO 151800K MAY.
4. BRAVO DELTA ECHO INDIA FURTHER 12 HOURS.

APPENDIX B.

Requests for meteor reports are to specify—

1. Type—Surface or A.A.
2. Time the report is required.
3. Area.
4. Times to be covered by report.
5. Times of flight (surface) or heights of burst (A.A.).

EXAMPLE.

FROM:

TO: N.A.S. NOWRA

WEATHER. REQUEST SURFACE METEOR BY 130900K.
AREA NOVEMBER VICTOR. 131000K TO 131200K.
20, 30, 40 SECS.

(DNWS 161/1/41.)

RESTRICTED.

538.—Replenishment at Sea—Man Overboard.

(*A.F.O.* 1401/1960.)

There is always a particular risk of man overboard during jackstay transfer or replenishment at sea, particularly in heavy weather. Swift and co-ordinated action is essential if rescue operations are to be successful.

2. The present instructions in A.T.P.1, article 1937, and A.T.P. 16, article 432 (*a*) are inadequate and pending their amendment the following instructions are to govern the action of ships in this event.

3. (*a*) *Rescue Helicopter Available.*—During daylight hours a rescue helicopter should be at Condition TWO for the purpose of rescuing personnel lost overboard. If bad weather or special hazards demand, it should be airborne in a suitable station.

(*b*) *Rescue Destroyer Present.*—A rescue destroyer or frigate should be stationed 500 yards astern if no helicopters are available.

(*c*) *No Rescue Helicopter or Destroyer Present.*—The Receiving Ship is always to be the Rescue Ship unless the Senior Officer present considers this to be undersirable or impracticable, in which case he is to detail the ship for this duty.

4. When neither ship between which the man falls is the Rescue Ship, both are to be prepared to drop a lifebuoy with marker.

5. Navy Order 443 of 1960 is hereby cancelled.

(DTSR 1623/1/10.)

(*Navy Order* 443 *of* 1960.)

UNCLASSIFIED. Cancelled vide CNO 428/62

539.—Ships' Badges, Nomenclature and Honours.

The "Ships' Badges, Nomenclature and Honours Committee" consists of the following members—

The Deputy Chief of Naval Personnel (President).
The Director of Personal Services.
Commander F. R. James, O.B.E., R.A.N. (Rt'd.).
The Senior History Master, Royal Australian Naval College.
A representative of the Director, National Gallery of Victoria.

2. The functions of the Committee are—

(*a*) to determine the design of badges for H.M.A. ships; and
(*b*) deal with naming and war honours of H.M.A. ships.

3. Ships (major war vessels) and establishments, not in possession of badges approved by the Admiralty or the Naval Board, are invited to forward further suggested designs to the Deputy Chief of Naval Personnel.

4. In order to obtain as many suggested designs as possible, Commanding Officers should forward designs submitted by members of the ship's company, and should not limit proposals to their own particular choice.

(HPB 8/2/2.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

540.—Aircrew—Medical Fitness.

Aircrew suffering from any physical or constitutional complaint are to report to Medical Officers without delay. Authorizing officers who have reason to doubt the medical fitness of any aircrew are to seek the advice of Medical Officers.

2. The effects of flying when suffering from common head colds may be serious and far-reaching.

3. A lowering of the black-out threshold may persist for three or four days after clinical recovery from gastro-enteritis.

4. Aircrew should not be authorized to fly for eight hours after taking any anti-histamine drug to counteract the effects of hay fever or for other purposes.

5. In order that they may be properly rested, aircrew should not normally keep watch within eight hours of being due to undertake flying duties.

6. All flying personnel should undergo a very careful dental examination at least every six months, **whether they know they require treatment or not,** in order to minimize the risk of high altitude toothache. This complaint (aerodontalgia) may constitute a serious risk when flying modern high speed aircraft.

(MDG 327/53/22.)

UNCLASSIFIED.

541.—Drafting, Compassionate Leave and Discharge Procedure.

It has been decided that H.M.A.S. CRESWELL will cease to be stabilized for drafting.

2. Navy Order 229 of 1959, is to be amended as follows—

Paragraph 4—

Delete " H.M.A.S. CRESWELL 12 months stabilized ".

(HPB 333/3/1.)

(*Navy Order* 229 *of* 1959.)

UNCLASSIFIED.

542.—Parade Training in the R.A.N.

The Naval Board have for some time been concerned at the considerable diversion of skilled man-power that is involved in the training of naval detachments to a sufficiently high standard to take part in ceremonial parades.

2. Accordingly, action has already been taken to reduce as far as possible the number of ceremonial commitments, but it must be appreciated that numerous occasions will still arise where the R.A.N. must play its part, and indeed it would not be in the best interests of the service to reduce such occasions to too great an extent.

3. It is axiomatic that the less men are well-trained in basic squad-drill, or the less they are in practice, the more time must be devoted to training them up to a standard acceptable for ceremonial purposes. In one year recently it was necessary at one establishment to spend 72,000 man-hours (which is the equivalent of the entire engagements of seven 6-year men) in preparing and practising for ceremonial commitments.

4. As the navy has become increasingly technical, so has the tendency grown to look upon squad-drill and parade-training as anachronistic in a modern fighting service. The Naval Board believe, however, that squad-drill is still the basis of all naval discipline and that the standard of drill in the Royal Australian Navy has been allowed to fall to a level where a disproportionate amount of training is necessary to meet ceremonial commitments.

5. The Naval Board direct, therefore, that at all levels and in all branches a greater effort is to be made to ensure that all officers and men acquire, and retain, a degree of smartness on parade which will enable them, with a minimum of special practice to take their part in ceremonial commitments at a standard in keeping with the traditions of the navy.

6. In this respect the Naval Board wish all branches to look for instruction and guidance to the Gunnery Branch, which it is intended should retain its traditional position as the guardian of parade-training standards in the navy.

7. Navy Order 557 of 1958 is hereby cancelled.

(DTSR 311/3/11.)

(*Navy Order* 557 *of* 1958.)

UNCLASSIFIED. Cancelled C NO 540/61

543.—Tax Free Element of Pensions Payable under the D.F.R.B. Act.

The following information regarding the method of application of section 26AA of the Income Tax and Social Services Contributions Assessment Act is for the guidance of contributors to the Defence Forces Retirement Benefits Fund.

2. Section 26AA of the Act provides that, except for such amount of pension as was purchased by the " undeducted purchase price ", as defined in the following paragraphs, amounts received as pension constitute portion of a pensioner's assessable income for taxation purposes.

3. Under the provisions of section 82H (2) of the Act a taxpayer may claim as a deduction from assessable income amounts paid as contributions toward the purchase of a pension or by way of Life Assurance premiums up to a limit of £100 for the year commencing 1st July, 1948, date of inception of the D.F.R.B. Scheme to 30th June, 1949; £150 for year ended 30th June, 1950, £200 for subsequent years of income to 30th June, 1956; £300 for years ended 30th June, 1957, 1958 and 1959, and £400 from 1st July, 1959, onwards unless otherwise varied by amendments to the Income Tax Assessment Act.

4. Amounts paid by a taxpayer in excess of those referred to in paragraph 3 could not, therefore, be claimed as a deduction in the particular years of income in which they were paid. Such amounts, however, represent portion of the " undeducted purchase price " of pension referred to in section 26AA of the Act. The " undeducted purchase price " of pension consists of the total of these individual amounts in excess of exemptions allowed for pension contributions and Life Assurance premiums on which tax was paid in the various years of income.

5. When a taxpayer, who was required to pay tax on the " undeducted purchase price " of his pension as instanced above, retires from his employment and on retirement becomes eligible for pension, he may request the Commissioner of Taxation to advise him of the amount of such pension which will be exempt from income tax in accordance with the above provisions. Such a request should be made to the Deputy Commissioner of Taxation in the state in which the member lodged his returns of income and must include details of the amounts paid towards pension and assurance premiums in each year in which the total of such payments exceeded the exemptions laid down.

6. The amount of pension which will be free of income tax is ascertained by dividing the total amount of the " undeducted purchase price " by the life expectancy of the pensioner at the age of his retirement. The example quoted was as under—

> " The life expectancy of a man aged 65 years is 14 years. His annual pension is £800 per year and the " undeducted purchase price " of his pension amounted to £1,400. The annual allowance would therefore be—

$$\frac{£1,400}{14} = £100$$

The amount of pension which would then be taxable (not having regard to concessional deductions, &c.) would be £800 – £100 = £700 a year ".

7. The Commissioner of Taxation has stated that the amount of deferred pay paid into the Defence Forces Retirement Benefits Fund by members of the R.A.N. who are contributors for full benefits also represents portion of the " undeducted purchase price " of their pensions.

8. Accordingly, on retirement, personnel who become eligible for pension under the D.F.R.B. Act, and who consider that portion of their pension does not represent assessable income in accordance with section 26AA of the Income Tax and Social Services Contributions Act, may request information from the Director of Navy Accounts of the amounts of their yearly contributions, and if applicable, deferred pay paid to the D.F.R.B. Fund in order that they may make application to the Deputy Commissioner of Taxation. If, in addition, they had paid assurance premiums details of the payments should be sought from the Company concerned.

9. Navy Order 483 of 1959 is hereby cancelled.

(HPB 271/1/8.)

(*Navy Order* 483 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

544.—Fleet Air Arm Electrical and Electronic Test Equipment—Introduction of Scheme for Check Calibration.

The Test Equipment Calibration Centre (Dockyard Radio Centre, Leichhardt) will be equipped to carry out the following functions—

(*a*) Periodic check calibration of all Fleet Air Arm Electrical and Electronic Test Equipment.

(*b*) Testing to specification; or evaluation of any particular item(s) of test gear.

(*c*) Survey of test equipment before and after repair.

2. *Method*—

(*a*) Test equipment requiring calibration will be collected from the aircraft carrier whilst in Sydney by the Dockyard Radio Centre's vehicle. The return of equipment will be effected similarly.

(*b*) Test equipment from R.A.N.A.S. Nowra will normally be air freighted to Mascot for collection and return as above.

(*c*) Test equipment from the Civilian Repair Organization will be collected from the user's premises by the Dockyard Radio Centre's vehicle and returned. These visits will be co-ordinated to avoid unnecessary travel.

3. *Transactions*—

(*a*) In view of the fact that only the user can decide when test equipment can be spared for re-calibration, the onus for sending equipment to the Calibration Centre will be on the user.

(*b*) The normal procedure will be as follows—

(i) The Dockyard Radio Officer will be informed by the user when it is desired to return test equipment for re-calibration. The nature of the equipment and a date, time, and place for collection will be nominated.

(ii) Form A.S. 331, endorsed " Calibration for Ship ", is to accompany the despatch to and return from the Dockyard Radio Centre, Leichhardt, of test equipment from H.M.A.S. MELBOURNE and R.A.N. Air Station, Nowra. Normal Naval Stores accounting action will be taken in a similar manner to " Repairable for Ship " transactions *vide* article 1003 of A.B.R. 4, Naval Storekeeping Manual. Form C.R.O. 4, endorsed " Calibration for C.R.O.". " Not for ledger purposes ", should, in a similar manner, be used by Civilian Repair Organizations.

(iii) Each equipment will have an S.118 label attached to indicate the category of each item.

(iv) Equipment returned for re-calibration but found to require adjustment beyond the scope of the Calibration Centre will be returned to store and a calibrated replacement item issued in lieu.

(v) A calibration chart, where necessary, will accompany the equipment on return after re-calibration. A copy will be retained by the Calibration Centre.

4. *Limitations*—

(*a*) The Calibration Centre will not be capable of performing any extensive repair to equipments. Such work will have to be undertaken by the Dockyard Radio Centre or outside industry in the normal way. Check calibration after repair will, of course, be carried out by the Calibration Centre.

5. *H.M.A.S. MELBOURNE*—

(*a*) Advantage will have to be taken of any time spent in the Dockyard or in port in Sydney to carry out test equipment transactions.

(*b*) The aircraft carrier will have priority for exchange items.

(*c*) Equipment due for re-calibration before the return of the carrier will be returned for calibration before departure for other areas.

6. *Period Between Checks*—The aim is to check-calibrate every item once per annum, although experience may show that some instruments require checking at shorter or longer intervals.

7. *Packaging*—Special attention will be paid to the packaging of test equipment for transit.

(DAMR 519/59/57.)

UNCLASSIFIED. No 472/62 is relevant

545.—Maintenance of Electrical and Electronic Equipment.

The manning situation is still at a stage where there are critical shortages in the higher rates of the Electrical Branch who maintain radar, radio and weapons systems equipments, and unusual measures must be taken if ships are to maintain a high standard of operational efficiency.

2. The Naval Board wish to direct the attention of all Flag Officers and Captains to paragraph 7 of Q.R. & A.I., Article 4111, " Instructions to the Electrical Officer," which states—

> " 7. He is to call into consultation or call for assistance of other branches in executing any work which his department is not manned or equipped to undertake. He is to afford similar facilities to other branches which require his assistance or advice."

and to state that in order to keep ships of the fleet in a high degree of operational efficiency during the present period of manning difficulties, they desire Captains to take all steps possible to render assistance in every way to the Electrical Officer to enable him to maintain communications and weapon systems.

Communications Branch Equipment.

3. It is considered that officers and ratings of the Communications Branch, under the overall direction of the Electrical Officer, should be capable of undertaking the routine equipment performance checks of their sets, and a proportion of the maintenance schedules. In addition they should undertake such other maintenance as may be mutually agreed by the Communication and Electrical Officers, and as their skill and other duties allow.

4. The equipment to which the above applies is—

(*a*) Normal ship-borne radio communication transmitters and receivers (whether fitted ashore or afloat).

(*b*) Aerials.

(*c*) Remote control systems.

(*d*) Associated battery outfits.

(*e*) Selected equipment at H.M.A.S. HARMAN (Belconnen).

5. To this end, ratings qualifying for Radio Supervisor and Radio Supervisor (Special) are taught user maintenance.

Gunnery and T.A.S. Equipment.

6. Ordnance Artificers undergo some electrical instruction when qualifying and should render such assistance in electrical maintenance of Gunnery and T.A.S. equipment as is mutually agreed by the Gunnery or T.A.S., Ordnance Engineer and Electrical Officers, and as their proficiency and other duties allow. This assistance should be rendered under the overall direction of the Electrical Officer.

7. Fire Control Armourer rates could be employed similarly on Gunnery Equipment.

8. At present T.A.S. ratings (U.C. and U.W.) receive no electrical training apart from that necessary for user checks and tests. However, some senior T.A.S. ratings through long experience or through early training may have sufficient knowledge to be of assistance.

General.

9. It should be borne in mind by Captains that during such periods as prolonged fleet exercises there may be inadequate user and electrical complement to continue planned maintenance schedules and that some reduction in the communications and weapon systems efficiency may have to be accepted.

(DMT 517/51/141.)

546.—Material Failures in Salt Water Systems of Types A, B and C Self-Contained Air-Conditioning Plants.

(*A.F.O.* 1163/1960.)

Recent reports from the R.N. show that rapid deterioration of steel pipes and fittings in the circulating water systems is still being experienced in the above plants.

2. In all ships fitted with these plants the following modifications are to be made to the salt water systems of the plants, the work being treated as a defect—

(*a*) All steel circulating water pipes and fittings are to be renewed in C.N.I. and gun metal respectively.

(*b*) Magnetic shut-off valves are to be removed and straight lengths of C.N.I. piping fitted in lieu.

(*c*) Nut and cone joints are to be incorporated in the system near the condenser to facilitate its removal for maintenance.

(*d*) All leaded brass ferrules are to be renewed either in aluminium brass or in phosphor bronze, and, where castings in the system are joined by screwed ferrules, the joints are to be brazed.

(*e*) Where the salt water systems from two or more air-conditioning plants have a common discharge overboard, a separate discharge valve from each plant is to be fitted.

3. The ship's organization should provide for the appropriate supply and discharge valves on the salt water system to be shut whenever an air-conditioning plant is not in use, in order to ensure that the plant is fully isolated. The ship's standing orders should emphasize the danger of attempting to run the plants with these valves shut.

4. Attention is drawn to B.R. 16 (Engineering Manual) articles 146 and 266, and especially to the need for regular inspection and renewal of corrosion pieces.

(DNC 1211/51/139.)

UNCLASSIFIED.

547.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 971/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. Commanding Officers of H.M.A. ships who are unable to comply within three months from the date of this order are to report the fact specially to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 1147XB ..	SC 048	Q.F. 4.7-in.; Q.F. 4-in.
RNC 1010XA ..	SC 061	Q.F. 5.25-in. ; Q.F. 4.7-in. ; Q.F. 4.5-in.; Q.F. 4-in. (F.A.)
RNC 1029XA ..		
RNC 903 ..	SC 109	Q.F. 4.7-in.
RNC 1156XB ..		
RNC 904 ..	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 1274XC ..		
RNC 6131 ..	ASN/T 190–054 ..	Q.F. 4.7-in.; Q.F. 4-in. (F.A.).
RNC 6135 ..		

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 4762 ..		
SPDN 4764 ..		
SPDN 4765 ..		
SPDN 4766 ..		
SPDN 4767 ..		
SPDN 4768 ..		
SPDN 4770 ..		
SPDN 4771 ..		
SPDN 4772 ..		
SPDN 4773 ..		
SPDN 4774 ..		
SPDN 4775 ..	FNHP 019–020 ..	Q.F. 40/60.
SPDN 4851 ..		
SPDN 4852 ..		
SPDN 4854 ..		
SPDN 4855 ..		
SPDN 4856 ..		
SPDN 4858 ..		
SPDN 4859 ..		
SPDN 4860 ..		
SPDN 4861 ..		
SPDN 4862 ..		
SPDN 4863 ..		
SPDN 4865 ..		
SPDN 4866 ..		
SPDN 4867 ..		
SPDN 4868 ..		
SPDN 4869 ..		
SPDN 4870 ..		
SPDN 4871 ..		
SPDN 4872 ..		
SPDN 4874 ..		
SPDN 4905 ..		
SPDN 4906 ..		
SPDN 4907 ..		
SPDN 4910 ..		
SPDN 4911 ..		
SPDN 4912 ..	FNHP 019–020	
SPDN 4913 ..		
SPDN 4915 ..		
SPDN 4916 ..		
SPDN 4919 ..		
SPDN 4921 ..		
SPDN 4923 ..		
SPDN 4925 ..		
SPDN 4926 ..		
SPDN 4927 ..		
SPDN 4952 ..		
SPDN 4954 ..		
SPDN 4955 ..		
SPDN 4956 ..		
SPDB 5152 ..		
SPDB 5153 ..		

2. Attention is drawn to article 211 of Naval Magazine and Explosive Regulations, B.R. 862 and paragraphs 6, 7 and 9 of article 53 of Naval Cordite Regulations, B.R. 862A.

3. R.A.N. Armament Depots. Separate instructions have been issued.

(DW 725/52/76.)

UNCLASSIFIED.

548.—Ammunition—Pyrotechnics—Signals, Distress Mark 13, Mod. O—Use with Inflatable Liferafts—Training.

(*A.F.O.* 1698/1958.)

The inclusion of KF 045 Signals Distress, mark 13 mod. O in inflatable liferafts is detailed in Navy Order 35 of 1959.

2. The KF 045 signal is an American signal which has been adopted for use by the Royal Navy and the R.A.N. in aircraft dinghy packs and for inflatable liferafts.

3. It is a dual purpose signal having an orange smoke unit at one end and a red flare unit at the other end; each unit can be used independently of the other. When the store is used initially, the container of the spent unit is to be cooled in water to enable the remaining unit to be used as necessary.

4. On a clear day in Australian coastal waters the smoke signal can be seen from a distance of 11 miles and the flare from a distance of 6½ miles. At night the flare is visible from a distance of 28 miles.

5. *Instructions for Operating.*—Instructions for operating are printed on the body of the signal. It is necessary for officers and men to receive some training in the use of these signals to be able to operate them correctly.

6. Care is required in the handling of the signal, as it is known that the burning smoke unit has a tendency to spill small quantities of hot liquid composition; this is not harmful to the person but may cause serious damage to the liferaft. If used in the raft the signal should be held outboard downwind from the raft so that any hot liquid composition which forms will drop clear of the buoyancy tube. It is possible to prevent the hot liquid composition from touching the hand by suitable manipulation of the signal.

7. It is important that the instructions for using the signal are fully complied with as otherwise the ring or cap can be torn away from the store without the friction wire firing the cap igniter. A contributory cause of this type of failure is that the instructions give the impression that the first action of operation of the signal occurs when the seal snaps, and that there must be no delay in pulling the ring away. This is not so; the removal of the seal being only the preparation for firing, the signal functions when the friction wire is withdrawn thus firing the cap igniter.

8. *Periodical Examination.*—The instructions in N.M. and E.R., B.R. 862, article 247, are to be complied with generally in respect of distress signals used with inflatable liferafts, except that paragraph (*d*) of article 247 is to be regarded as cancelled. Distress signals withdrawn after twelve months stowage with the liferafts are to be retained on board for training. Particular attention is to be given to marking the signals in accordance with article 247, paragraph (*b*).

9. *Outfit Allowances.*—The peacetime allowance of KF 045 Signals, Distress, mark 13 mod. O is four per inflatable liferaft carried. In time of war the allowance will be increased to six per inflatable liferaft carried.

10. *Training.*—Training of officers and men in the use of these signals should be carried out in those ships to which inflatable liferafts are supplied. To cover the first year's training requirements, the following quantities may be demanded from the nearest R.A.N.A.D.

Aircraft Carriers	324
Daring Class	68
Type 15 Frigates	40
Type 12 Frigates	60

The training requirement in subsequent years should be met by using the signals withdrawn, vide paragraph 8.

11. *Stowage.*—The six distress signals allowed per raft are to be inserted in the pockets on the outside of the pack valise when stowed. The training allowances should be stowed in the pyrotechnic magazine.

(DW 727/56/37.)

(*Navy Order* 35 *of* 1959.)

549.—This Order will not be Issued.

RESTRICTED.

550.—A/S Weapons—A/S Mortar, Mark 10—CH 317 Fork—Modification: CJ 512 Jig, Setting—Introduction.

(*A.F.O.* 658/1960.)

The following modification is approved—

(*a*) *Weapon*	A/S Mortar, mark 10.
(*b*) *Parts affected*	CH 317 fork.
(*c*) *Drawing No. or Diagram* ..	AME. 4020/28. Navy Order Diagram Issue 12/60.
(*d*) *Modification*	Remove metal from the end of CH 317 fork adjacent to lever grip to a depth of 0.15-in. for a distance 0.7-in. from the end.
(*e*) *Purpose*	To ensure the approved clearance between the lifting fork and the head of unit, electric contact, and prevent the fouling of the CH 240 lever by the CH 317 fork in the breech mechanism.
(*f*) *By whom to be done* ..	R.A.N. Armament Depots.
(*g*) *When to be done* ..	First convenient opportunity for equipments in service. Equipments in store, before issue.

2. A jig to check the adjustment of the unit, electric contact, has been designed and is hereby introduced into Naval Service.

(*a*) Items—CJ 512—Jig, setting. Drawing U.C.W. 4022/48.
CJ 680—Box, wood. Drawing U.C.W. 350/42.

(*b*) Purpose—Adjustment of unit, electric contact, to ensure contact with cap of primer.

(*c*) When used—On each occasion of stripping and re-assembling the breech mechanism.

(*d*) (i) Method of use—With the unit, electric contact (which includes the fork) fitted in the breech block, insert the CJ 512 jig, setting in the chamber of the cartridge container.

(ii) Ensure that the jig is not inserted in such a position that it is under one extractor and over the other, as this will cause the breech to jam on closing. A modification to prevent this happening will be promulgated in due course.

(iii) Close the breech taking care that the toe of the B.M. lever grip is manually depressed so that it positively engages its retaining slot in the slide. Check that the clearance between the fork and head of the unit contact is $0.02 \begin{smallmatrix} + .005 \\ - .000 \end{smallmatrix}$ ins. If outside these limits, adjustment is to be made by inserting or removing shims under the head of the adjusting screw. Lock the adjusting screw by bending up the tab of the locking washer.

(*e*) Distribution—CJ 512 jigs will be issued to ships without demand when available on the basis of one per CJ 016 chest, tools and spare gear No. 1 CJ 016 chests issued by Armament Depots in future will contain the jig in the upper tray.

(*f*) R.A.N.A.D.'s only—One CJ 512 jig contained in CJ 680 box is to be included in the contents of the upper tray of each CJ 016 chest issued to Service. Naval Proportion Book and Ships Warrants will be amended.

3. Navy Order 1052 of 1958 is hereby cancelled.

(DW 707/51/28.)

(*Navy Order* 1052 *of* 1958.)

UNCLASSIFIED. Cancelled vide N.O 474/62

551.—Periodical Examination and Testing of Diving Equipment and Breathing Apparatus in use in H.M.A. Establishments and in Stock at Naval Store Depots.

The procedure hereunder is to be followed for the periodical examination and testing of diving equipment and breathing apparatus in use in H.M.A. establishments and in stock at Naval Store Depots—

(*a*) *H.M.A. Establishments.*—An inspection is to be made annually by the Officer-in-Charge, Diving School, H.M.A.S. WATSON. The report of this inspection in respect of each establishment is to be forwarded to the Naval Board through the Commanding Officer, H.M.A.S. WATSON. A copy of the report is to be forwarded to the Commanding Officer of the establishment concerned who is to furnish to the Naval Board (copy to the Commanding Officer, H.M.A.S. WATSON) details of action taken or proposed to make good any defects mentioned in the report.

(*b*) *Naval Store Depots.*—

(i) (Superintending) Naval Store Officers are responsible for ensuring that stocks of all diving equipment and breathing apparatus are examined annually by specialist technical officers and that items are tested periodically, prior to issue, and on return from ships and services in accordance with articles 775, 776 and 778 of the Storehouse Manual, B.R.1692.

(ii) The annual examination will be carried out by the Officer-in-Charge, Diving School, H.M.A.S. WATSON, during his annual inspection of diving equipment, &c., in H.M.A. establishments.

(iii) If a specialist technical officer is not available to carry out pre-issue tests, the (Superintending) Naval Store Officer is to so inform the ship or establishment demanding the equipment. On receipt of such advice the ship or establishment concerned is to arrange for the required tests to be carried out.

(iv) The report of the Officer-in-Charge, Diving School, of his inspection is to be forwarded to the Naval Board through the Commanding Officer, H.M.A.S. WATSON. A copy of the report is to be forwarded to the (Superintending) Naval Store Officer concerned, who is to advise the Director of Naval and Air Stores of the action taken or proposed to remedy defects.

2. The foregoing applies to all items stocked under class E, group 5.

(DW 512/74/50.)

UNCLASSIFIED.

552.—P.R.4 Torpedo Tube Mountings—Modification.

Approved modifications to the P.R.4 Torpedo Tube Mountings are given in the appendix to this order.

2. Local modification numbers are preceded by the letters " A.N.", no Admiralty modifications have yet been issued.

3. Where a modification has been reported " complete ", the serial number of the mounting is indicated in the " Remarks " column.

4. The information contained herein is to be used to complete form S.1151 (*e*), or O.E.O.'s Master Record Form A.S.2024 (54).

APPENDIX.

Mod. No.	*Drawings.*	*Description.*	*Remarks.*
A.N.1	T.5274. (The latest revision is T.5509)	Hand training gear. Fit locking device to prevent rotation of hand-wheel when clutched to " Power "	Reg. Nos. 19–21, 23–27 are modified. Modification parts will be supplied for remainder
A.N.2	T.5275	Cardan shaft. Thrust collars to be added	Reg. Nos. 19–27 are modified

APPENDIX—*continued.*

Mod. No.	*Drawings.*	*Description.*	*Remarks.*
A.N.3	T.5233	Rear handrail. To be reduced in height by 8 inches	Reg. Nos. 19–27 are modified
A.N.4	T.5276	Charging valve cover. Increase clearance for torpedo charging nozzle. Fit modified access covers and securing arrangements	Reg. Nos. 19–27 are modified
A.N.5	EEM. 43159/R3, Sheet 2	Outer heater terminal box cables. Tubes F, M, P and Z. D.C. tubes only. Remove flexible tubing and replace by guard	Reg. Nos. 19–27 are modified
A.N.6	EEM. 43159/R3, Sheet 2	Heater terminal box cables. All tubes. D.C. tubes only. Fit additional cable clips	Reg. Nos. 19–27 are modified
A.N.7	T. 5277 A.N. (The latest revision is T. 5520 A.N.)	Training gear. Reduction of vibration in bevel gear drive	Reg. Nos. 19, 21, 23–27 are modified
A.N.8	T. 5277	Training limit stop. To be repositioned	Reg. Nos. 19–27 are modified
A.N.9	T.P. 14013	*Latch tripper and " W " gear.* (*a*) Modify tripper (*b*) Build up guide strips	Reg. Nos. 19–27 are modified
	T.P. 6574	(*c*) Machine web to give clearance for Oldhams couplings (if necessary)	
A.N.10	T. 5505. (Latest revision is T. 5528)	*Rear door.* Hinges repositioned to allow increased opening	Reg. Nos. 20–27 are modified. Modification parts will be supplied for remainder

APPENDIX—*continued.*

Mod. No.	*Drawings.*	*Description.*	*Remarks.*
A.N.11		*Brass instruction plate* for stripping breech mechanism. Fit galvanized steel liner under. Make joint with barium chromate paste patt. No. 4945; Secure with cadmium plated round headed steel screws	Reg. Nos. 20, 22–27 are either modified or have aluminium plates fitted
A.N.12	T. 5233 A.N. D.O.U.W. A/46335	*Footplates, covers and handrails.* Fit additional footplates and covers. Modify handrail	Reg. Nos. 19, 20, 22–27 are modified. Modification parts will be supplied for remainder
A.N.13	T. 5247	*Top strip.* Increase cut-away on rear end to 6″ from rear door joint-face. Length of lead-in to remain at 1¾	Reg. Nos. 19–27 are modified
A.N.14	T.P. 8471 A.N. ..	*Blast screen.* Fit grease nipples to hinge pins of door and reduce diameter of hinge pins	Reg. Nos. 22, 24–27 are modified
A.N.15		*Voice pipes D.C. tubes only.* Remove voice pipe communication facilities	Reg. No. 22 modified. Voice pipes not fitted to A.C. tubes
A.N.16	EEM. 43159/R3, Sheet 2	*Training motor controller D.C. tubes only.* Fit an isolating switch A.P. 2695 in supply to controller for training motor	Reg. No. 22 modified A/C tubes modified during manufacture by fitting switch A.P. 18012
A.N.17	T.P. 14879	*Training worms.* Fit balance piece to balance worms	Reg. Nos. 22–27 are modified
A.N.18	T. 2603/178 ..	To modify "Power"/"Hand" change-over gear	Reg. Nos. 23, 24 and 27 are modified

APPENDIX—*continued.*

Mod. No.	*Drawings.*	*Description.*	*Remarks.*
A.N.19	U.L. 3833	To replace existing racer clips with new rigid/resilient clips	
A.N.20	T. 5266. (Latest revision is T. 5531 A.N.) T.4898 T.P. 16244 T.5274 (latest revision is T.5509) T.P. 18273 or T.P. 19216 T.P. 16667 T.5505 (latest revision is T.5528) T.P. 15890 dated (6.6.57), or T.P. 19701 T.5215 T.P. 1083 dated (30.7.57) T.P. 4116 dated (6.6.57)	Provision of additional lubrication	Reg. Nos. 23, 24 and 27 are modified

(DW 736/51/13.)

UNCLASSIFIED.

553.—Anchors, Chain Cable and Gear—Allocation of Pattern Numbers.

(*A.F.O.* 323/1960.)

The revised section of B.R. 810, the Rate Book of Naval Stores for class B, group 4 (anchors, chain cable and gear), will shortly be published. It has been necessary to revise the pattern numbers allocated for certain items as follows—

(*a*) *Anchors, ships' and boats'.*—A new pattern number has been allocated to each type and size of anchor instead of the locally allocated pattern numbers prefixed with the letter "N". Boats' anchors, 45/60 lb., untested, for danbuoys and the associated spare forelocks are obsolescent, but they have been patternized (B4A/21022 and 21023 respectively) in view of the large stocks held. Future purchases of boats' anchors and forelocks for danbuoys will be to Drawing DNC.15/316 (patterns B4A/21000 and 21001 respectively).

(*b*) *Chain cable.*—Six-figure pattern numbers have been allocated. The first two digits indicate the type of cable, viz.:—

10—Admiralty quality iron fitted with lugged joining shackles.
12—Admiralty quality iron for use with lugless joining shackles.
14—Merchant quality iron fitted with lugged joining shackles.
16—Merchant quality iron for use with lugless joining shackles.
20—Admiralty quality forged steel for use with lugless joining shackles.
22—Merchant quality forged steel fitted with lugged joining shackles.
24—Merchant quality forged steel for use with lugless joining shackles.
28—Admiralty quality mild steel for use with lugless joining shackles.
30—Merchant quality mild steel fitted with lugged joining shackles.
42—Aluminium bronze for use with lugless joining shackles.

The next two digits denote the nominal size of the cable expressed in sixteenths of an inch, i.e., 23 = $1\frac{7}{16}$-in., and the last two figures the length in feet, i.e., 90 = 15 fms.

For example pattern B4A/144875 is Merchant quality chain cable fitted with lugged joining shackles 3-in. by $12\frac{1}{2}$ fms. long.

(*c*) *Gear.*—The pattern number consists of six figures and, where the drawings indicate that the item is manufactured in various materials, a suffix letter, as follows—

F—Admiralty quality forged steel.
M—Merchant quality iron.
S—Merchant quality forged steel.
B—Non-magnetic material.

The last two digits of the pattern number indicate the size in sixteenths of an inch.

For example pattern B4B/904020F is a mooring swivel Admiralty quality forged steel cable $1\frac{1}{4}$-in.

2. Stocks and records at Dockyards and Store Depots should be adjusted accordingly on receipt of the new rate book.

3. H.M.A. ships and commissioned establishments should comply with A.B.R. 4 (Naval Storekeeping Manual), article 1812 (*g*), in adjusting their ledgers and permanent loan lists.

(DNAS 505/74/16.)

UNCLASSIFIED. Cancelled vide N.O. 458/62

554.—Fumigation of H.M.A. Ships.

All ships are liable to infestation by rats and in some cases by fleas, bugs, &c.

2. There is obviously a very grave danger from rat infestation in H.M.A. ships operating in or arriving from areas where plague is endemic or where sporadic cases may occur showing that the rat population is affected by the bacillus of plague.

3. The only satisfactory method of eliminating rats is by complete fumigation of the whole ship. This procedure is to be carried out at the earliest opportunity by any H.M.A. ship in which rats have been observed.

4. Captains are to ensure that an item for fumigation is inserted in ship's main defect list for annual refits or more frequently if considered necessary.

5. Special care is also to be taken in regard to the provision of adequate rat guards and the disposal of garbage when alongside.

6. In cases of doubt, the representative of the Commonwealth Department of Health should be consulted.

7. Prior to fumigation by dangerous gases or sprays, water urns or other articles of like pattern are to be drained completely by inversion. Tap drainage is insufficient, as water remains below the level of the taps for safety reasons, although apparently empty.

8. Navy Order 692 of 1958 is hereby cancelled.

(MDG 1211/51/145.)

(*Navy Order* 692 *of* 1958.)

RESTRICTED.

555.—Naval Stores (General)—40 mm. R.U. Ammunition Lockers, Pattern B3/30,004 and Pattern B3/7820—Modifications.

(*A.F.O.* 667/1960.)

It has been reported that 40-mm. R.U. Ammunition Lockers fitted in certain R.N. ships have not been modified in accordance with instructions previously promulgated and it is possible that other ships may also have unmodified lockers.

2. The lockers are therefore to be inspected on receipt and, where necessary, the following modifications are to be carried out by Ship's Staff, Base Staff or Refitting Authorities, as appropriate—

(*a*) Locker door clips are to be strengthened by welding a 5 lb. mild steel fillet piece in the throat of the handle (Navy Order Diagram Issue 12/60).
(*b*) Lockers are to be fitted with door hold-open hooks and eyes to hold the doors as close as possible to the sides of the lockers.
(*c*) Lockers are to have 4 No. $\frac{3}{8}$-in. diameter drain holes drilled in the corners of the base.

3. For those ships in which unmodified lockers have already been fitted and where the work is beyond the resources of Ship/Base Staff, a suitable item is to be inserted in the Defect List.

(DNAS 505/71/29.)

UNCLASSIFIED.

556.—Naval Stores (General) (Class B, Group 3)—Detonator Locker, Aluminium Alloy Pattern B3/31348 and A/S Smoke Marker, Aluminium Alloy, Pattern B3/31349—Introduction.

(*A.F.O.* 2436/1959.)

In order to reduce the number of different types of detonator lockers and to effect a measure of standardization, a new aluminium alloy detonator locker to Drawing D.N.C. 13/1014 has been designed to supersede existing patterns B3/7185 and 30016. A maximum number of 4 lockers can be bolted together, each " unit " being separated by 10 lb. M.S. plate to conform with B.R. 862, article 145 paragraph 2, the 4 " units " then being treated as a single locker for the purposes of article 145 paragraph 3.

2. Stocks of patterns 7185 and 30016 are to be issued until exhausted.

3. A/S smoke markers are now being issued in boxes N18 and it has been found necessary to design a new aluminium alloy smoke marker locker to Drawing D.G.S./XCI/102/NC/43, to supersede pattern B3/7811.

4. The new items have been added to the Rate Book and Authorized List of Naval Stores under class B, group 3 as follows—

Pattern No.	*Description.*	*Ship's Classification.*
	Lockers ammunition, aluminium alloy	
B3/31348	Lockers detonator..	Portable fittings
B3/31349	Lockers markers, smoke, A/S	Portable fittings

The superseded items have been marked " O ".

5. Admiralty has advised that the relevant publications will be amended.

(DNAS 505/71/14.)

UNCLASSIFIED.

557.—Naval Stores (General) (Class B, Group 7)—Welding Rods.

(*A.F.O.* 479/1960.)

Description and specification of the following welding rods has been altered to read as shown, and the Rate Book and Authorized List of Naval Stores will be amended accordingly.

Pattern Nos.	*Description.*	*Nearest Specification.*	*Australian Specification.*
	Monel Metal:		
12032	$\frac{3}{16}$-in.	B.S. 2901–N.A. 33	No Australian equivalent
12033	$\frac{1}{8}$-in.		
12034	$\frac{3}{32}$-in.		

2. Navy Order 1027 of 1959 is relevant.

(DNAS 505/84/11.)

(*Navy Order* 1027 *of* 1959.)

UNCLASSIFIED.

558.—Naval Stores (General) (Class E, Group 3)—Inflatable Liferafts. Pattern 5603.

Navy Order 35 of 1959 is to be amended as follows—

Renumber paragraphs 29, 30, 31, 32, 33, 34, 35 and 36.
To read 30, 31, 32, 33, 34, 35, 36 and 37, respectively.
Insert new paragraph 29.

" 29. Deterioration of inflatable liferafts is accelerated under tropical conditions and ships which have returned after service north of the tropic of capricorn for a period of 6 months or more should return their outfit of rafts to the dockyard as early as practicable for inspection and servicing as necessary ".

(DNAS 1275/57/32.)

(*Navy Order* 35 *of* 1959.)

UNCLASSIFIED.

559.—Naval Stores (General) (Class E, Group 3) R.F.D. Type 50N Mark 6A Inflatable Lifejacket complete with Whistle, Light, Battery and Life Line—Embarkation of Full Allowances in Peace.

(*A.F.O.* 2186/1958.)

In order to improve the state of preparedness of the Fleet and reduce work on mobilization it has been decided that H.M.A. ships in commission shall now carry onboard at all times the full quantity of inflatable lifejackets R.F.D. type 50N mark 6A complete with whistle, light, battery and life line allowed, i.e. a quantity equal to 110 per cent. of the authorized war complement.

2. Demands to complete to the above allowance should be forwarded by H.M.A. ships in commission to the appropriate (S)N.S.O. Demands for ships under construction, modernization, conversion, or re-storing after refit, should be arranged by the Storing Yard concerned in the usual manner.

3. Lifejackets other than those required for day to day use (e.g. in boats, during replenishment at sea and for instructional purposes) are to be stowed in ships' storerooms or other suitable stowage (*see* para. 4 below) until required for issue on a personal basis in an emergency. The stowage space which will be required in most ships is not likely to be large but ships which experience difficulty in providing such stowage are to report the fact to the Naval Board through their administrative authorities.

4. Prolonged exposure to light and any contact with grease, &c., is detrimental and will accelerate deterioration of the rubberized fabric from which these jackets are manufactured. A reasonably even temperature is required and the jackets should not be stowed more than three or four high on each shelf or rack. Provided that these lifejackets are stowed away from excessive heat there should be little risk of deterioration.

5. Pending experience, however, of the extent to which the lifejackets are liable to deteriorate when stowed for long periods onboard, ships in commission are to land 10 per cent. of their stocks annually for test and inspection. In the event of a significant proportion being found defective the (S)N.S.O. will call for the return of the balance of those onboard not actually in use and arrange replacement. Details are to be reported to the Naval Board.

(DNAS 1275/58/10.)

UNCLASSIFIED.

560.—Naval Stores (General) (Class E, Group 5)—Reducer and By-Pass Valve Assembly—Introduction.

(*A.F.O.* 1080/1960.)

The following item has been introduced into the Rate Book and Authorized List of Naval Stores—

Pattern.	*Description.*	*Ships' Accounting Classification.*
E5/7658	Reducer and By-pass Valve Assembly	Permanent

This new assembly, which will be fitted in clearance diving breathing apparatus and shallow water breathing apparatus, pattern E5/5561A and 5562A, will replace the reducer valve, pattern E5/5565 and the by-pass valve, pattern E5/5576.

2. Some delay in deliveries from the United Kingdom is expected and priority in supply will be given to clearance diving teams and units when the reducer valve, pattern E5/5565, fitted in clearance diving breathing apparatus, pattern E5/5561A, becomes defective and requires replacement.

3. Pattern E5/7658 reducer is similar in operation to the pattern E5/5565 reducer, except that the bellows assembly has been replaced by a diaphragm and no leak is permissible past the inlet valve seat with no load on the setting spring.

The same testing apparatus is used with this reducer.

4. The new reducer is designed for two types of jet—

(*a*) For oxygen flows up to 1.5 l.p.m.

(*b*) For mixture gas flows up to 12 l.p.m.

Both assemblies are supplied with each reducer and they are stamped " OXGN " and " MIX " respectively on the sealing nut.

5. *Tests.*—Assemble reducer to test apparatus as shown in figure 18. B.R. 155C(3).

(*a*) *Test for internal leakage*

With fine adjustment valve pattern E5/6236 fully open, open air supply to reducer.

With no load on reducer setting spring, no flow should be registered on flowmeter.

Any flow indicates a leak past the inlet valve seat or by-pass valve.

(*b*) *Flow test* (*oxygen assembly*).—As laid down in B.R. 155C(3) 2307, paragraph 4(*c*) and (*d*).

(*c*) *Jet Test* (*oxygen assembly*).—Set reducer to pass 0.5 l.p.m., close fine adjustment valve.

Note back pressure on gauge. This shall be between 40 and 60 lb./sq. in.

(*d*) *Flow test* (*mixture assembly*).—Carry out test 2 with flows of 4, 8 and 12 l.p.m.

The flow range for the 4 l.p.m. test shall be 3.75 l.p.m. min. to 4 l.p.m. nominal.

The flow range for the 8 l.p.m. test shall be 7.65 l.p.m. min. to 8 l.p.m. nominal.

The flow range for the 12 l.p.m. test shall be 11.5 l.p.m. min. to 12 l.p.m. nominal.

(*e*) *Jet test* (*mixture assembly*).—Carry out test 3 with flows of 4, 8 and 12 l.p.m.

Back pressure on gauge for 4 l.p.m. to be 100–130 p.s.i.

Back pressure on gauge for 8 l.p.m. to be 230–280 p.s.i.

Back pressure on gauge for 12 l.p.m. to be 350–400 p.s.i.

(DNAS 512/74/48.)

UNCLASSIFIED.

561.—Naval Stores (General) (Class E, Group 7)—Allocation of New Pattern Numbers.

(*A.F.O.* 1299/1960.)

To facilitate accounting by eliminating duplicated pattern numbers, and to regularize the situation where items are now accounted for under other than Admiralty Pattern numbers or Joint Service numbers, new Admiralty Pattern numbers have been assigned to the items under Class E, Group 7 of the Rate Book and Authorized List of Naval Stores, B.R. 810, as detailed in the Appendix to this Order.

2. Records should be amended accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*g*) of A.B.R. 4 (Naval Storekeeping Manual).

3. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Description.	*New Pattern Number.*	*Old Pattern Number.*
Apexior No. 1 for internal use..	4955	N.12330
Apexior No. 3 for external use	4956	N.12329
Cellon degreasing liquid TS.3333, 1-qt. tin	7059	7059
Cellon degreasing liquid TS.3333, 1-pt. tin	4957	7059
Cement, rubber resin, 1-gal. tin	4958	388
Cement, rubber resin, 1-qt. tin..	388	388
Cement, rubber resin, ½-pt. tin..	4959	388
Copper naphthenate ..	4977	N.12342
Heldite for sealing in ¼-lb. tin ..	4147	4147
Heldite for sealing in ½-lb. tin ..	4978	4147
Heldite for sealing in 1-lb. tin ..	4979	4147
Lacquer, insecticidal No. 101 in 1-pt. tin	4944	N.12781
Lacquer, insecticidal No. 101 in 1-qt. tin	10611	N.12781
Lacquer, insecticidal No. 101 in 1-gal. tin	10612	N.12781
Matches, safety	10571	N.12428
Paint, Tantectol " W " grade, first coat..	10573	N.12385
Paint, Tantectol " W " grade, second coat	10574	N.12386
Polish, wax, Belco in 1-lb. tin ..	10575	N.12310
Spirit White..	10576	N.12311
Oil, mineral, kerosene, standard grade B	10595	N.12313
Oil, mineral, kerosene, premier grade A	10596	N.12313
Paint, heat-resisting aluminium in 1-qt. tin	7070	7070
Paint, heat-resisting aluminium in 1-gal. tin	10598	7070
Gas, methyl chloride	10577	N.12608
Cylinder, methyl chloride, 16 lb.	9066	N.12620
Cylinder, methyl chloride, 22 lb.	9067	N.12621
Valve protection cap (Admiralty standard, for oxygen cylinders)	9068	N.12628
Acid, hydrochloric in trade carboys containing 120 lb., 1.16 S.G.	1	1
Acid, hydrochloric in stone jars containing 27 lb., 1.16 S.G.	10578	1

APPENDIX—*continued.*

Description.	*New Pattern Number.*	*Old Pattern Number.*
Acid, hydrochloric in trade carboys, containing 120 lb., 1.154 S.G.	5	5
Acid, hydrochloric in stone jars, containing 27 lb., 1.154 S.G.	10579	5
Acid, sulphuric in trade carboys, containing 188 lb., 1.84 S.G.	2	2
Acid, sulphuric in stone jars containing 42 lb., 1.84 S.G. ..	10580	2
Carboy, trade, 10-gallon, complete	10593	N.12701
Basket, iron, for pattern carboy	10594	N.12702

(DNAS 512/80/58.)

UNCLASSIFIED.

562.—Naval Stores (General) (Class E, Group 12)—Safety Walk Tread Strips—Allowances of Spares.

Navy Order 287 of 1960 is to be amended as follows—

Heading—

Delete—(Class B, Group 10B).

Insert—(Class E, Group 12).

(DNAS 514/62/47.)

(*Navy Order* 287 *of* 1960.)

UNCLASSIFIED.

563.—Naval Stores (General) (Class F, Group 19)—Testing and Measuring Equipment—Transfer from Class F, Group 1C, Part 3.

(*A.F.O.* 887/1960.)

All electrical and electronic testing and measuring equipment hitherto dealt with under Class F, Group 1C (Part 3) will be dealt with under Class F, Group 19 (N.A.T.O. Class Group 6625 and 6635), as from the date of this Order.

2. The items detailed in Appendix " A " are to be transferred, under their existing pattern numbers; the items in Appendix " B " have been re-referenced and, on transfer, should be dealt with under the new pattern numbers shown.

3. Naval Store accounts in ships and commissioned establishments should be adjusted in accordance with A.B.R.4, article 1812 (*a*) and (*b*) and paragraph 11 of Navy Order 607 of 1959 as necessary.

The stores listed are Permanent unless otherwise stated.

APPENDIX " A ".

Admiralty Pattern No.	*Description.*
N.A.T.O. Group No. 6625	
47A	Avometer testing set complete with case.
48A	Avometer testing set, pattern 47A with shunts, transformer and voltage multiplier, complete with case.
W.144	Voltmeter, 2-in., 0–25 volts, 50 cycles.
W.145	Voltmeter, 2-in., 0–60 volts.
W.404	Ammeter, 2½-in. dial, moving coil, 0–300 MA.
W.405	Ammeter, 2½-in. dial, moving coil, 0–200 MA.
W.406	Ammeter, 2½-in. dial, moving coil, 0–25 MA.
W.407	Ammeter, 2½-in. dial, special for type 406.
W.408	Ammeter, 2½-in. dial, moving coil, 0–10 MA.
W.500	Voltmeter, 2½-in. dial, 0–60 volts.
847A	Voltmeter, 2½-in. dial, 0–250 volts.
1806	Voltmeter, 3–0–3 volts.
2807	Voltmeter, 0–10 volts.
4711	Bridge Megger, safety, 100V.
5045	Ohmmeter, megger circuit testing, ranges 0–1,000 ohms. and 100–200,000 ohms. complete with case.
5047	" Wee Megger ", 250 volts, 0–10 megohms, complete with case.
6496	Bridge megger resistance tester, complete with case.
12519	Voltmeter, moving coil, 180–280 volts, 5-in. scale.
12520	Ammeter, 0–2400 amps., 5-in. scale.
12521	Ammeter, 0–2700 amps., 5-in. scale.
12655	Meter (volume) for panel amplifiers, patterns 12647, 12649, 126551 and 12652.
12657	Load, test, 50–300 watt, for panel amplifiers, patterns 12647 and 12649.
12673	Potentiometer, 0–500K ohms.
12676	Meter (output), for control boxes, patterns 12648, 12650 and 32073.
12901	Voltmeter, moving coil, 180–280 volts, 5-in. scale.
12902	Voltmeter, moving coil, 50–350 volts, 5-in. scale.
12903	Ammeter, moving coil, short shunt 0–75 amps.
12904	Ammeter, moving coil, short shunt 0–1000 amps., 5-in. scale.
12905	Ammeter, short shunt, 150–0–150 amps., 5-in. scale.
12906	Ammeter, short shunt, 600–0–600 amps., 5-in. scale
12907	Voltmeter, 0–100 volts, 5-in. scale, moving coil.
12908	Ammeter, short shunt, 0–1800 amps., moving coil.
12909	Ammeter, short shunt, 2000–0/0–4500 amps., 7-in. double scale.
12910	Ammeter, short shunt, 2000–0/0–2500 amps., 7-in. double scale.
12912	Ammeter, moving coil, 5-in. scale, 0–2000 amps.
12918	Ammeter, moving coil, 5-in. scale, 0–20 amps.
12919	Ammeter, projecting type, 5-in. scale, 0–60 amps.
12924	" Wee Megger " insulation tester, 0–50 meg., 500 volt.
12945	Avometer, testing set, type 8S.
13302	Adjustable potentiometer, resistance 210 ohms.
13303	Adjustable potentiometer, resistance 180 ohms.
13301	Avominor, AC/DC, universal.
13304	Variable resistance, 0–40 ohms.
13334	Ammeter, 6-in. dial, moving coil, 200° scale.
13586	Ammeter, tong test, type " B ".
13606	Ammeter, moving coil, 5-in. scale, 0–60 amps.
13607	Ammeter, moving coil, 5-in. scale, 0–100 amps.
13609	Ammeter, moving coil, 5-in. scale, 0–200 amps.

APPENDIX " A "—*continued.*

Admiralty Pattern No.	*Description.*
N.A.T.O. Group No. 6625—continued.	
13610	Ammeter, moving coil, 5-in. scale, 0–300 amps.
13612	Ammeter, moving coil, 5-in. scale, 0–400 amps.
13613	Ammeter, moving coil, 5-in. scale, 0–400 amps.
13614	Ammeter, moving coil, 5-in. scale, 0–600 amps.
13615	Ammeter, moving coil, 5-in. scale, 0–800 amps.
13616	Ammeter, moving coil, 5-in. scale, 0–1000 amps.
13617	Ammeter, moving coil, 5-in. scale, 0–1200 amps.
13618	Ammeter, moving coil, 5-in. scale, 0–1800 amps.
13619	Ammeter, moving coil, 5-in. scale, 0–2000 amps.
13620	Ammeter, moving coil, 5-in. scale, 0–2400 amps.
13621	Ammeter, moving coil, 5-in. scale, 0–2700 amps.
13626	Ammeter, moving coil, 5-in. scale, 0–1200 amps.
13627	Ammeter, moving coil, 5-in. scale, 0–1800 amps.
13628	Ammeter, moving coil, 5-in. scale, 0–2000 amps.
13629	Ammeter, moving coil, 5-in. scale, 0–2400 amps.
13630	Ammeter, moving coil, 5-in. scale, 0–2700 amps.
13633	Ammeter, moving coil, 5-in. scale, 60–0–60 amps.
13634	Ammeter, moving coil, 5-in. scale, 100–0–100 amps.
13635	Ammeter, moving coil, 5-in. scale, 150–0–150 amps.
13638	Ammeter, moving coil, 5-in. scale, 0–20 amps.
13656	Ammeter, moving coil, 2½-in. dial, 0–5 amps.
13669	Voltmeter, moving coil, 5-in. scale, 0–40 volt.
13679	Voltmeter, 5-in. scale, 100–140 volt.
13718	Frequency meter, 40–60 cycles.
13719	Frequency meter, 300–350 cycles.
13983	Voltmeter, moving coil, 5-in. scale, 180–280 volts.
13984	Ammeter, moving coil, 5-in. scale, 0–2400 amps.
13985	Ammeter, moving coil, 5-in. scale, 0–2700 amps.
13988	Voltmeter, moving coil, 5-in. scale, 0–280 volts.
19744	Bonding tester, complete with leads and case.
19746	Leads, type " A ", for pattern 19744 (consumable).
19747	Leads, type " B ", for pattern 19744 (consumable).
21030	Galvanometer.
21629	Ammeter, 0–6 amps, 220 volts.
21637	Ammeter, A.C., 0–20 amps.
24966	Noise measuring instrument.
24994	Micro ammeter for pattern 24966.
32010	Meter, line, for panel line selector, patterns 12947/12948.
32024	Meter, measuring, for radio interference, complete with case.
32044	Portable noise measuring equipment.
32063	Load test, 16 watt for microgram, pattern 32018.
32064	Load test, 2 and 16 watt.
32094	Frequency meter and control box.
32099	Test set for automatic telephone.
32124	Signal level meter.
32125	Voltmeter, 0–5 V, 2 kΩ/V.
32126	Micro ammeter, moving coil, 1½-in. rd., flushed sealed, 0–500 μA.
32127	Milliameter, thermo-couple, 3½-in. rd., flush, 0–5 mA.
32128	Milliameter, moving coil, 3½-in. rd., flush, 0–500 mA.
32129	Voltmeter, 3½-in. dial, 240° scale.
32130	Voltmeter, M.C., 0–600 V–100 Ω/V.

APPENDIX " A "—*continued.*

Admiralty Pattern No.	*Description.*
N.A.T.O. Group No. 6625—continued.	
32131	Voltmeter, M.C., 0–10 V–100Ω/V.
32132	Resistance for pattern 32131.
32133	Ammeter, thermo-couple, 2½-in. rd., flush 0–3.5A.
32134	Ammeter, moving coil, 2½-in. round.
32136	Voltmeter, moving coil, 2½-in. round.
32145	Ammeter, 400–0–400 amps., 75 M.V. shunt.
32146	Ammeter, 400–0–400 amps., 150 M.V. shunt.
32157	Milliameter, moving coil, 2½-in. round.
32158	Micro ammeter, moving coil, 2½-in. round.
32159	Micro ammeter, moving coil, 2½-in. round.
32160	Micro ammeter, moving coil, 3½-in. round.
32161	Stethoscope (Bin aural).
32170	Oscilloscope, mark 29 TU.
32185	Shunt, 50 MA, for pattern 32158 (consumable).
32186	Shunt, 500 MA, for pattern 32158 (consumable).
32187	Shunt, 2A for pattern 32158 (consumable).
32193	Frequency meter to D.E.E. Drg. D.19488.
32207	Ammeter, clip on type, complete with carrying case.
61731	Frequency meter, 230V, 3½-in. dial.
N.A.T.O. Group No. 6635	
32045	Recorder, CO_2
32046	Repeater for CO_2 recorder, pattern 32045.
32074	Explosimeter, M.S.A., type S.2.
32075	Belt, web, for pattern 32074 (consumable).
32076	Pellets, P.D.B. for pattern 32074 (consumable).
32077	Opener, magnetic lock, for pattern 32074.
32078	Wrench, valve, for pattern 32074 (consumable).
32106	Sampling line, 5 ft., complete with couplings, for pattern 32074 (consumable).
32107	Aspirator bulb, for pattern 32074 (consumable).
32108	Flash back arrestor, for pattern 32074 (consumable).
32109	Filters, cotton, for pattern 32074 (consumable).
32110	Ballast lamp for pattern 32074 (consumable).
32111	Filament unit for pattern 32074 (consumable).
32118	Hydrogen content meter.

APPENDIX " B ".

Existing Admiralty Pattern No.	*Description.*	*Denom.*	*New Admiralty Pattern No.*
N.A.T.O. Group No. 6625			
12945A	Multimeter, complete with case and leads	No.	943–1524
32144	Avometer, model 7X, complete with carrying case	No.	943–1523
62097	Lead, test, black, with clip (consumable)..	No.	943–2773
62098	Lead, test, red, with clip (consumable) ..	No.	943–2772
64159	Prods, test (consumable)	Pair	943–2781

(DNAS 519/69/6.)

(*Navy Order* 607 *of* 1959.)

UNCLASSIFIED.

564.—Stores—Spare Parts (Machinery Spares)—Transfer of Self-Locking Nuts and Precision Nuts to Class B, Group 2D.

(*A.F.O.* 330/1960.)

It has been established that certain self-locking nuts, and Code P steel E.N.7 precision nuts held as spare gear are identical to Naval Store items held under class B, group 2D. The Admiralty Catalogue Numbers of these nuts, and the equivalent Naval Store Joint Service Catalogue Numbers are listed in the appendix to this order. Admiralty Catalogue Numbers have not yet, however, been adopted in the R.A.N.

2. All stocks held at Machinery and Spares Depot, Sydney, of these items are being transferred to class B, group 2D. Any stocks (apart from these held for ready use) held on board H.M.A. ships and commissioned establishments are to be transferred to Naval Store charge, using forms A.S. 549, and future requirements are to be demanded from the (Suptg.) Naval Store Officer concerned under the Joint Service Catalogue Number.

APPENDIX.

Class B, Group 2D
Joint Service Catalogue Nos. — *Admiralty Catalogue Nos.*

Nuts Stiff B.S.F. " P " Steel, Hexagonal Nylon Insert Standard (Simmonds " Nyloc ") as finished.

	Dia. Inch.	
B2D/948–2050	$\frac{1}{4}$	CA.007669
2051	$\frac{5}{16}$	CA.007670
2052	$\frac{3}{8}$	CA.007671
2053	$\frac{7}{16}$	CA.007672
2054	$\frac{1}{2}$	CA.007673
2055	$\frac{5}{8}$	CA.007674
2056	$\frac{3}{4}$	CA.007675
2057	$\frac{7}{8}$	CA.007676
2058	1	CA.007677
2059	$1\frac{1}{8}$	CA.007678
2060	$1\frac{1}{4}$	CA.007679
2061	$1\frac{3}{8}$	CA.007680
2062	$1\frac{1}{2}$	CA.007681

Nuts Stiff B.S.F. " P " Steel, Hexagonal All Metal Standard (Simmonds " Pinnacle ") as finished.

	Dia. Inch.	
B2D/948–2063	$\frac{1}{4}$	CA.008685
2064	$\frac{5}{16}$	CA.008686
2065	$\frac{3}{8}$	CA.008687
2066	$\frac{7}{16}$	CA.008688
2067	$\frac{1}{2}$	CA.008689
2068	$\frac{5}{8}$	CA.008690
2069	$\frac{3}{4}$	CA.008691
2070	$\frac{7}{8}$	CA.008692
2071	1	CA.008693
2072	$1\frac{1}{8}$	CA.008694
2073	$1\frac{1}{4}$	CA.008695
2074	$1\frac{3}{8}$	CA.008696
2075	$1\frac{1}{2}$	CA.008697

APPENDIX—*continued.*

Class B, Group 2D
Joint Service Catalogue No. — *Admiralty Catalogue Nos.*

Nuts stiff, UNF2B, " P " Steel, Hexagonal Nylon Insert Standard (Simmonds " Nyloc ") as finished.

	Dia. Inch.	
B2D/941–3198	$\frac{1}{4}$	CA.007895
3199	$\frac{5}{16}$	CA.007896
3304	$\frac{3}{8}$	CA.007897
2029	$\frac{7}{16}$	CA.007898
3305	$\frac{1}{2}$	CA.007899
3306	$\frac{5}{8}$	CA.007901
3307	$\frac{3}{4}$	CA.007902
3308	$\frac{7}{8}$	CA.007903
3309	1	CA.007904

Nuts Stiff UNF2B " P " Steel Hexagonal All Metal Standard (Simmonds " Pinnacle ") as finished.

	Dia. Inch.	
B2D/941–3194	$\frac{1}{4}$	CA.000534
3196	$\frac{5}{16}$	CA.000535
3292	$\frac{3}{8}$	CA.000536
2028	$\frac{7}{16}$	CA.000537
3293	$\frac{1}{2}$	CA.000538
3294	$\frac{5}{8}$	CA.000540
3295	$\frac{3}{4}$	CA.000541
3296	$\frac{7}{8}$	CA.000542
3297	1	CA.000543

Nuts Code " P " Steel EN7 Precision (Normal Series) UNC Thread up to and including 1 inch diameter above 1 inch diameter threaded 8 UNC Hexagonal (E.-in-C. Specification 7FA2).

	For Bolts Dia. Inch.	
B2D/941–8807	$\frac{1}{4}$	CA.002425
8808	$\frac{5}{16}$	CA.002433
8809	$\frac{3}{8}$	CA.002434
8810	$\frac{7}{16}$	CA.002435
8811	$\frac{1}{2}$	CA.002426
8812	$\frac{5}{8}$	CA.002473
8813	$\frac{3}{4}$	CA.002421
8814	$\frac{7}{8}$	CA.002437
8815	1	CA.002438

(DNAS 505/61/33.)

UNCLASSIFIED.

565.—Fire—Knowledge of Breathing Apparatus.

A serious fire resulting in two deaths occurred recently at an establishment, Rescue work was impeded by a lack of knowledge of the available Salvus breathing apparatus.

2. Although choice of rig and equipment for fire parties is a local decision. Commanding Officers should ensure than at least two men in the fire party are fully conversant with the breathing apparatus in use.

(DTSR 1446/1/13.)

UNCLASSIFIED.

566.—Fires—Precautions—Decorations and Illuminations on Festive Occasions.

It is desired to draw attention to the increased fire risk involved due to decorations and additional temporary illuminations on festive occasions.

2. The Electrical Officer of the establishment should be consulted before any additional temporary lighting or heating is arranged, as there is a danger of circuits being overloaded, which may bring out any weakness in the electrical system. This, in turn, may be the cause of a fire.

3. Fixed and temporary heating arrangements should have guards fitted to prevent contact with combustible materials, particularly fancy dresses, many of which are highly inflammable.

4. When additional temporary electric lighting is used for decorative purposes, every effort should be made to ensure that the wiring does not touch or is not close to combustible materials.

5. The use of cotton wool and candles for decorative purposes should be avoided since in the past these have been the cause of many serious fires.

6. At functions where the public, particularly children, are present, it may be necessary to conform to certain local by-laws. Where large numbers of persons are in attendance, due consideration should be given to the means of escape in the event of fire.

7. On such occasions, no laxity should be allowed in the fire-fighting organization, and the following precautions should be observed—

(*a*) " First aid " fire extinguishing equipment should be readily available.

(*b*) If necessary, additional appliances should be provided.

(*c*) Consideration should be given to the necessity for the attendance of a man in the building concerned to act as a fire-fighter.

(DTSR 1446/1/12.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

567.—Canned Meat Packs for the R.A.N.

Navy Order 203 of 1960 listed the range of items of canned meat packs available for use in the R.A.N. Owing to procurement difficulties, it has not been possible to arrange for supplies of the following—

Boiled Beef and Carrots.
Mince and Spaghetti.
Meat, Bacon and Beans.

2. Paragraph 1 of Navy Order 203 of 1960 is therefore to be amended by the deletion of these three items from the list of Category " B " items.

3. The Fixed Issuing Price List for Provisions is to be amended by deleting the item " Boiled beef and carrots ".

(DV 912/95/9.)

(*Navy Order* 203 *of* 1960.)

UNCLASSIFIED.

568.—Victualling Stores—Safety Equipment—Immersion Suit—Instructions for Removing Boots.

(*A.F.O.* 1238/1960.)

In future, immersion suits with boots attached which are to be returned to Victualling Yards are, where practicable, to have the boots removed first by Safety Equipment Sections—especially where the return is due to one of the items being worn out or in need of repair. In such a case if time permits, the boots should be removed and only the defective item withdrawn and replaced.

2. Exceptionally, immersion suits which have been used on ditching are to be returned in accordance with A.P.(N) 76, article 3214, with boots still attached.

3. The procedure for removing boots from immersion suits is given in the appendix to this order. *It is emphasised that this procedure requires considerable care and attention without which one or both the items involved can easily be rendered unserviceable.*

4. Admiralty has advised that A.P. 1182E (Naval), Volume I, will be amended.

Appendix.

Procedure for Removing Boots from Immersion Suits.

(*The whole operation should take approximately* 35 *minutes per pair of boots.*)

Completely remove the outer taping from over the joint of the trouser leg with the boot (*N.B.* Removal of this taping may leave a film of rubber—this is acceptable).

2. Lift the bottom of the trouser leg from the outer surface of the boot *a little at a time*, taking care not to tear the trousers or damage the boot. Should the rubber on the boot start to peel away from the boot fabric, work around to the opposite side of the tear thus peeling the trouser fabric away from the boot in the opposite direction.

3. When the outer trouser fabric has been removed, fold it back and commence to peel the boot from the trouser inner fabric. Care must be taken—

(*a*) not to split the joint of the boot fabric at the back of the boot when removing the trouser lining; and

(*b*) not to remove the taping covering the seams on the immersion suit trousers.

4. After the boot has been removed completely, examine the trouse fabric for creases held by rubber solution; these should be removed by pulling out the crease and brushing away the rubber solution with a stiff nail-brush. Any loose, thick or uneven deposits of rubber solution should similarly be removed.

5. Using the procedure outlined above, it is normally possible to remove boots without damaging either the trouser fabric or the rubber surface of the boot. Should, however, there be inadvertent damage to the boot, provided this damage is confined to an area not greater than 1-in. from the top of the boot (thus ensuring that the damaged surface is clear of the final taping), it is permitted to stick down the parted section using KB.62 solution.

6. Tape on the trouser seams which has been inadvertently peeled back should be stuck back in position with KB.62 solution.

7. To prepare the boot for re-attachment to a pair of trousers, clean off any uneven deposits of solution from the outer and inner sides of the boot with a stiff nail-brush.

8. If the joint at the back of the boot lining has been disturbed, it should be smeared with KB.62 solution and stuck back in position.

(DV 917/61/29.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

569.—Books—Textbooks and Instruments for Educational Purposes—Establishment.

Navy Order 327 of 1960 is to be amended as follows—

Paragraph 2, line 5—

Delete " a letter " and *insert* in lieu " Form A.S. 130 ".

(DNAS 451/51/9.)

(*Navy Order* 327 *of* 1960.)

UNCLASSIFIED.

570.—Record of Working of Machinery and Systems, and Machinery Logs—Introduction of.

The use of Rough Engine-room Registers A.S. 353E (A), for recording information *re* the operation of the whole plant whenever boilers are alight; A.S. 353E (B) Temperatures and Pressures of Main Engines and A.S. 117B Refrigeration Machinery Log, is to be discontinued. Log A.S. 467 (C) Movements of Main Engines is to be retained.

2. The discontinued logs are being replaced by two logs of loose-leaf forms, (*a*) Record of Working of Machinery and Systems Log; and (*b*) Machinery Log.

3. *Machinery Log* A.S. 467Z consists of—

(*a*) Aluminium holder, into which is inserted the daily machinery log sheet and perspex guard. This is to be hung in the vicinity of the machinery to which it is applicable.

(*b*) Perspex guard, to protect and keep the log sheet clean, and carry the heading strip.

(*c*) Heading strip, a printed strip which prior to being inserted into the slot in the perspex guard must be completed by typing the titles in the columns applicable to the machinery or specific machine e.g. evaporators, turbo generators, &c., for which the log is being used.

(*d*) Machinery Log sheets A.S. 467Y—for the recording of, temperatures pressures and other required information according to the heading strip for the particular machinery or machine to which the log is applicable. The sheet covers a 24 hour period.

(*e*) Covers A.S. 467Z—The machinery Log sheets are dimensionally designed to fit into this cover when completed and returned to the Engineer's Office. A heading strip is to be glued on the inside of the back cover exactly the same as that in the perspex guard. By cutting off the top margin of the Machinery Log sheet prior to inserting in the cover readings on the inserted sheets can be read off against their appropriate headings.

(*f*) Title Strip—" Machinery Log Sheets " is to be glued on the front cover (A.S. 467Z) of each set of covers and the title of the machinery or specific machine hand-printed on the front cover.

4. *Record of Working of Machinery and Systems Log* A.S. 467W consists of—

(*a*) Aluminium holder and perspex guard—the same items as for the Machinery Log.

(*b*) Heading strip—a printed strip of instructions for use of Record of Working of Machinery and Systems Log sheets. To be inserted in the slot provided in the perspex guard.

(*c*) Record of Working of Machinery and Systems Log Sheets A.S. 467X are used with the aluminium holder and perspex guard in the same manner as the Machinery Log Sheets. The sheets are to record Action Taken Condition Reported and Time. Special instructions to Watch-keepers are also recorded.

(*d*) Covers A.S. 467W—Record of Working of Machinery and Systems Log sheets are to be inserted in covers on being returned to the Engineer's Office.

(*e*) Title Strip—" Record of Working Machinery and Systems " is to be glued on the front cover (A.S. 467W) of each set of covers and the title of the machinery to which the log sheets refer hand-printed on the front cover.

ALLOWANCES.

Ship.	*Machinery Log.*				*Record of W. of M. & S. Log.*
	Main Steaming.	*Generators.*	*Evaporators.*	*Refrigeration.*	
Carrier	2	5	4	4	2
Darings	2	5	2	2	2
Battles	1	3	2	—	1
Q's	1	2	2	—	1
Sloops	1	—	1	—	1
River Frigates	1	—	1	—	1
O.M.S.	1	—	1	—	1
Paluma	1	—	—	—	1
Kimbla	1	—	1	—	1
Woomera	1	—	—	—	1
Emu	1	—	—	—	1

Note (*a*) Six months' supply of Log Sheets is to be issued with each Log.

(*b*) Supply to ships will be effected by S.N.S.O., Sydney on receipt of Demand to the above scale of allowances.

(DME 1282/51/1.)

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

571.—Radio Facilities for R.A.N. Vehicles in Shore Establishments.

It has been decided that certain vehicles in Shore Establishments may be fitted with radio communication facilities where such fitting will be advantageous in carrying out policing and security work.

2. Except in Flinders Naval Depot and N.A.S. Nowra. where service equipment will be used, the use of suitable commercial equipment will normally be authorized. The use of commercial equipment presents the advantages of equipment which has been specially designed for vehicles and also installation and maintenance by the firm.

3. Commercial equipment has already been approved for use in vehicles attached to FOICEA, NOIC VIC and NOIC W.A. Authorities who have requirements are to forward them for consideration.

(DSD 16/7/6.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
1st August, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

5120/60.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

572.—Ensigns and Flags Worn by Naval Establishments.

The wearing of the White Ensign and Australian National Flag by naval establishments is to be in accordance with the appendix to this order. These flags are not to be displayed from other positions without the prior approval of the Naval Board. Similarly, any changes in the table are to be reported.

2. Establishments which are not normally entitled to wear the White Ensign, e.g., civil establishments, are to fly the Australian National Flag at the masthead daily if possible (as shown). These establishments should conform whenever flags are flown (or half-masted) on Commonwealth buildings.

3. On occasions when H.M.A. ships and commissioned establishments are dressed, civil establishments are to wear a White Ensign in addition to the Australian National Flag, in accordance with the appendix. The White Ensign is to be hoisted at a gaff or yard, or a separate mast.

4. While no special ceremony is required at civil establishments, officers-in-charge should ensure that the Australian National Flag and White Ensign are treated with respect. They should be hoisted at the time prescribed for hoisting colours in H.M.A. ships and hauled down at sunset, or at such fixed hours as may be appropriate to local conditions.

5. Navy Orders 74, 282 and 616 of 1959 are hereby cancelled.

APPENDIX.

Ship, establishment or building.	Special Flags.	Daily. (See Note 1). White Ensign.	Daily. (See Note 1). A.N.F.	Additional Ensigns worn on Dress Ship and/or Special Occasions (See Note 2). White Ensign.	Additional Ensigns worn on Dress Ship and/or Special Occasions (See Note 2). A.N.F.
A.C.T.					
Navy Office, Canberra (*See* Note 2)	Naval Board	Yes	—	—	—
Admiralty House (official residence of C.N.S.) ..	C.N.S.	—	—	—	Yes
H.M.A.S. HARMAN*					
No. 1 mast		Yes	—	Yes	—
No. 2 mast		—	Yes	—	—
~~BELCONNEN W/T STATION~~		Yes	—	—	Yes
H.M.A.S. CRESWELL					
Foremast*		—	Yes	—	—
Mainmast*		Yes	—	Yes	—
New South Wales.					
"Tresco" (official residence of F.O.I.C.E.A.) ..	F.O.I C.E.A.	—	—	—	—
Naval Headquarters, Potts Point	FOICEA	Yes	—	—	—
"Charlemont"		Yes	—	—	—
Royal Naval House, Sydney		Yes	—	—	—
Garden Island—					
Signal Station	~~FOICEA~~	Yes	—	—	—
Administration Block ..	†	—	Yes	—	—
R.A.N. Armament Depots—					
Newington	†	—	Yes	Yes	—
Spectacle Island	†	—	Yes	Yes	—
R.A.N. Torpedo Establishments—					
North Sydney	†	—	Yes	Yes	—
Pittwater	†	—	Yes	Yes	—
Royal Edward Victualling Yard	†	—	Yes	Yes	—
H.M.A.S. WATSON—					
N.D. School*		Yes	Yes	—	—
Administration Block* ..		Yes	—	Yes	—
T.A.S. School*		Yes	—	Yes	—
H.M.A.S. NIRIMBA—					
Main Gate Mast* ..		Yes	—	Yes	—
Foremast } Parade Ground		—	Yes	—	—
Mainmast } Parade Ground		—	—	Yes	—
H.M.A.S. PENGUIN—					
Main Entrance Mainmast*		Yes	—	Yes	—
Accommodation Block ..		—	Yes	—	—

See 934 of 1960

APPENDIX—*continued.*

Ship, establishment or building.	Special Flags.	Daily. (See Note 1). White Ensign.	Daily. (See Note 1). A.N.F.	Additional Ensigns worn on Dress Ship and/or Special Occasions (See Note 2). White Ensign.	Additional Ensigns worn on Dress Ship and/or Special Occasions (See Note 2). A.N.F.
New South Wales—*continued.*					
H.M.A.S. RUSHCUTTER ..		Yes	—	—	Yes
H.M.A.S. ALBATROSS—					
No. 1 mast*		Yes	—	Yes	—
No. 2 mast		—	Yes	—	Yes
A.J.A.S.S. (*See* Note 2) ..	R.A.A.F. Ensign	Yes	—	—	—
White Ensign Club, Nowra		Yes	—	—	—
RAN STORE DEPOT RANDWICK			YES		
Queensland.					
H.M.A.S. MORETON ..		Yes	—	—	Yes
Naval Staff Office. (*See* Note 2)		Yes	—	—	Yes
Victoria.					
H.M.A.S. LONSDALE—					
Drill Hall		Yes	—	—	—
Parade Ground* ..		—	Yes	—	—
R.A.N. Mine Depot, Swan Island	†	—	Yes	—	—
Naval Dockyard, Williamstown—					
Main Entrance mast ..		—	Yes	—	—
Graving Dock mast ..		—	Yes	—	—
Naval Dockyard Police Headquarters, Williamstown ..	†	—	Yes	—	—
R.A.N. Armament Depots—					
Maribyrnong	†	—	Yes	—	—
Somerton	†	—	Yes	—	—
H.M.A. Victualling Yard, Port Melbourne	†	—	Yes	—	—
Flinders Naval Depot—					
No. 1 mast, Parade Ground		—	—	Yes	—
No. 2 mast, Parade Ground*	C.S.T.F.N.D.	Yes	—	—	—
No. 3 mast, Parade Ground*		—	Yes	—	—
Drill Hall South ..		—	—	Yes	—
Drill Hall North ..		—	—	—	Yes
Signal School East ..		—	—	Yes	—
Signal School West ..		—	—	—	Yes
West Head Gunnery Range ..		Yes	—	—	—
Navy Office, Melbourne ..		Yes	—	—	—
NAVAL STORE DEPOT PT MELB			YES		

APPENDIX—*continued.*

Ship, establishment or building.	*Daily.*			*Additional Ensigns worn on Dress Ship and/or Special Occasions (See Note 2).*	
	Special Flags.	*(See Note 1).*			
		White Ensign.	*A.N.F.*	*White Ensign.*	*A.N.F.*
Tasmania.					
H.M.A.S. HUON—					
Foremast*		—	—	—	Yes
Mainmast*		Yes	—	—	—
Naval Staff Office ..		Yes	—	—	—
South Australia.					
H.M.A.S. TORRENS—					
Parade Ground mast ..		—	—	—	Yes
Administration Block mast		Yes	—	Yes	—
Western Australia.					
H.M.A.S. LEEUWIN—					
Foremast		—	Yes	—	—
Mainmast*	N.O.I.C. W.A.	Yes	—	—	—
Drill Hall North ..		—	—	Yes	—
Drill Hall South ..		—	—	—	Yes
Combined Recruiting Centre, Perth		Yes	—	—	—
Naval R.T.O.'s Office, Perth		Yes	—	—	—
Naval Staff Office ..		Yes	—	—	—
R.A.N. Armament Depot, Byford	†	—	Yes	—	—
Naval Store Depot, Shuffrey-street, Fremantle ..	†	—	Yes	—	—
Northern Territory.					
Naval Headquarters—					
North East mast ..		Yes	—	Yes	—
South West mast ..		—	Yes	—	—
Admiralty House, Darwin ..		Yes	—	—	Yes
Darwin Naval Radio Station—					
Coonawarra West ..		Yes	—	—	—
Coonawarra East ..		Yes	—	—	—
Manus Island.					
H.M.A.S. TARANGAU—					
Signal Tower		Yes	—	—	—
Office of N.O.I.C., New Guinea		—	—	—	Yes

Notes—

1. Establishments should wear the most suitable size colours daily (either 4, 6 or 8 breadths), but size 4 may be flown during bad weather. Generally the Australian National Flag should be one size smaller than the White Ensign.
2. If practicable, larger size colours, than those in normal use, should be flown on Sundays and on Dress Ship and/or Special Occasions (i.e., 6, 8 or 10 breadths).

* This denotes masts in naval establishments which should be dressed overall on dress ship occasions.

† This denotes civil establishments where a United Nations Flag is flown on United Nations Day (24th October).

(DSD 37/2/1.)

(*Navy Orders* 74, 282 *and* 616 *of* 1959.)

RESTRICTED.

573.—Fire—Outbreak of Fire—Reports—Shore Establishments—Form A.S. 228.

The following modified procedure for rendering returns of the outbreak of fires in H.M.A. Shore Establishments is to be adopted.

2. Reports on form A.S. 228 are to be prepared in quadruplicate in respect of all outbreaks of fire, and all attendances at " outside " fires and malicious false alarms are to be the subject of report.

3. Reports on form A.S. 228 will be disposed of as follows—
   (*a*) 1 No. copy to be retained.
   (*b*) 3 No. copies to be forwarded to the appropriate administrative authority for disposal as follows—
      (i) 1 No. copy to be retained.
      (ii) Forward one copy to the Naval Board.
      (iii) Forward one copy to the Commonwealth Fire Board, Box 2807AA, G.P.O., Melbourne.

4. Reports on form A.S. 228 rendered to the Commonwealth Fire Board will be completed in respect of page 1 and 2 only.

5. Heads of departments concerned should complete the form in respect of losses, damage and cost of repairs, after the appropriate Commonwealth Director of Works, or his representative (except at Manus Island) has been consulted regarding the damage and cost of repairs to buildings and utility services (i.e. water, sewerage, &c.).

6. In the case of fire originating in electrical or radio equipment appropriate cross reference should be made to the form A.S. 2022 (Report of Defective Material or Design) rendered.

7. The Senior Civilian Electrical Engineer should be consulted in all cases of fires of electrical origin, and that officer's certified remarks as to the cause and/or condition of apparatus and fittings should be included in Section 14 of form A.S. 228.

8. In order not to prejudice a further investigation should it be desired by higher authority, it is important that forms A.S. 228 be rendered without delay—if possible within three working days of the outbreak of fire. To avoid delay, an approximate estimate of the cost of making good the loss or damage involved should be included on form A.S. 228 if a detailed estimate is not readily available and the latter forwarded later.

9. Reports on fires involving aircraft should continue to be forwarded in accordance with I.F.A.A., Article 615, Part III.

(DNW 1446/1/2.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

574.—Instructional Films and Filmstrips—Serial No. A.1064 "Fleet Work Study", Part 2—"The Team in Action"—Distribution.

(*A.F.O.* 862/1960.)

Copies of Part 2 of the Admiralty instructional film Serial No. A.1064, "Fleet Work Study" entitled "The Team in Action" are being obtained and the initial distribution will be made, without demand, by S.N.S.O., Sydney, on the following scale—

Service.	*No. of copies.*
Head of Fleet Work Study, Navy Office, Canberra ..	1
R.A.N. Film Library, Sydney	1

2. This film shows how a Fleet Work Study Team tackled a particular problem—the intermediate docking of submarines.

It emphasises that Work Study is a joint effort between the team, the command and the ship or establishment to which the team is attached, and requires the full support of all concerned.

3. The film has a running time of 23 minutes and is issued on one spool.

(DNAS 519/56/91.)

UNCLASSIFIED.

575.—Instructional Films and Filmstrips—Serial No. S.A. 1086, "Ceremonial", Parts 1 and 2—Distribution.

(*A.F.O.* 369/1960.)

Copies of the Admiralty filmstrip Serial No. S.A. 1086, "Ceremonial", parts 1 and 2 are being obtained and initial distribution will be made, without demand, by S.N.S.O., Sydney, on the following scale—

Service.	*No. of copies.*
Carriers	1 each
Daring Class	1 each
Battle Class	1 each
Type 15 Frigates	1 each
Type 12 Frigates	1 each
H.M.A.S. BARCOO	1
H.M.A.S. WARREGO	1
H.M.A.S. SWAN	1
H.M.A.S. GASCOYNE	1
H.M.A.S. DIAMANTINA	1
Flinders Naval Depot	2
H.M.A.S. ALBATROSS	1
H.M.A.S. CRESWELL	1
R.A.N.A.T.E. NIRIMBA	1
H.M.A.S. LEEUWIN	1
H.M.A.S. LEEUWIN (for Reserve Training)	1
H.M.A.S. HUON (for Reserve Training)	1
H.M.A.S. LONSDALE (for Reserve Training)	1
H.M.A.S. MORETON (for Reserve Training)	1
H.M.A.S. RUSHCUTTER (for Reserve Training) ..	1
H.M.A.S. TORRENS (for Reserve Training)	1

2. Details of the filmstrip are as follows—

Part 1—Recognition (36 frames)—

This part shows the various standards and personal flags, and where they are flown, dressing overall, flags and discs on boats, flags on cars and aircraft and other matters of the recognition aspect of ceremonial.

Part 2—Situation (51 frames)—

This part shows the ceremonial to be observed when ships meet; when V.I.Ps., Senior Officers and others visit H.M.A. ships.

3. Both parts of the filmstrip are in colour.

4. A printed training guide will be issued with each copy of this strip.

(DNAS 519/56/69.)

UNCLASSIFIED. Cancelled CNO 540/61.

576.—Malaya Allowance and Education Allowance—Income Tax.

The Commissioner of Taxation has advised that although Malaya Allowance and Education Allowance are not subjected to tax instalment deductions the totals of these allowances are, for the following reasons, to be recorded in the relevant group certificates for the appropriate year of income.

(*a*) *Education Allowance*—Where the Commonwealth subsidizes a member of the Navy in respect of education expenses which may be claimable by him as deductions from assessable income, the view is taken by the Commissioner of Taxation that only the excess, if any, of his actual expenses over the amount of Education Allowance he received during the relevant year of income qualifies for deduction as being " necessarily incurred " under Section 82J of the *Income Tax and Social Services Contribution Assessment Act* 1936–1959 which reads as follows—

" 82J.—(1.) Amounts paid by the taxpayer in the year of income in respect of expenses necessarily incurred by him for or in connexion with the full time education, at a school, college or university or from a tutor, of a person who is less than twenty-one years of age and—

(*a*) is a child of the taxpayer; or

(*b*) is a person in respect of whom the taxpayer is entitled to a deduction under Section eighty-two B of this Act, shall be allowable deductions.

(2) The deductions allowable under this section, in respect of any one year of income, in relation to the education of any one person shall not exceed one hundred pounds.".

Notice of payment of the Education Allowance is also required by the Taxation Department for the proper consideration of claims for allowance of the standard deduction of £91 in respect of a student child over 16 years of age.

(*b*) *Malaya Allowance*—Exemption of Malaya living allowance is effective only by reason of a Special Treasury remission. The law requires, however, that assessments be prepared upon the basis of the Malaya Allowance being, legally, fully subject to tax. This requires the inclusion in group certificates of details of the allowance to enable also the amount due for remission to be ascertained and other necessary accounting requirements to be fulfilled in accordance with usual remission procedure.

2. Navy Order 429 of 1960 is hereby cancelled.

(DNA 271/1/9.)

(*Navy Order* 429 *of* 1960.)

UNCLASSIFIED.

577.—Overseas Outfit Allowance—Production of Receipts.

A number of claims for Overseas Outfit Allowance have recently been received and receipts in support of the expenditure incurred have not been furnished in accordance with the provisions of I.P.I. 173/5. In such cases, it is necessary to obtain a Statutory Declaration from the member and submit the case to the Treasury under section 46 of the Audit Act, for the expenditure incurred to be accepted without the production of supporting receipts.

2. Members who incur expenditure in this regard, should therefore ensure that they procure and retain the necessary receipts to enable payment to be made without the necessity to approach Treasury in the matter.

(DNA 930/51/41.)

UNCLASSIFIED.

578.—Ratings—Engine Room Branch—Award of Auxiliary Machinery Watchkeeping Certificate.

The attention of Captains is drawn to the importance of the Auxiliary Machinery Watchkeeping Certificate to Acting Engine Room Artificers 4th Class and Engineering Mechanics 1st Class as an advancement qualification, and the following points are to be brought to the notice of officers concerned—

(*a*) A rating should be examined immediately he is sufficiently experienced on a particular machine, and the results of the examination recorded (failures being entered in pencil) on page 4 of form A.S. 1246a—History Sheet for Engineering Mechanic Ratings—or form A.S. 1233g—Engine Room Artificer's History Sheet—as appropriate.

(*b*) Every endeavour is to be made to qualify suitable Engineering Mechanics before they are drafted ashore.

(DMT 303/21/35.)

UNCLASSIFIED.

579.—Ratings—Standard of Reporting on Ratings.

(*A.F.O.* 1159/1960.)

The Naval Board wish to remind all officers that from the earliest stage in a rating's service, it is most important to exercise the utmost care when making a report or assessment in respect of him; all such reports or assessments should be given the same degree of care and attention that is devoted to special reports on potential Upper Yardmen and S.D. List candidates. Good reporting, whatever the nature of the report, is essential to good administration and morale; in particular it helps to ensure that only the right men are advanced to higher rating.

2. Every Captain is responsible for ensuring that a satisfactory standard of reporting is maintained in his ship; he should be assisted in this task by his Heads of Department, who should personally check all reports and advise and instruct Divisional Officers as required. Inspecting Officers should always satisfy themselves that a proper standard of reporting is being maintained in the ships which they inspect by examining a representative selection of ratings' documents in each department.

3. Some of the common faults in reporting which occur are—

(*a*) The reporting officer is unduly influenced by previous reports, whereas the nature of the report which is being made calls for the assessment of the man in relation to the period immediately preceding it. This particularly applies to ratings who have recently been advanced, who should be assessed in their new rate. For example, the reporting officer may be reluctant to recommend an efficiency assessment of " Satisfactory " for a man who has had a succession of " Superior " assessments, although the rating's current performance no longer merits the higher assessment.

(*b*) The automatic award of the maximum permissible character assessment. There should be no hestitation about awarding a discretionary assessment whenever it is warranted.

(*c*) Failure to assess a man against the proper background e.g., a background of other men who hold the same rating.

(*d*) A tendency to over-assess men, which depreciates the value of the higher assessments, is unfair to those men who really merit such assessments and may deprive the latter of the full benefit of such assessments.

(*e*) Failure to report on a rating, either favourably or unfavourably, at the correct time, e.g., on form A.S. 264 when a man who is qualified for inclusion on form A.S. 507 is not recommended for advancement. This type of error can give rise to difficulties should information be wanted at a later date.

(*f*) Failure to bring out the particularly good or bad points about a rating, especially when these are not in keeping with the overall tenor of the report.

4. It has been noted that insufficient discretion has been used in the award of recommendations for higher rate, particularly for the Chief Petty Officer rate. This leads to almost automatic advancement to the Chief Petty Officer rate instead of selective advancement of only the better Petty Officers.

5. The annual assessments at the end of 1959 indicate a reluctance to award efficiency assessments of Moderate and Inferior. The assessments made consisted of—

Superior	17.5%
Satisfactory	79.5%
Moderate	2.9%
Inferior	0.1%

6. Captains are to bring the contents of this Order to the notice of all their officers, and are to ensure that any tendency in individual officers to maintain less than a proper standard of reporting is immediately checked.

(DMT 303/21/36.)

UNCLASSIFIED.

580.—Spectacles—Lenses of Hardened Glass.

When spectacles are prescribed for apprentices, artificers and artisans arrangements are to be made for lenses of hardened glass to be supplied at public expense.

2. An amendment to paragraph 51 of the "Handbook of Naval Eyesight and Colour Perception Standards" will be issued.

3. Navy Order 247 of 1960 is relevant.

(MDG 327/54/4.)

(*Navy Order* 247 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

581.—Check Calibration of Electrical Test Equipment.

(*A.F.O.* 316/1960.)

Facilities are being set up in H.M.A. Dockyards in Sydney and Melbourne for the check calibration of electrical test equipment.

2. The facilities available are shown in Appendix A. This list, which will be constantly under revision, is intended to serve as a guide. It does not infer that any piece of test equipment, after check calibration will have an accuracy better than the original specification.

3. Appendix B lists the present recommended periodicity of check calibration of a range of test equipment and will be amended as the requisite information becomes available.

4. The capacity of the dockyards to undertake this work is at present limited and requests for calibration will not be entertained outside refit periods. Defect List or Request for Survey, form S.331 (marked "not for ledger action") procedure is to be used, depending on whether the equipment is classified as a "portable fitting" or as a "Sea Store".

APPENDIX A.

Quantity.	*Range.*	*Error.*	*Remarks.*
Voltage—		Per cent.	
DC	10mV–1.75 volts	0.03	Melbourne
		0.02	Sydney
DC	1.75V–750V	0.06	Melbourne
		0.02	Sydney
AC (50 c/s)	150mV–750V ..	0.1 ..	Melbourne
AC (20–150 c/s) ..	150mV–15V ..	0.1 ..	
AC (500Kc/s–300Mc/s)	10^{-5}V–10^{-1}V ..	5	Sydney
AC (500Kc/s–2000Mc/s)	10^{-1}V–2V	5	Sydney
Current—			
DC	10^{-5}A–10A	0.1 ..	Sydney
DC	10^{-1}A–600A	0.1 ..	
AC (50 c/s)	10^{-1}A–500A	0.1 ..	
AC (30 c/s–10Kc/s) ..	10^{-3}A–10A	0.3	Sydney
Resistance—			
DC	0.005 ohms–10^3 ohms	0.06 ..	Melbourne
	10^3 ohms–10^6 ohms	0.1 ..	
	10^6 ohms–10^8 ohms	5 ..	
AC (50 c/s–3000 c/s)	1 ohm–10^7 ohms ..	0.03 ..	Sydney
	1 ohm–10^7 ohms ..	0.3 ..	
AC (1M c/s–100M c/s)	10 ohms–10^4 ohms ..	3 ..	
Capacitance—			
(500 c/s)	10 pF–1 uF	2	Melbourne
(500 c/s–20K c/s) ..	10 pF–1000 pF ..	± 1pF	Sydney
(800 c/s–2K c/s) ..	1000 pF– 1 uF ..	0.1 ..	
(1M c/s–100M c/s) ..	1 pF–80 pF	3 ..	
Inductance—			
(500 c/s)	1 uH–100H	0.1	Melbourne
(50 c/s–3000 c/s) ..	1 uH–10H	0.1 ..	Sydney
(50 c/s–3000 c/s) ..	10H–100H	1 ..	
Frequency	10 c/s–220M c/s ..	One Part in 10^6	Melbourne
	10^{-7} c/s–10^3 c/s ..	.03 ..	Sydney
	10^3 c/s–200M c/s ..	.0002 or 0.1 c/s	
Power	1W–25W (DC–250M c/s in 75 ohms)	5	Sydney

APPENDIX A—*continued.*

Quantity.	*Range.*	*Error.*	*Remarks.*
Attenuation—			
(0.5M c/s–300M c/s) ..	To 100dB in .75 ohms	5	Sydney
Modulation—			
(Up to 500M c/s) ..	A.M. up to 100 per cent.	±2 ..	Sydney
	F.M. up to 75 Kc/s Deviation	1 ..	
Distortion—			
(20 c/s–20 Kc/s) ..	0.1–100 per cent.	+2 .. / −0.5 ..	Sydney

APPENDIX B.

PERIODICAL CHECK CALIBRATION OF ELECTRICAL TESTING INSTRUMENTS.

J.S. Cat. No.	*Pattern No.*	*Description.*	*Periodicity.*
949–0510 ..	ZDO2417	CT44 Wattmeter absorption No. 1 AF ..	3 years
—	54708	Wattmeter AF (Obsolescent)	3 years
943–2784 ..	63729	CT214 Test set radio	18 months
949–0512 ..	ZDO2970	Decibel meter, portable No. 3, mark 2 ..	18 months
—	W3332	Voltmeter, portable, electrostatic 0–6kV ..	3 years
—	W5079	Voltmeter, portable, electrostatic 0–15kV ..	3 years
—	—	XT319 Voltmeter, portable, electrostatic 0–30kV	18 months
943–2418 ..	67921	CT54 Voltmeter, electronic	18 months
943–2782 ..	61418	Probe unit for CT54	18 months
943–2783 ..	61417	CTA25 DC Multiplier for CT54 ..	3 years
943–2771 ..	67922	CTA2 Rectifier unit for CT54	6 years
—	64653	Radiac adaptor for CT54	18 months
943–3266 ..	62274	CT216 Reflection coefficient meter (2–30 Mc/s)	18 months
943–3267 ..	62275	CT217 Reflection coefficient meter (125 and 280 Mc/s)	3 years
—	W5000	Capacitor inductance bridge (Obsolescent)	—
943–2442 ..	103920	CT375 Bridge universal	3 years
—	100320	Q meter	3 years
—	100387	Box of inductances for Q meter ..	3 years
943–2419 ..	61761	CT160 Test set, electronic valve ..	18 months
—	54709	Analyser (Obsolescent)	3 years
949–0517 ..	ZDO2332	CT43 Bridge, impedance, Army No. 5 ..	3 years
—	6496	Bridge megger	18 months
—	12924	Megger, Wee	3 years
—	53059	Wavemeter G92	3 years
—	55870A	Wavemonitor G302	3 years

APPENDIX B—*continued.*

J.S. Cat No.	*Pattern No.*	*Description.*	*Periodicity.*
943–2421 ..	104391	CT379 Calibrator, range indicator ..	6 years
—	57880	Range calibrator des. 2	6 years
949–0515 ..	ZDO1831	CT45 Test set, deviation FM No. 2 ..	3 years
943–2417 ..	68622	CT52 Oscilloscope miniature	6 years
943–2499 ..	68623	CTA1 Power unit for CT52	6 years
—	10S/831	Oscilloscope, type 13A	6 years
943–4059 ..	104290	CT433 Signal generator, AF	3 years
—	54704A	Signal generator	3 years
—	10S/16780	CT218 Signal generator	3 years
—	54707 or WY0698	Test oscillator, ganging No. 2 (Obsolescent)	—
—	54704	Signal generator (Obsolescent)	—
—	ZD00784	CT212 Test oscillator	3 years
—	W5001A	Signal generator (Obsolescent)	—
—	54705	Signal generator (Obsolescent)	—
943–1825 or	71115	CT378 Signal generator (2–225 Mc/s) (also CT378A)	3 years
943–2145 ..	67166	CT82 Generator, thermal noise	18 months
943–3249 ..	63451	CT207 Generator, thermal noise ..	3 years
943–2416 ..	61354	CT215 Signal generator, pulse modulated	3 years
943–2420 ..	61335	CT202 Frequency swept oscillator ..	3 years
943–2443 ..	68577	CT318 Test set, insulation, 0–18kV ..	3 years
—	W2445	Tester insulation (Obsolescent)	—
—	100321	Attenuator AF	3 years
—	W7252	Oscillator G205	3 years
—	WY0023	Fluxmeter Adre No. 1	3 years
—	58150	Measuring lead for WY0023	3 years
—	47A	Avometer 47A	18 months
—	48A	Avometer 48A	18 months
943–1524 ..	12945	Multimeter 8SX	18 months
943–1523 ..	32144	Multimeter 7X	18 months
972–8577 ..	104390	Attenuator RF, 0–100dB	3 years
972–9733 ..	—	CT421, Attenuator, RF, 0–100dB ..	3 years
943–1632 ..	—	CT414 Oscilloscope, double beam ..	18 months
943–7177 ..	—	CT386A Oscilloscope (also CT386) ..	18 months
943–1911 ..	—	CT394, Signal generator (12–485 Mc/s) (also CT394A)	3 years
943–2134 ..	—	Multiminor	18 months
943–6737 ..	—	CT380, Oscilloscope, measuring ..	18 months
943–8385 ..	—	CT373, Test set oscillator and distortion meter	18 months
972–6157 ..	—	CT432, Calibrator, frequency	18 months
—	—	XT381, Frequency swept oscillator ..	18 months
943–3268 ..	71790	CT397 Power Unit, variable voltage ..	6 years
—	—	XT410 Generator, thermal noise ..	18 months

UNCLASSIFIED.

582.—Self Lubricating Plummer Blocks—Modification to Strainer Plate Locating Pin.

Severe damage has occurred in plummer bearings due to the oil scraper plate being incorrectly replaced after examination.

2. In order to prevent the possibility of similar occurrences, the following modification is to be carried out on all ships fitted with " Michell " type plummer, and plummer and trailing blocks—

(*a*) The strainer plate is to be removed from each bearing and the handle and locating pin replaced with a modified pin manufactured to the dimensions shown in Navy Order Diagram Issue 13/60.

(*b*) A check is to be carried out that the modified pin will not permit the cover plate to seat if the scraper plate is fitted incorrectly.

3. The above modification is to be carried out by ships' staff at the first available opportunity.

(DME 1211/51/152.)

583.—Diving—Underwater Swimming—Use of C.D.B.A. Pattern 5561A—Reports.

(*A.F.O.* 2572/1959.)

Pattern 5561A Clearance Diving Breathing Apparatus, worn with pattern 3380 U.W.S.S. fitted for " suit inflation " as described in Navy Order 496 of 1960 (*Diving—Pattern* 3380 *Swim Suit with C Type Hood Pattern* 3382, *and Face Mask, pattern* 3384—*Comfort in Use at Depth Beyond* 33 *ft.—Suit Inflation*), can be used for underwater swimming in depths down to 80 feet. Continuous underwater swimming results in a greater oxygen consumption than any other form of underwater activity; in order to supply the maximum requirement a mixture of 60 per cent. oxygen/40 per cent. nitrogen, with a reducer flow setting of 6 litres/min. is required.

2. Qualified Clearance Divers are authorized to carry out swimming to a maximum depth of 80 feet. The following rules governing equipment and safety precautions are to be observed—

(*a*) Pattern 3380 U.W.S.S. fitted for suit inflation, pattern 3382 C type hood, pattern 3384 face mask, and pattern 3386 swim fins, together with suitable underwear, are to be worn. Swimming in skin is not to be permitted because the diver would be negatively buoyant.

(*b*) Breathing apparatus, pattern 5561A, using a mixture of 60 per cent. oxygen/40 per cent. nitrogen, and with *reducer flow set to* 6 *litres/min.* is to be used.

(*c*) Swimmers operating in this apparatus are always to operate in pairs and be in constant contact with a " buddy " line not exceeding 15 feet in length. Each swimmer is to be personally responsible for the safety of his companion. The " buddy " line securing arrangements must be such that they are capable of quick release in emergency, but impossible to release accidently or in error. (*See* Appendix.)

(*d*) To avoid decompression stops, diving times are not to exceed those shown in the table below, which replaces Table I of B.R. 155C for mixture swimming. Article 0305 (i) regarding repeated dives is, however, to apply. Depth of dive and duration will, of necessity, be the responsibility of the swimmers themselves and will require the use of a watch HS.10 CD, and a wrist depth gauge. *Until a suitable depth gauge becomes available swimming is not to take place where depth of water exceeds 80 feet, and endurance is to be based on the maximum depth of water in the swimming area.*

Underwater Swimming Table—60 per cent./40 per cent. Mixture.

Depth in Feet.	*Duration of dive from leaving surface to leaving bottom.*	*Minimum Time for Ascent.*
	Mins.	*Mins.*
50 or less ..	60	½
50–60	60	1
60–70	40	1
70–80	30	1½

3. The following techniques have been evolved during trials and are recommended—

(*a*) *Communications.*—Communications between underwater swimmers can be obtained by using the single life line code on the " buddy " line. If a swimmer requires the help of his companion he is to indicate the fact by the telephone signal—a rapid succession of pulls. Communication from the surface to the diver can be effected in favourable conditions by tapping with a spanner on the diving ladder.

(*b*) *Drill for the Descent.*—It is necessary to ensure that gas from the suit is allowed to reach the outer ear. This will happen automatically if the suit is kept comfortably free from pinches by operating the suit inflation cylinder valve.

(*c*) *Drill for the Ascent.*—Before starting to ascend, flush through the counterlung by using the bypass valve but do not inflate the counterlung more than is necessary. Ascend slowly and regularly at about 1 foot per second. As a guide do not ascend faster than the small bubbles from the relief valve if they can be seen. A marked shot rope can be used in training. Do not allow pressure to build up in the counterlung. Vent out of the mouth if necessary.

(*d*) *Trouble Drills.*

Symptoms.	*Probable Causes.*	*Action.*
Breathing discomfort, dizziness or apprehension.	Over exertion, too rapid ascent or restriction to gas supply.	Signal companion. Remain in same position. Resist any tendency to surface. Relax. Flush through counterlung.

If after taking this action trouble persists, it must be assumed that the reducer is not giving its proper flow. In this event the diver must indicate to his companion his intention to surface, flush through his

counterlung with oxygen from his emergency cylinders and make a slow controlled ascent. Ascent without flushing the counterlung in these circumstances could result in unconsciousness.

(*e*) *Emergency Drills.*

(i) *Free Ascent.*—Should the breathing apparatus become inoperative due to damage or fault, an ascent without breathing becomes necessary. This can be carried out with or without the breathing apparatus. The procedure is as follows—

(1) Inform companion of your intention to ascend.
(2) Slip weights.
(3) Use suit inflation to provide the necessary buoyancy.
(4) *Breathe out during ascent.*

On arrival at the surface the set can be ditched if there is difficulty in maintaining positive buoyancy.

(ii) *Ditching drill.*—It is preferable not to ditch under water as it is an advantage to retain the face mask for underwater vision and suit inflation will provide adequate buoyancy for the ascent. Circumstances may, however, render underwater ditching necessary and, in any case, with a flooded counterlung the set must be ditched on surfacing. The drill is—

(1) Undo right waist buckle of harness.
(2) Loosen face mask straps.
(3) Release shoulder strap and take weight of apparatus on left shoulder.
(4) Remove face mask and mouthpiece.
(5) Let apparatus slide off left arm.

(iii) *Companion diver drill.*—When it is known that a diver is in difficulties and/or wishes to ascend, the companion should close and assist him as necessary. In the event of the diver becoming unconscious, his companion should carry out a controlled ascent with him. On arrival at the surface, the unconscious diver's weights should be slipped and he should then be turned on his back and his counterlung flushed through with oxygen. His face mask should be left in place unless it becomes apparent that he is not breathing from his set, i.e., that the counterlung is not working in and out. In this event, his face mask must be removed and his face supported clear of the water. Support can best be provided by holding him under the arms with his head resting on his companion's chest. His set should be ditched as soon as possible after the removal of the face mask, care being taken when doing this not to lose hold of him. The companion may find it necessary to slip his own weights to maintain buoyancy but on no account should he remove his own face mask.

(iv) *Oxygen poisoning.*—Provided the depth of 80 feet is not exceeded, the chances of this occurring are remote. However, should any disquieting symptoms be experienced, e.g., lip twitching, the diver should signal his companion and ascend immediately.

4. *Training.*—Before permitting swimming in accordance with these orders Clearance Diving Officers are to satisfy themselves that their teams are adequately practised in emergency drills. Simulated decompression stops at 10 and 20 feet should be exercised in order to evolve satisfactory methods of carrying these out should deeper and longer dives be authorized.

5. *Reports.*—Officers in charge of Clearance Diving Teams are to report through their administrative authorities, copy to the Captain, H.M.A.S. WATSON, any suggestion for improving underwater swimming efficiency and for carrying out decompression stops.

APPENDIX.

To Make-Up a " Buddy " Line.

The line is to consist of a length of 3-lb. line, eye spliced at each end. The length between splices may be varied to meet conditions but in no case should it exceed 15 feet.

2. A strap for each diver is to be made up of a 2-in. webbing strip, secured with a strong buckle and with a suitable metal ring sewn to it. In addition a 2-ft. lizard of 3-lb. line is required with spring hooks fitted at each end.

3. The strap is buckled to the arm just above the elbow; if it is secured to the left arm the " buddy " line may interfere with ditching the set. The lizard is clipped to the ring on the strap and the other end to the eye splice of the " buddy " line.

(DW 1624/11/2.)

(*Navy Order* 496 *of* 1960.)

UNCLASSIFIED.

584.—Cathodic Protection—Fitting of Zinc Anodes.

Research and trials in Australia have led to the introduction of alloyed zinc anodes for the suppression of underwater corrosion.

2. The following zinc anodes have been adopted for Naval service and are available from Naval Stores. These anodes will be accounted for under class B, group 7 (ABC Supply Classification 5340–66) under the pattern numbers indicated—

Pattern No.	*Description.*	*Remarks.*
011–4141	Anode, corrosion preventive, zinc aluminium alloy, overall dimensions, 13-in. long, 6-in. wide, 1¼-in. thick	Standard anode. Approximate life 12 months. The standard anode for the protection of steel immersed in sea water.
011–4142	Anode, corrosion preventive, zinc aluminium alloy, overall dimensions, 13-in. long, 6-in. wide, 2-in. thick	Long life anode. Approximate life 2 years. To be used where a long docking interval is required
011–4143	Anode, corrosion preventive, zinc aluminium alloy, overall dimensions, 6¾-in. long, 2½-in. wide, 1¼-in. thick	Restricted area anode. Approximate life 12 months. For use in way of A.S. dome openings and other restricted areas where it is impracticable to fit type 1 anodes.

3. Anodes are to be fitted in all H.M.A. ships and steel hulled small craft in the following positions—

(*a*) In sea tubes.
(*b*) In way of A.S. openings.
(*c*) In stern tube eddy plates.

Anodes are *not* required inside rope guards and " A " bracket eddy plates. Additional anodes will be specified for certain ships by Navy Office.

4. All ships that are not otherwise cathodically protected should have anodes fitted close to the propellers to protect the rudder and adjacent hull.

5. Rudders of all ships are to be bonded to the hull.

6. Where galvanic anodes are fitted for cathodic protection, the zinc aluminium alloy anodes listed above are to be used wherever practicable. In certain cases e.g. certain sea tubes, it will not be practicable to fit standard anodes. In these cases rolled zinc slab is to be cut to size and fitted, particular care being taken to ensure good metallic contact between the anode and protected structure.

7. Anodes are not normally to be fitted to wooden craft. Where anodes are fitted for protection of the propeller, or other special fittings, they must be electrically bonded to the fittings to be protected.

8. Standard anodes are to be fitted in accordance with the following instructions—

(*a*) Clean the minimum area for hull attachment down to bare metal.

(*b*) Apply a suitable jointing compound (e.g. zinc paste like patt. 104) liberally to the underside of the anode. The anode is to be placed flat on the clean steel surface and secured by welding the cast-in strap to the hull.

(*c*) Paint area around the anode, including the anode strap, with the normal underwater hull painting system. Care is to be taken that no paint is applied to the anode surface.

9. Zinc anodes readily accessible at docking are to be surveyed at each docking, and renewed when it is apparent that the zinc remaining will be consumed before the next occasion of docking. Other anodes fitted in sea tubes are to be renewed by dockyard every two years.

10. The substance of these instructions will be incorporated in A.B.R. 5023, the Cathodic Protection Manual, now in course of publication.

11. Navy Order 874 of 1958 is hereby cancelled.

(DNC 121/51/41.)

(*Navy Order* 874 *of* 1958.)

UNCLASSIFIED.

585.—Contamination of Avgas by Sea-water.

A case recently occurred of the contamination of Avgas on board a H.M.A. ship after the drums containing the gasoline were hosed down with sea-water.

2. To avoid contamination of fuel by sea-water and/or rain-water, drums are not to be hosed and should be stowed on their side whenever practicable, large bung uppermost and facing outwards for ready inspection.

3. Where end-on stowage is necessary, a waterproof cover is to be used to prevent water ingress into bung threads. Such covers must be removed daily for drum inspection.

4. Article 0310 of B.R. 1754 (1956)—Regulations for Storing and Handling Gasoline and other Inflammable Stores, also refers.

(DNAS 603/84/19.)

UNCLASSIFIED.

586.—Naval Stores—Accounting—Permanent Stores Retained Pending Supply of Replacements.

(*A.F.O.* 886/1960.)

Instances occur when it is essential for a defective permanent item of naval stores to be retained and used on board pending a supply of replacement item. In these cases the Departmental Officer concerned is to request the Supply Officer to demand the new item on form A.S.134 and at the same time to raise form A.S.331 for the one retained. The form A.S.134 is to be annotated " Defective item retained pending replacement. Form A.S.331 Serial No. ..... refers ". The form A.S.331, bearing a reference to the demand serial number, is to be sent, with the demand for the new item, for registration to the dockyard or depot, from where it will be returned to the ship or establishment and retained for eventual despatch with the defective item as soon as the serviceable replacement is received.

2. The above procedure is not applicable to Air Stores.

3. Article 0603 of A.B.R.4 Naval Storekeeping Manual will be amended.

(DNAS 501/51/17.)

UNCLASSIFIED.

587.—Naval Stores (Electrical)—Pattern F16/189612 Carbon Roller Contacts for Pattern F1B/10723 Ipots—Initial Spares Allowance.

(*A.F.O.* 808/1960.)

Admiralty has advised that as a result of continued reports regarding the poor or erratic performance of various fire control equipments due to the carbon roller contacts in Ipots F1B/10723 becoming defective, spare contacts (for replacement purposes) have been introduced as consumable items of Naval Stores under pattern F16/189612 (N.A.T.O. Supply Classification 5905).

2. " First Outfit " quantities of these contacts should be demanded from normal storing yards, quoting this order as authority, on the following scale—

No. of Ipots, Pattern F1B/10723 Fitted.	*" First Outfit " quantity of Contacts, Pattern F16/189612*
1–10	5
11–20	10
21–50	15
51 and over	20

(DNAS 519/66/19.)

UNCLASSIFIED.

588.—Naval Stores (General) (Class F, Group 2A, Part 1)—2-Volt Cells—Obsolence and Replacement.

(*A.F.O.* 481/1960.)

The following 2 volt cells and associated components, previously required for making up 24 volt low power batteries, have now been made obsolete and are being deleted from B.R. 810, Rate Book and Authorized List of Naval Stores—

Pattern No.	
5466	Cell, 2 volt, 550 amp. hour.
5530	Cell, 2 volt, 400 amp. hour.
5532	Cell, 2 volt, 250 amp. hour.
5534	Cell, 2 volt, 150 amp. hour.
5535	Cell, 2 volt, 100 amp. hour.
5459	Cell, 2 volt, 60 amp. hour.
5537	Tray for 4 cells 5530.
5538	Tray for 6 cells 5532.
5539	Tray for 6 cells 5534.
5540	Tray for 6 cells 5535.
5457	Crate for 6 cells 5459
5458	Crate for 4 cells 5459.
14100	Connector intercell, for cells 5466.
14101	Connector end-cell, for cells 5466.
14103	Connector intercell, for cells 5530.
14104	Connector end-cell, for cells 5530.
14106	Connector intercell, for cells 5532.
14108	Connector intercell, for cells 5534.
14109	Connector intercell, for cells 5535.
14110	Connector intercell, for cells 5459.
14102	Sockets, cable, for cells 5466.
14105	Sockets, cable, for cells 5530.
14107	Sockets, cable, for cells 5532.
14111	Sockets, cable, for cells 5534, 5535 and 5459.
8606	Separators, perforated ebonite.
8607	Separators, perforated ebonite.

2. Present stocks should continue to be issued until expended, after which, requirements should be met by replacement of the complete low power battery by the following batteries as appropriate—

Pattern No.		
14231	Battery, 4 volt, 620 amp. hour.	(Replaces 2 No. pattern 5530 or 2 No. pattern 5466.)
14227	Battery, 12 volt, 115 amp hour.	(Replaces 6 No. pattern 5535 or 6 No. pattern 5459.)
14229	Battery, 12 volt, 285 amp. hour.	(Replaces 6 No. pattern 5532 or 6 No. pattern 5534.)

These batteries and their accessories are already included in B.R. 810—Rate Book and Authorized List of Naval Stores—under class F, group 2A, part 1.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 518/58/21.)

UNCLASSIFIED.

589.—Naval Stores (General)—Forms A.S. 134S—"Shopping List" Preparation.

Article 0601 of A.B.R. 4 provides that demands on forms A.S. 134S, "Shopping Lists", can contain a mixture of Naval and Air Stores under any number of classes/groups and sections.

2. In order to simplify the processing of periodical replenishment demands at the Naval Store Depot, Sydney, separate masters for such demands are in future to be prepared for—

(*a*) General Naval Stores.
(*b*) Air Stores.
(*c*) Electrical, Radar and Radio Stores.
(*d*) Stationery Stores.

However, any number of the foregoing categories may continue to be included on one master when preparing casual demands.

3. With reference to paragraph 6 (*a*) (i) and (ii) of article 0601 of A.B.R. 4 the carbon paper now in use is to be used green side up.

4. A.B.R. 4 will be amended.

(DNAS 400/51/63.)

UNCLASSIFIED.

590.—Planned Maintenance—Disposal of Routine Maintenance Cards.

When equipment is permanently removed from ships, operating the Planned Maintenance System, relevant routine maintenance cards are to be forwarded to the appropriate Directorate at Navy Office. In the case of Electrical Planned Maintenance Equipment Cards, Maintenance Report Cards and Auxiliary Sheets are also to be forwarded.

2. Maintenance schedules are to remain in the volume until such time as they are deleted by a maintenance schedule amendment.

(DW 1209/51/2.)

RESTRICTED.

591.—Naval Stores (Technical) (Class F, Group 3)—Dosimeter, Q.F., No. 3, 0-50R, Pattern 911-0003—Defect.

(*A.F.O.* 1834/1959.)

A long-term defect has been revealed in Dosimeter, quartz fibre, No. 3, 0–50R, pattern F3/911–0003, in that, due to deterioration of the soldered joint between fibre and fibre supports, or discontinuity in the gold plating of the fibre, the response of the electroscope to changes in electrostatic charge becomes so slow as to limit the serviceability of the dosimeter.

2. All Dosimeters, No. 3, held in H.M.A. ships and establishments and in stock at dockyards are to be tested forthwith in accordance with the Test Schedule shown as an appendix to this order. The work is considered to be within the capacity of ships' staffs.

3. Repair of dosimeters with defective fibre assemblies is not considered practicable in view of cost and high wastage which could be expected. It has been decided, however, that provided the number of defective instruments does not exceed a maximum of 20 per cent. of allowance for any one service that it should be possible so to regulate their use that their sluggishness is not an embarrassment. Demands to replace any defective items held in excess of 20 per cent. of allowance are to be forwarded to Storing Yards quoting this order as authority for issue.

4. On completion of tests of Yard stocks (Superintending) Naval Store Officers are to segregate and report to Navy Office (for DNAS) quantities of (*a*) serviceable dosimeters and (*b*) dosimeters found defective.

5. The procedure for the use of dosimeters marked as in the appendix to this order is promulgated in Navy Order 592 of 1960 (*Dosimeter, Q.F., No.* 3, 0–50*R*, *Pattern F*3/911–0003—*Procedure for Use of Substandard Instruments*).

APPENDIX.

*Test Schedule D.G.S. II/RWH/*1.

Dosimeter, Q.F., No. 3, 0–50*R.*, *Pattern F*3/911–0003.

This schedule lays down the procedure by which Dosimeters, No. 3, with defective fibre assemblies may be distinguished from fully serviceable dosimeters.

2. *Test Equipment required.*

(*a*) Charging Unit No. 1, pattern F3/911–0004.

(*b*) Capacitor 0.02μf $\pm$ 10 per cent., pattern F15/911–5516.

3. *Procedure.*

(*a*) Charge the dosimeter, using Charging Unit, No. 1, in the normal manner so that the fibre reads 0 roentgen.

(*b*) Remove dosimeter from the socket of the charging unit.

(*c*) Connect the pin of the charging unit momentarily to the body of the socket via the 0.02μf capacitor. (Discharge capacitor by shorting its ends after each use.)

(*d*) Replace dosimeter in socket and firmly press down as before and observe the behaviour of the fibre, taking care not to operate the charging switch whilst doing so. It will be seen that as soon as sufficient pressure is applied to the dosimeter the image of the fibre will move almost instantaneously away from zero to a position somewhere near the middle of the scale. As it approaches this new position it may slow down very suddenly and then " creep " slowly over the last part of its travel before coming to rest at its new position.

The new position of the fibre on the scale is not important but the length of scale over which the fibre " creeps " is the criterion by which the fibre assembly is adjudged to be serviceable or defective.

The maximum length of scale over which the fibre is permitted to creep in a fully serviceable dosimeter is one half of one minor scale division or 2 per cent. of the total length of the scale.

(*e*) Dosimeters found defective by this procedure are to be clearly marked by painting on a second red band.

(DNAS 519/53/25.)

(*Navy Order* 592 *of* 1960.)

RESTRICTED.

592.—Naval Stores (Technical)—Dosimeter, Q.F., No. 3, 0-50R, Pattern F3/911-0003—Procedure for the Use of Sub-Standard Instruments.

(*A.F.O.* 1835/1959.)

A long-term defect has been revealed in Dosimeter, quartz fibre, No. 3, 0–50R, pattern F3/911–0003, in that the response of the electroscope to changes in electrostatic charge becomes so slow as to limit the serviceability of the dosimeter. Attention is drawn to Navy Order 591 of 1960 (*Naval Stores* (*Technical*)) (*Class F, Group* 3)—*Dosimeter, Q.F., No.* 3, 0–50*R*, *Pattern* 911–0003—*Defect*) with regard to identification of these sub-standard instruments.

2. The following procedure is to be followed when using these dosimeters—

The dosimeter should be charged, using the charging unit No. 1, pattern F3/911–0004, until the fibre coincides with the 10r scale reading, and then laid aside for a period of not less than 15 minutes before issue. Immediately prior to such issue the scale should be read and the reading noted. This reading must be subtracted from that obtained when the dosimeter is subsequently returned after use, in order to assess the true dose received.

Note.—If the fibre is off scale and no reading is possible, then the above procedure must be repeated until a reading can be obtained.

3. These sub-standard dosimeters must not be used for assessing " flash " dosage but by employing the procedure detailed above they are suitable for use in assessing dosages received during operations in fall-out conditions or during decontamination work.

(DNAS 519/53/25.)

(*Navy Order* 591 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

593.—Gun Memoranda of Inspection and Failure Reports Forms S.1148 (H)—Life of Components—Recording.

(*A.F.O.* 335/1960.)

A new Memorandum of Inspection for guns, now in print, embodies a column for the recording of replacement of components. This will enable the " life " of new components in service to be assessed, and provide a record for the exchange of those components with a " life " already assigned.

2. Pending the issue of the new memoranda, all replacements of breech mechanism components are to be recorded in the existing " Remarks " space under the heading " Results of Inspection after each Series ", on pages 2 and 3 of the existing memorandum (3-in. mark N1, 4.5-in. mark 5 and 6-in. mark N5 guns only).

3. This entry is to be made by ships' officers if the exchange is made by the ships' staff, and by the N.O.I.O. if the exchange is made by R.A.N. Armament Depot staff. The Officer-in-Charge of the R.A.N. Armament Depot will inform the N.O.I.O. of particulars of components exchanged.

4. When failure of a gun component is reported on form S.1148 (H), an assessment of the number of rounds fired with the component is to be entered on the bottom line of Section 4 of the form.

5. The new memoranda, when printed, will be issued for all new manufacture guns, liners or barrels, and retrospectively for all O.Q.F. 3-in. mark N1, 4.5-in. mark 5 and 6-in. mark N5, N.O.I.O's will hold blank memoranda. They will arrange for all entries in the old memoranda to be transferred to the new memoranda at the next inspection, and to forward the old memoranda together with the duplicate of the new memoranda, to the Director of Weapons, Department of the Navy, Victoria Barracks, Melbourne, for retention.

(DW 700/52/9.)

RESTRICTED.

594.—Particulars of Sea-going Merchant Ships—ALP 4 Navy.

A new publication, entitled " ALP 4 Navy—Particulars of Sea-Going Merchant Ships " is now available on limited distribution and will be issued without demand to replace AIP 1 NAVY of the same title.

2. Upon receipt, ALP 4 NAVY is to be inserted within the covers of AIP 1 NAVY (where held) and the blue front cover piece pasted in position. The original contents of AIP 1 NAVY are then to be destroyed. Destruction certificate is not required.

3. Covers will be issued to recipients who were not holders of AIP 1 NAVY.

(SO(T) 465/256/32.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

FOR OFFICIAL USE ONLY. C.N.O. 595/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
2nd August, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

595.—Books—Distribution of Non-accountable Publications During May, 1960.

The non-accountable publications, Amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C. " Series, contained in the appendix to this order, have been distributed to ships and services during May, 1960. Article 2518 of A.B.R.4 is relevant.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments, referred to in the appendix to this order, are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	11th March, 1960.
Aeroplane	18th March, 1960.
Aircraft	Volume 39, No. 8, May, 1960.
D.E.F. 1234..	Amendment No. 9.
Educational Information	No. 102, dated 18th March, 1960.
Fibres and Plastics	Volume 21, No. 3, March, 1960.
Flight	11th March, 1960.
Flight	18th March, 1960.
Joint Services Recognition Journal ..	Volume 15, No. 1, January, 1960.
Journal of the Institute of Navigation ..	Volume 6, No. 7, Autumn, 1959.
Manual of the Audit Act and Treasury Regulations	Issue No. 27, dated 26th February, 1960. Pages 1–16.
N.A.M.A.N.	N.2065–N.2076.
Occupational Safety and Health ..	Volume IX., No. 4, October–December, 1959 (Final Issue).
United Nations Review	Volume 6, No. 9, March, 1960.
United Nations Review	Volume 6, No. 10, April, 1960.
United States Naval Institute Proceedings	Volume 86, No. 3, March, 1960.
United States Naval Institute Proceedings	Volume 86, No. 4, April, 1960.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
D.C.A. Airways Operations Instructions, Vol. 2	A.L. 7.
D.C.A. Aviation Safety Digests	No. 21 (March, 1960).
I.C.A.O. Bulletins	Vol. XV.–No. 1, 1960.
R.A.F. Flight Information Publications Terminal Approach Procedure Charts	A.L. 4 to T.A.P. Check List (29.2.60) A.L. 5 to T.A.P. Check List (29.2.60). A.L. 6 to T.A.P. Check List (29.2.60).
R.A.F. Flight Information Publications Terminal Approach Circular Charts S.E. Asia and Australasia	A.L. 2 to T.A.P. Check List (29.2.60) A.L. 3 to T.A.P. Check List (29.2.60).
Sperry Field Service Bulletins	Zero Reader Flight Director, Type Z.L. 1 (19.2.60).
R.A.A.F. M/T Maintenance Instructions ..	A.L. 15.
R.A.A.F. Repair and Maintenance General Instructions	A.L. 323 A.L. 325 A.L. 326.
R.A.A.F. Special Technical Instructions ..	Armament Bombing Equipment/14 Escape Facility/22 Fuel and Lubricants/7, 11, 13 Gas Turbine Equipment/7 Goblin/21, 22 Instruments/25, 26 Inst. Pump Fuel Air Hydraulic/8, 9 Propeller/13 Piston Engine Fuel Equipment/6, 7 Rocket Equipment/9 Rotol Acc. Drive Equipment/9 Safety Equipment/23, 24, 25 Twin Wasp Power Plant/9, 10 Vampire/35, 36 Viper/8, 9 Wasp Junior/8.
R.A.A.F. Summary of Aircraft Accidents..	(October–December, 1959).
R.A.A.F. Summary of Defects Reports ..	Electrical No. 4/59.
R.A.A.F. Summary of Defects Reports ..	Instrument/19.
Air Diagrams	SR. 1404/NB, Sheet 1 SR. 1404/NB, Sheet 2 SR. 1410/NB, Sheet 1 SR. 1410/NB, Sheet 2 SR. 1411/NB SR. 1417/NB.
Air Diagrams	S.R. 1418/N.B. S.R. 1419/N.B. S.R. 1420/N.B. S.R. 1421/N.B.
A.A.P. No. 2, Table of Contents (12th Edition)	Sub A.L. 95 (A.L. 11099).
A.A.P. No. 2, A.B.C.S.C., Class 5826 (2nd Edition)	Sub A.L. 5 (A.L. 11035).
A.A.P. No. 2, A.B.C.S.C., Class 5920 (2nd Edition)	Sub A.L. 5 (A.L. 11010).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, A.B.C.S.C., Class 5960 (2nd Edition)	Sub A.L. 5 (A.L. 10895).
A.A.P. No. 2, A.B.C.S.C., Class 5965 ..	Sub A.L. 6 (A.L. 10897).
A.A.P. No. 2, A.B.C.S.C., Class 5970 (2nd Edition)	Sub A.L. 6 (A.L. 10944).
A.A.P. No. 2, A.B.C.S.C., Class 5977 (2nd Edition)	Sub A.L. 6 (A.L. 10948).
A.A.P. No. 2, A.B.C.S.C., Class 5990 (2nd Edition)	Sub A.L. 5 (A.L. 11034).
A.A.P. No. 2, A.B.C.S.C., Class 5999 (2nd Edition)	Sub A.L. 5 (A.L. 11042).
A.A.P. No. 2, Group A, Section 65 (3rd Edition)	Sub A.L. 12 (A.L. 10984).
A.A.P. No. 2, Group E, Section 7R (3rd Edition)	Sub A.L. 23 (A.L. 11056).
A.A.P. No. 2, Group G, Section 5A, Vol. 2 (5th Edition)	Sub A.L. 28 (A.L. 10843).
A.A.P. No. 2, Group G, Section 5A, Vol. 3 (4th Edition)	Sub A.L. 26 (A.L. 10978).
A.A.P. No. 2, Group G, Section 5E (5th Edition)	Sub A.L. 30 (A.L. 10902).
A.A.P. No. 2, Group G, Section 5U, Vol. 2 4th Edition)	Sub A.L. 33 (A.L. 10860) Sub A.L. 34 (A.L. 11125).
A.A.P. No. 2, Group G, Section 5W (3rd Edition)	Sub A.L. 20 (A.L. 11003) Sub A.L. 21 (A.L. 11043).
A.A.P. No. 2, Group G, Section 6D (8th Edition)	Sub A.L. 39 (A.L. 11017) Sub A.L. 40 (A.L. 11090).
A.A.P. No. 2, Group G, Section 6J (5th Edition)	Sub A.L. 18 (A.L. 10990).
A.A.P. No. 2, Group G, Section 105C (4th Edition)	Sub A.L. 39 (A.L. 11004).
A.A.P. No. 2, Group G, Section 106A (8th Edition)	Sub A.L. 31 (A.L. 10985).
A.A.P. No. 2, Group J, Section 12A (7th Edition)	Sub A.L. 39 (A.L. 10927).
A.A.P. No. 2, Group K, Section 2 (12th Edition)	Sub A.L. 26 (A.L. 10968).
A.A.P. No. 2, Group N, Section 35 (8th Edition)	Sub. A.L. 24 (A.L. 10796).
A.A.P. No. 2, Group T, Section 27A (7th Edition)	Sub A.L. 26 (A.L. 11012) Sub A.L. 27 (A.L. 11032).
A.A.P. No. 2, Group T, Section 27C (7th Edition)	Sub A.L. 22 (A.L. 11013).
A.A.P. No. 2, Group T, Section 27F (8th Edition)	Sub A.L. 32 (A.L. 11015).
A.A.P. No. 2, Group T, Section 27G (8th Edition)	Sub A.L. 21 (A.L. 10840).
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A.A.P. No. 2, Group T, Section 32A (11th Edition)	Sub A.L. 24 (A.L. 10975).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4343A, Vol. 2	(A.L. 69) B.4 (Alt. 1 Inc.).
4343B, Vol. 1, Book 3	A.L. 17 and 18.
4343B, Vol. 2	(A.L. 135) D.2.
4343G, Vol. 1, Book 2	A.L. 30 and 31.
4343C, Vol. 1, Book 3	A.L. 14 and 15.
4343C, Vol. 2	(A.L. 41) C.11 (Canc.) (A.L. 43)–C.12 (A.L. 42)–D.8 (A.L. 40)–E.4 (A.L. 44)–H.2.
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4343D, Vol. 2	(A.L. 57)–A.7 (A.L. 59)–B.3 (A.L. 58)–N.6.
4343D, Vol. 6	A.L. 72.
4343E, Vol. 2	(A.L. 28)–L.2 (A.L. 29)–Z.9.
4343G, Vol. 1	A.L. 47 and 50.
4343S, Vol. 2	(A.L. 9)–X.1.
4360, Vol. 6	A.L. 30.
4360B, C, D (G.H.N.)	A.L. 12.
4360C (Issue 3) (N), Vol. 5, Part 2 ..	A.L. (RAN) 7.
4361, Vol. 6, Parts 1 and 2	A.L. 23.
4361, Vol. 6, Part 4	A.L. 26.
4361G, Vol. 2	(A.L. 149)–N.1 (Alt. 2 Inc.) (A.L. 159)–P.13 (A.L. 156)–Q.6.
4471A, Vol. 1	A.L. 124, 126, 127 and 128.
4487A, Vol. 2	D.14 (Alt. 1) Mod. No. Gannet/RAN/40 (Feb., 1960).
4487B, Vol. 2	D.13 (Alt. 1) Mod. No. Gannet/RAN/40 (Feb., 1960).
4511, Vol. 1 and Vol. 6	A.L. 57.
4515A, Vol. 3, Part 1, Section 2, Chapter 1 ..	A.L. 2.
4685, Vol. 1	A.L. 2.
A.P. (N) 400 (VA)	A.L. 12.
A.P. (RAN) 7, Vol. 3, Part 2	A.L. 3.
A.P. (RAN) 101	A.L. 30 and 31.
A.P. (RAN) 400 (Syc.) (2nd Edition) ..	A.L. 1.
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	STI/184 (12.2.60).
N.A.M.O. Vampire	STI/192 (6.1.60)
	STI/193 (25.1.60).
N.A.M.O. Westland Whirlwind	A.L. 14
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	SI/24 (10.2.60).
R.A.N.A.M.O. Engines General	L.1 (Issue 5) (April, 1960).
R.A.N.A.M.O. General	A.L.3
	A.L.5
	A.L.9
	L.63 (April, 1960)
	STI/Elec./RAN. 40 (April, 1960).
R.A.N.A.M.O. Sea Venom	SI/RAN. 28 (April, 1960).
R.A.N.A.M.O. Sycamore	A.7 (Issue 2) (April, 1960).
R.A.N.A.M.O. Vampire Trainer	A.18 (March, 1960)
	STI/RAN/16 (Issue 2) (April, 1960).
Air Clues	January, 1960.
Air Pictorial	January, 1960
	February, 1960.
D.C.A. Aeronautical Information Circulars	5/1960 (30.3.60)
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D.C.A. Aeronautical Information Publications	General A.L. 34
	A.G.A. (A.L. 20)
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	R.A.C./3 (A.L. 22)
	R.A.C./3 (A.L. 23).
D.C.A. Airways Operations Instructions, Vol. 1	A.L. 3.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
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1182E, Vol. 1	A.I.L. 3/59
	A.I.L. 4/59
	A.I.L. 5/59.
1275A, Vol. 1, Section 13	A.L. 24.
1275A, Vol. 1, Section 16	A.L. 34.
1275A, Vol. 1, Section 18	A.L. 30.
1275A, Vol. 1, Section 27	A.L. 27.
1275A, Vol. 2	(A.L. 92)–B.2 (Canc.)
	(A.L. 91)–Y.7.
1275B, Vol. 1, Section 16	A.L. 23.
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	(A.L. 142)–H.2 (Alt. 1 Inc.)
	(A.L. 144)–K.14.
1355, Vol. 2, Part 1	(A.L. 132)–F.104
	(A.L. 133)–G.130 (Alt. 2 Inc.).
1464G, Vol. 1	A.L. 160 and 161.
1464G, Vol. 2	No. 104.
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1803, Vol. 2, Part 1	E.131
	F.97
	F.101
	F.102
	S.58
	T.9.
1803A, Vol. 1	A.L. 63.
1803B, Vol. 2, Part 3	A.L. 97.
1803D, Vol. 2, Part 2	A.L. 221.
1803E, Vol. 2, Part 2	A.L. 76.
1803P, Vol. 1	A.L. 100 and 101.
1803R, Vol. 1	A.L. 73.
1803S, Vol. 1, Book 1	A.L. 11.
2240A, Vol. 1 and Vol. 6 (Book 4)	A.L. 18 and 19.
2240A, Vol. 2, Part 1	No. 119
2264B	A.L. 43
2306G, Vol. 5	A.L. 2.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2337, Vol. 1, Book 1	A.L. 47.
2337, Vol. 2	(A.L. 171)–A.34
	(A.L. 172)–A.35.
2337, Vol. 6	A.L. 76 and 77.
2531J, Vol. 1	A.L. 11.
2531L, Vol. 1	A.L. 8.
2533C, Vol. 2, Part 1	13 (A.L. 2).
2554D, Vol. 2	(A.L. 2)–I.2.
2656A, Vol. 1 (2nd Edition)	A.L. 3 and 4.
2662B	A.L. 24, 25 and 28.
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2887N, Vol. 2	(A.L. 27)–B.20.
2892F, Vol. 2	(A.L. 88)–B.64 (Alt. 1 Inc.).
2892F, Vol. 3 (2nd Edition)	A.L. 11.
2897R, Vol. 1, Book 2 (2nd Edition)	Loxon Binders.
2980A, Vol. 1	A.L. 47.
3042, Book 4	A.L. 3.
3158, Vo. 2	(A.L. 501)–A.1 (Alt. 6 Inc.)
	(A.L. 502)–B.1 (Alt. 6 Inc.)
	(A.L. 500)–B.7 (Alt. 14)
	(A.L. 503)–E.1 (Alt. 6 Inc.)
	(A.L. 504)–H.1 (Alt. 6 Inc.)
	(A.L. 505)–K.1 (Alt. 5 Inc.).
3279	A.L. 18.
3280B	A.L. 12 and 13.
4099J, Vol. 1	A.L. 77.
4099J, Vol. 2	(A.L. 338)–D.19
	(A.L. 331)–J.15 (Alt. 1)
	(A.L. 336)–J.26 (Alt. 2 Inc.)
	(A.L. 335)–K.16 (Alt. 1 Inc.).
4121C, Vol. 2, Part 1	(A.L. 101)–F.13.
4121C, Vol. 3, Part 1	A.L. 24.
4257B, Vol. 1	A.L. 102.
4269C, Vol. 5, Part 2 (N)	A.L. (RAN) 1.
4288 (N), Vol. 1, Parts 1 and 2	A.I.L. 1/60
	A.I.L. 2/60
	A.I.L. 3/60
	A.I.L. 4/60
	A.L. 37.
4288, Vol. 2	(A.L. 340)–B.124 (Alt. 1 Inc.)
	(A.L. 339)–B.127 (Alt. 1 Inc.)
	(A.L. 344)–B.129 (Alt. 1 Inc.)
	(A.L. 338)–B.142 (Alt. 1 Inc.)
	(A.L. 341)–B.176 (Alt. 1 Inc.)
	(A.L. 343)–B.252
	(A.L. 345)–B.253
	(A.L. 346)–B.254.
4303B, Vol. 1, Book 2	A.L. 17.
4303E, Vol. 2	(A.L. 4)–B.3.
4320B, Vol. 2	(A.L. 103)–G.30.
4320B, Vol. 3, Part 1	A.L. 20.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 4	Amendments 1 and 2.
A.B.R. 4	Errata to Amendment 2.
A.B.R. 10	Amendments 2 and 3.
A.T.P. 10 (British Supplement No. 2)	Amendment 8.
B.R. 31	Chapter 9, Revised December, 1959.
B.R. 67 (2)	Amendment 4.
B.R. 70/1959	January, 1960, Supplement.
B.R. 125/1959–60	Supplement No. 9, March, 1960.
B.R. 125/1959–60	New Entries No. 9, March, 1960.
B.R. 128 (1)	Supplement No. 5, February, 1960.
B.R. 226B (1) Revised November, 1957	Amendment 1.
B.R. 226B (22), 1958	Australian Amendment No. A.N. 2.
B.R. 226B (90)	Amendment 2.
B.R. 226C (1), Revised November, 1957	Amendment 1.
B.R. 664	Amendments 37 and 38.
B.R. 763 (Volume 1, 6th Edition, March, 1959	Supplement No. 3.
B.R. 763	Supplement No. 3 to the Preface.
B.R. 810/52, Section 1	Amendment 8.
B.R. 819 (2)	6.
B.R. 1257	20.
B.R. 1467 (1) (2)	8.
B.R. 1641	3.
B.R. 1671	6.
B.R. 1671 (3)	4.
B.R. 1705 (4)	18.
B.R. 1709 (1)	23.
B.R. 1709 (3)	9.
B.R. 1736 (19)	1.
B.R. 1771 (28)	2.
B.R. 1837 (3), Division R, Section RD	6.
B.R. 1837 (3), Division R, Section RJ	5.
B.R. 1837 (3), Division R, Section RQ	5.
B.R. 1837 (3), Division R, Section RV	6.
B.R. 1837 (3), Division R, Section RW	6.
B.R. 1837 (3), Division R, Section RY	6.
B.R. 1837 (3), Division S, Section SA	6.
B.R. 1837 (3), Division S, Section SB	6.
B.R. 1837 (3), Division S, Section SL	5.
B.R. 1837 (3), Division S, Section SN	5.
B.R. 1837 (3), Division S, Section SP	5.
B.R. 1837 (3), Division S, Section SV	4.
B.R. 1837 (3), Division S, Section SX	5.
B.R. 1837 (4), Division U, Section UL	5.
B.R. 1937 (7), Division K, Introduction	20.
B.R. 1837 (7), Division L, Introduction	23.
B.R. 1837 (8), Division M, Section MA	9.
B.R. 1837 (8), Division M, Section MG	15.
B.R. 1837 (8), Division M, Section MM	13.
B.R. 1837 (8), Division M, Section MP	15.
B.R. 1917 (1)	Amendment List No. 42.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 1917 (2)	Amendment List No. 44.
B.R. 1917 (2A)	Amendment List No. 31.
B.R. 1921 (December, 1949)	Amendment 58.
B.R. 2047A (9A)	3.
B.R. 2110 (1)	10.
B.R. 2110 (2)	10.
B.R. 2111 (12)	3.
B.R. 2125 (1)	1.
B.R. 2125 (2)	8.
B.R. 2125 (4)	6.
B.R. 2125 (6)	4.
B.R. 2125 (8)	4.
B.R. 2125 (9)	2.
B.R. 2179	1.
B.R. 2180	1.
B.R. 2902	5 and 6.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
B.R. 1978	S.C. 7/60, Correction No. 9.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 157.
129, Vol. 1 (6th Edition)	A.L. 9.
1086, Book 2 (2nd Edition)	A.L. 93, 94.
1086, Book 3, Part 1 (2nd Edition)	A.L. 74, 75.
1086, Book 4, Part 4 (2nd Edition)	A.L. 20, 21, 22, 23, 24 and 25.
1086, Book 5 (2nd Edition)	A.L. 86.
1086, Book 6 (2nd Edition)	A.L. 100.
1086, Book 7 (2nd Edition)	A.L. 107, 108, 109 and 110.
1086, Book 10 (2nd Edition)	A.L. 94, 95.
1086, Book 11 (2nd Edition)	A.L. 149, 150.
1086, Book 13 (2nd Edition)	A.L. 131, 134 and 135.
1086, Book 15 (2nd Edition)	A.L. 143, 144, 146, 148, 149, 151, 152, 153, 154, 155, 156, 157, 158 and 160.
1181, Vol 2	(A.L. 103)–B.85 (A.L. 104)–B.86 (A.L. 105)–B.87 (A.L. 106)–B.88.
1181A, Vol. 6, Parts 2, 3 and 4	A.L. 9 and 10.
1181C, Vol. 6, Parts 2, 3 and 4	A.I.L. 1/59 (R.A.N.) (Cancellation).
1182 (N), Vol. 1	A.L. 21.
1182 (N), Vol. 2	(A.L. 78)–E.17 (A.L. 81)–E.17 (Alt. 1).
1182A, Vol. 2, Part 1	C.41 E.16 (A.L. 1).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group Y, Section 10AD (6th Edition)	Sub A.L. 16 (A.L. 11085).
A.A.P. No. 2, Group Y, Section 10B (7th Edition)	Sub A.L. 37 (A.L. 11005).
A.A.P. No. 2, Group Y, Section 10H (8th Edition)	Sub A.L. 34 (A.L. 10993).
A.A.P. No. 2, Group Y, Section 10K (6th Edition)	Sub A.L. 21 (A.L. 10929).
A.A.P. No. 2, Group Y, Section 10SB (8th Edition)	Sub A.L. 17 (A.L. 11075).
A.A.P. No. 2, Group Y, Section 10W (5th Edition)	Sub A.L. 14 (A.L. 10867) Sub A.L. 15 (A.L. 11063).
A.A.P. No. 2, Group Y, Section 110A (6th Edition)	Sub A.L. 26 (A.L. 10904).
A.A.P. No. 2, Group Y, Section 110B (5th Edition)	Sub A.L. 18 (A.L. 10925).
A.A.P. No. 2, Group Y, Section 110BB (7th Edition)	Sub A.L. 18 (A.L. 11053).
A.A.P. No. 2, Group Y, Section 110C (3rd Edition)	Sub A.L. 22 (A.L. 10926).
A.A.P. No. 2, Group Y, Section 110D, Vol. 1 (4th Edition)	Sub A.L. 46 (A.L. 11027).
A.A.P. No. 2, Group Y, Section 110F (5th Edition)	Sub A.L. 24 (A.L. 10924).
A.A.P. No. 2, Group Y, Section 110FB (6th Edition)	Sub A.L. 22 (A.L. 10898).
A.A.P. No. 2, Group Y, Section 110H (6th Edition)	Sub A.L. 24 (A.L. 10899).
A.A.P. No. 2, Group Y, Section 110K (6th Edition)	Sub A.L. 23 (A.L. 11006).
A.A.P. No. 2, Group Y, Section 110KB (7th Edition)	Sub A.L. 25 (A.L. 10907).
A.A.P. No. 2, Group Y, Section 110L (6th Edition)	Sub A.L. 24 (A.L. 10923).
A.A.P. No. 2, Group Y, Section 110M (4th Edition)	Sub A.L. 20 (A.L. 10894).
A.A.P. No. 2, Group Y, Section 110Q (7th Edition)	Sub A.L. 11 (A.L. 11054).
A.A.P. 121 (November, 1957)	A.L. 6.
A.A.P. 316	A.L. 120.
A.A.P. 702.1, Parts 1 and 3	A.L. 89, 91, 92, 93, 94, 95, 96 and 98.
A.A.P. 703.2, Vol. 1	A.L. 1.
A.A.P. 716.0, Vol. 2, Part 2	A.L. 37.
A.A.P. 721:79, Vol. 2, Part 1	A.L. 15.
A.A.P. 721:79, Vol. 2, Part 2	A.L. 176, 179, 180, 181, 182, 184 and 188.
A.A.P. 742:00, Vol. 2, Part 1	A.L. 13, 14, 15, 16, 17 and 18.
A.A.P. 742:00, Vol. 2, Part 2	A.L. 8, 9 and 10.
A.A.P. 750:00, Vol. 2, Part 1	A.L. 60, 63, 64, 65, 66, 67, 68 and 69.
A.A.P. 750:00, Vol. 2, Part 2	A.L. 139, 141 and 142.
A.A.P. 757:00, Vol. 2, Part 1	A.L. 1.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
R.A.A.F. Crash Critique	No. 62 (2.12.59)
	No. 63.
R.A.A.F. Dakota Orders	A.L. 69.

Title.	*Date.*
Lloyds Shipping Index	4th April, 1960.
Lloyds Shipping Index	22nd May, 1960.
Lloyds Shipping Index	9th May, 1960.
Lloyds Shipping Index	16th May, 1960.
Lloyds Shipping Index	23rd May, 1960.

(DNAS 465/57/98.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
5th August, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

5537/60.

UNCLASSIFIED.

596.—Uniform Badges—Naval Ratings including WRANS and Reserve Ratings.

As a result of the change to Class II. Dress of members of the Band Branch and certain ratings formerly dressed in Class III. rig, and the introduction of new badges for musician ratings, it has become necessary to revise and modify the existing scheme of badges. In future, therefore, badges will be issued, accounted for and worn in accordance with the following instructions—

2. *Issues*

(*a*) Gratuitous issues of gold wire and other necessary badges, in accordance with the scales set out in Appendix " A " to this order, are to be made to R.A.N. and W.R.A.N.S. ratings as follows—

(i) On first advancement to the acting rate—Further issues are not to be made on confirmation of rating, or on re-advancement following disrating or reversion.

(ii) On qualifying for and on advancement in specialist or technical qualification.

(iii) On qualifying for good conduct, skill and other special badges.

(*b*) The free issues specified are designed to provide for all necessary changes of badges on articles of uniform provided in the appropriate compulsory kits of the ratings concerned, and on items issued on personal loan, with the exception of hat badges which are issued gratuitously to W.R.A.N.S. ratings on advancement, and cap badges, the cost of which is included in the gratuity payable to R.A.N. ratings on change of class of uniform.

(*c*) Subsequent replacements of worn-out badges and requirements for wear on new uniforms are to be provided at the expense of the ratings concerned.

(*d*) Sufficient stocks of badges to enable anticipated gratuitous issues to be made are to be carried by all ships and establishments. Care is to be taken, however, to ensure that in smaller ships stocks held are restricted to estimated requirements for a limited period only, bearing in mind that the majority of advancements in specialist qualifications, at least, occur in the larger establishments and that when operating in or from the Sydney area, any special or unforseen requirements can be met quickly by the Suptg. Victualling Store Officer, Sydney. Stocks of badges held are to be reviewed at least quarterly and any surplus stocks held are to be returned to the nearest Victualling Yard.

3. *Accounting*

(*a*) When a rating becomes entitled to a gratuitous issue of badges, the necessary gold badge for presentation to the rating by the Captain or his representative is to be issued by the Supply Officer to the Captain's Secretary (in relation to rating and good conduct badges) or to the Departmental Head (in relation to other badges) and a temporary receipt obtained.

(*b*) When form A.S. 161—Report of Changes—is prepared, an additional carbon copy is to be made (this copy is to be taken from a separate book of forms A.S. 161 and the serial number altered in manuscript, at the same time, the addressee shown on the additional copy should be amended to agree with that shown on form A.S. 105, copy No. 2, i.e. the Supply Officer) and given to the Supply Officer or officer responsible

for victualling stores, who will issue red and blue badges in the normal manner on form A.S. 105. Particulars of gold badges issued *vide* paragraph 3 (*a*) are also to be included on form A.S. 105 and the temporary receipt destroyed. The copy of form A.S. 161 is to be attached to copy No. 2 of form A.S. 105.

(*c*) If badges are temporarily unavailable for issue, the Supply Officer, or officer responsible for victualling stores, will retain the copy of form A.S. 161 until all badges are available. If no issues have been effected before the rating is drafted, the copy of form A.S. 161 is to be forwarded to the Supply Officer of the ship or establishment concerned. If part issue has been made, the copy of form A.S. 161 is to support copy No. 2 of form A.S. 105 for issues made and an advice, showing the badges still to be issued, forwarded to the Supply Officer concerned.

4. *Wearing of Badges*

(*a*) Badges of rating will be worn as at present, on the left arm by Petty Officers and leading rates.

(*b*) Branch badges will be worn as follows except where otherwise stated—

(i) By Chief Petty Officers, on the lapels of blue uniforms; on the right cuff of white uniforms and blue overall suits.

(ii) By Petty Officers and below—on the right arm so that the centre line of the badge is midway between the point of the shoulder and point of the elbow.

(*c*) Where several Part II or specialist qualifications exist within a Branch (e.g. quarters armourer, fire control armourer, gun layers armourer, &c. in the Gunnery Branch) the ratings' particular qualifications will be indicated by the addition of a letter or letters to the basic device of the Branch badge.

(*d*) Stars and Crowns will be added to the Branch badge to denote standard of qualifications as follows—

	Seaman and Naval Airman Branches.	*Other Branches.*
One Star (above the basic device)	3rd Class S.Q. ..	Technical qualification for Able rate for Branches dressed as Seamen except for ratings of the Supply and Secretariat, Sick Berth and Dental Branches.
Two Stars (one above and one below the basic device)	2nd Class S.Q. ..	Technical qualification for leading rate for Branches dressed as seamen except for ratings of the Supply and Secretariat, Sick Berth and Dental Branches.
Crown (above the basic device)	1st Class S.Q. Not to be worn by rating below confirmed Leading Rate	Technical qualification for Petty Officer rate; not to be worn by rating below confirmed Leading Rate.
Crown above and Star below basic device	Instructor	—

A Crown will be worn by all Chief Petty Officers above the Branch badge.

(*e*) Regulating Branch—The use of the Crown as the Branch badge of the Regulating Branch is not affected by the above arrangements and the badge of that Branch remains unchanged.

5. Details of—
   (*a*) Badge designs for the various Branches.
   (*b*) Pattern numbers of Branch badges.
   (*c*) Vocabulary numbers of Wran's badges, are indicated in Appendixes B, C and D.

6. This order will be reprinted for posting on notice boards.

7. Navy Order 747 of 1959 is hereby cancelled.

APPENDIX "A".

SCALE A.—R.A.N. RATINGS.

	Type of badge.	*Number to be issued.*
1. *On advancement to—*		
(*a*) Leading Rate .. .. (*b*) Petty Officer	Appropriate Rating Badge	1 gold, 2 red, 9 blue — Class II. Ratings.
		1 gold, 1 red, 6 blue — Class III. Ratings.
Additional issues to be made to—		
(i) Petty Officer Musicians..	Appropriate Rating Badge	1 gold, 1 blue — For wear on Class II. suits.
(ii) Ratings whose compulsory kit includes 2 No. Suits, blue overall	Appropriate Rating Badge	2 blue
(iii) Ratings whose compulsory kit includes 3 No. Shirts, action working	Appropriate Rating Badge	1 blue
(iv) Stewards	Appropriate Rating Badge	3 blue
2. *On advancement to—*		
Chief Petty Officer	Appropriate Branch Badge	1 pair gold, 1 pair red, 2 No. gold
Additional issues to be made to—		
(i) Chief Petty Officer Musician	Appropriate Branch Badge	1 pair gold, 1 No. gold
(ii) Ratings whose compulsory kit includes 2 No. Suits, blue overall	Appropriate Branch Badge	2 blue

APPENDIX "A"—*continued.*

	Type of badge.	*Number to be issued.*
3. *On qualifying for, or on advancement in specialist or technical qualification—*		
(*a*) Petty Officers and below..	Appropriate Branch Badge	1 gold, 2 red, 2 blue — Class II. Ratings.
		1 gold, 1 red, 2 blue — Class III. Ratings.
(*b*) Chief Petty Officers ..	Appropriate Branch Badge	1 pair gold, 1 pair red, 2 No. gold
Additional issues to be made to—		
(i) Chief Petty Officer Musician	Appropriate Branch Badge	1 pair gold, 1 No. gold
(ii) Petty Officer Musician ..	Appropriate Branch Badge	1 gold, 1 blue — For wear on Class II. suits
(iii) Ratings whose compulsory kit includes 2 No. Suits, blue overall	Appropriate Branch Badge	2 blue
(iv) Naval Airman (Aircrew)	Appropriate Branch Badge	1 red
4. *On qualifying for skill and other special badges (e.g. Good Shooting Badges)—*		
(*a*) Petty Officer and below ..	Appropriate Skill or Special Badge	1 gold, 2 red, 2 blue — Class II. Ratings.
		1 gold, 1 red, 2 blue — Class III. Ratings.
(*b*) Chief Petty Officers ..	Appropriate Skill or Special Badge	1 gold, 1 red, 2 blue
Additional issues to be made to—		
(i) Chief Petty Officer Musician	Appropriate Skill or Special Badge	1 gold, 1 blue
(ii) Petty Officer Musicians..	Appropriate Skill or Special Badge	1 gold, 1 blue — For wear on Class II. suits.
5. *On qualifying for Good Conduct Badges—*		
Petty Officers and below ..	Good Conduct Badge (sets of 1, 2 or 3 as appropriate)	1 set gold, 2 sets red, 2 sets blue — Class II. Ratings.
		1 set gold, 1 set red, 2 sets blue — Class III. Ratings.

APPENDIX "A"—*continued.*

Additional issues to be made to—

	Type of badge.	*Number to be issued.*	
Petty Officer Musicians ..	Good Conduct Badge (sets of 1, 2 or 3 as appropriate	1 set gold 1 set blue	For wear on Class II. suits.

6. *On first occasion after advancement when required to wear foul weather clothing—*

	Type of badge.	*Number to be issued.*
Chief Petty Officers and Petty Officers	Appropriate badge for Foul Weather Hoods	1 No.

SCALE B.—W.R.A.N.S. RATINGS.

	Type of badge.	*Number to be issued.*
1. *On advancement to—*		
(*a*) Leading Wran	Appropriate Rating Badge	1 gold
(*b*) Petty Officer Wran ..		6 blue
Additional issues to made to—		
(i) Ratings serving in tropical areas (ii) Sick Berth Attendants .. (iii) Stewards .. .. (iv) Cooks	Appropriate Rating Badge	4 blue
2. *On advancement to—*		
Chief Wran	Appropriate Branch Badge	1 pair gold 4 pair blue
3. *On qualifying for, or on advancement in specialist or technical qualification—*		
	Type of badge.	*Number to be issued.*
(*a*) Petty Officer Wran and below	Appropriate Branch Badge	1 gold 4 blue
(*b*) Chief Wran	Appropriate Branch Badge	1 pair gold 4 pair blue

APPENDIX "B".

SUMMARY OF BADGE DESIGNS FOR VARIOUS BRANCHES.

Branch.	*Device.*	*Distinguishing Letters for Various Specializations.*	*Remarks.*
Gunnery	Crossed Guns ..	Quarters Armourer—Q.A. Fire Control Armourer—F.C. Gunlayer Armourer—G.A. Seaman Gunner (Quarters)—Q Seaman Gunner (Control)—C	Letters worn below basic device

APPENDIX "B"—*continued.*

Branch.	*Device.*	*Distinguishing Letters for Various Specializations.*	*Remarks.*
Radar Plot.. ..	Spider's Web crossed by Lightning Flashes	—	—
Torpedo and Anti-Submarine	Crossed Torpedoes, Vertical Harpoon, Coil superimposed	Underwater Control—C Underwater Weapons—W	
	Diver's Helmet ..	Clearance Diver—C	
Coxswain	Six-spoked Wheel, Crown above	—	C.P.O. Coxswain will wear the basic device encircled by Laurel Wreath
Surveying Recorder	Sextant	—	—
Physical and Recreational Training	Crossed Clubs ..	—	—
Tactical Communication Operator	Crossed Flags ..	—	—
Radio Communication Operator	Wings Crossed by Lightning Flashes	—	—
Engineering Mechanic	Propeller	—	—
Mechanician ..	Propeller superimposed on a Throttle Wheel	—	—
Regulating Branch	Crown	—	Master-at-Arms will wear the basic device encircled by Laurel Wreath
*Pilots Classes I and II	Wings (Pilot's flying badge)	—	Worn on left cuff or left breast according to uniform
*Observers Classes I and II	Observer's Flying Badge	—	Worn on left cuff or left breast according to uniform
*Aircrewman (T), (A) or (S)	Telegraphist Air Gunner's Badge	—	Worn on left cuff or left breast according to uniform
Naval Airman ..	Aeroplane.. ..	Aircraft Handler—H Safety Equipment—SE Meteorological Observer—MET Photographer—P	Letters worn below basic device
Naval Airman Mechanic	Aeroplane.. ..	Airframe—A .. Engine—E Ordnance—O	—

APPENDIX " B "—*continued.*

Branch.	*Device.*	*Distinguishing Letters for Various Specializations.*	*Remarks.*
Aircraft Mechanician	Four-bladed propeller	—	—
Electrical	Crossed Diagonal Lightning Flashes	Electrician (Power)—P Electrician (Electronics)—E Electrician (Air)—AL Radio Electrician—R Radio Electrician (Air)—AR	Letters worn below basic device
Supply and Secretariat	Star	Victualling—V .. Writer—W Stores—S Cook—C Steward—OS Officers' Cook—OC Stenographer—ST Butcher—B	Letters worn in centre of badge
Wran Steward (General)	Letter G in a circle	—	—
Wran Motor Transport Drivers	Letters MT in a circle	—	—
Shipwright Branch (Artisans)	Crossed Axe and Hammer	—	—
Sailmakers ..	Crossed Fid and Marline Spike	—	—
Band Branch ..	Lyre encircled by Laurel Wreath	—	Small Lyre without Laurel Wreath worn by Junior Musicians
Divers	Diver's Helmet ..	—	Worn by: Divers 1. (*a*) On the collar by C.P.O.'s. (*b*) On the right arm by P.O.'s and below. Divers 2 or 3. On the right cuff in addition to appropriate branch badge
Artificers and Naval Shipwrights	—	—	Branch badges will not be worn by these ratings.

APPENDIX " B "—*continued.*

Branch.	*Device.*	*Distinguishing Letters for Various Specializations.*	*Remarks.*
Sick Berth	Red Cross on a white ground in a circle	Advance Nurse—N X-ray Assistant—X Masseur—M Hygiene Inspector—H Laboratory Assistant—L Mental Nurse—P Operating Room Assistant—O Dietitian—DN Occupational Therapist—T Chiropodist—CH Dispenser—DS Orthoptist—OPH Aviation Medicine—AM	Letters worn below basic device.
Dental	Letter " D " in a circle	—	—

* The addition of stars and crown, under the arrangements referred to in paragraph 4 of this order, does not apply to these badges.

APPENDIX " C ".

The pattern numbers of ratings' badges, which are to be quoted in all demands, issue notes and accounts, consist of a prefix " N ", followed by a number, or a number and suffix.

(*a*) The suffix " A " indicates a red badge.

(*b*) The suffix " B " indicates a blue badge.

(*c*) The suffix " N " indicates a gold nylon badge.

(*d*) The suffix " C " indicates a gold wire cuff badge, for C.P.O.'s only. Gold wire lapel badges for Chief Petty Officers and gold wire badges for other ratings bear only the basic pattern number and have no suffix—

Examples.

(*a*)	N600	C.P.O.	Gunnery Instructor	Gold wire.
	N600N	C.P.O.	Gunnery Instructor	Gold nylon.
	N600A	C.P.O.	Gunnery Instructor	Red.
	N600C	C.P.O.	Gunnery Instructor	Gold wire for right cuff.
(*b*)	N601	P.O.	Gunnery Instructor	Gold wire.
	N601N	P.O.	Gunnery Instructor	Gold nylon.
	N601A	P.O.	Gunnery Instructor	Red.
	N601B	P.O.	Gunnery Instructor	Blue.

APPENDIX " C "—*continued.*

2. The only exceptions to this system are—

(*a*) Beret Badges—Pattern numbers N9, N10 and N10X which are all metal badges.

(*b*) Foul Weather Cap Badges—Pattern numbers N5X and N6X which are all metal badges.

(*c*) Pattern numbers N412 and N413 which are Armlets, Patrol, for other ratings and Petty Officers respectively.

(*d*) Damage Control Badges which are all printed badges.

(*e*) W.R.A.N.S. Badges which are identified by vocabulary numbers.

3. Good Conduct Badges, except gold nylon type, are stocked in single badges, sets of two and sets of three.

4. The numbers to be used in connection with the various badges are listed below—

Pattern No.	*Rating.*
N1..	Petty Officer.
N2..	Leading Rate.
	Cap Badges—
N5..	Chief Petty Officer.
N5X	Chief Petty Officer.
N6..	Petty Officer.
N6X	Petty Officer.
N7..	Class III. Ratings.
	Beret Badges—
N9..	Chief Petty Officer.
N10	Petty Officer.
N10X	Other ratings.
	Good Conduct Badges—
N11N	Gold nylon.
N11—1 Stripe	Gold wire.
N11—2 Stripe	Gold wire.
N11—3 Stripe	Gold wire.
N11A—1 Stripe	Red.
N11A—2 Stripe	Red.
N11A—3 Stripe	Red.
N11B—1 Stripe	Blue.
N11B—2 Stripe	Blue.
N11B—3 Stripe	Blue.
	Miscellaneous Badges—
N85	Spare letter " C ".
N86	Spare letter " W ".
N87	Spare letter " M ".
N228	Spare letter " H ".
N229	Spare letters " SE ".
N230	Spare letter " A ".
N231	Spare letter " E ".

APPENDIX " C "—*continued.*

Pattern No.	*Rating.*
	Miscellaneous Badges—continued.
N232	Spare letter " O ".
N233	Spare letters " MET ".
N234	Spare letter " P ".
N410	Good Shooting Badge.
N411	Bugler's Badge.
N412	Armlets, Patrol.
N413	Armlets, P.O., for wear on watchcoats.
N415	Small crown for addition to badges.
N416	Large crown for addition to badges.
N417	Star for addition to badges.
N472	Letters " SWS ".
N485R	Damage Control H.Q. (White on Red).
N485G	Damage Control H.Q. (White on Green).
N485Y	Damage Control H.Q. (White on Yellow).
N485E	Damage Control H.Q. (Black on Orange).
N486R	Damage Control Figure 1 (White on Red).
N486G	Damage Control Figure 1 (White on Green).
N486Y	Damage Control Figure 1 (White on Yellow).
N486E	Damage Control Figure 1 (Black on Orange).
N487R	Damage Control Figure 2 (White on Red).
N487G	Damage Control Figure 2 (White on Green).
N487Y	Damage Control Figure 2 (White on Yellow).
N487E	Damage Control Figure 2 (Black on Orange).
N488R	Damage Control Figure 3 (White on Red).
N488G	Damage Control Figure 3 (White on Green).
N488Y	Damage Control Figure 3 (White on Yellow).
N488E	Damage Control Figure 3 (Black on Orange).
N489R	Damage Control Figure 4 (White on Red).
N489G	Damage Control Figure 4 (White on Green).
N489Y	Damage Control Figure 4 (White on Yellow).
N489E	Damage Control Figure 4 (Black on Orange).
N490R	Damage Control Figure 5 (White on Red.)
N490G	Damage Control Figure 5 (White on Green).
N490Y	Damage Control Figure 5 (White on Yellow).
N490E	Damage Control Figure 5 (Black on Orange).
N492R	Damage Control Figure 6 (White on Red).
N492G	Damage Control Figure 6 (White on Green).
N492Y	Damage Control Figure 6 (White on Yellow).
N492E	Damage Control Figure 6 (Black on Orange).
	R.A.N.R. Badges—
N440—1 Stripe	Badges, Good Service.
N441	Badges, Lapel, R.A.N.R. for wear by C.P.O.'s.
N443	Badges, Arm, R.A.N.R.
N444	Letters, Shoulder, R.A.N.R., for Musicians.
N445	Badges, Metal for Naval Reservists, " bar brooch " or " A " type fastener.
	Branch Badges—

Note.—Badges for C.P.O.'s are in pairs.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	GUNNERY BRANCH.
	Instructors—
N600	Chief Petty Officer.
N601	Petty Officer or Leading Rate.
	Fire Control Armourers—
N602	Chief Petty Officer.
N603	F.C. 1st Class (P.O. and Confirmed Leading Rate).
N604	F.C. 2nd Class.
	Gunlayer Armourer—
N605	Chief Petty Officer.
N606	G.A. 1st Class (P.O. and Confirmed Leading Rate).
N607	G.A. 2nd Class.
	Quarters Armourer—
N608	Chief Petty Officer.
N609	Q.A. 1st Class (P.O. and Confirmed Leading Rate).
N610	Q.A. 2nd Class.
	Seaman Gunners—
N611	Seaman Gunner (Quarters).
N612	Seaman Gunner (Control).
	RADAR PLOT BRANCH.
	Plotting and Radar Instructors—
N45	Chief Petty Officer.
N46	Petty Officer or Leading Rate.
	Radar Plot Ratings—
N47	Chief Petty Officer.
N48	R.P. 1st Class (P.O. and Confirmed Leading Rate).
N49	R.P. 2nd Class.
N50	R.P. 3rd Class
	TORPEDO AND ANTI-SUBMARINE BRANCH.
	Clearance Divers—
N56	Chief Petty Officer.
N57	C.D. 1st Class (P.O. and Confirmed Leading Rate).
N58	C.D. 2nd Class
N59	C.D. 3rd Class.
	Torpedo and Anti-Submarine Instructors—
N60	Chief Petty Officer.
N61	Petty Officer and Confirmed Leading Rate.
	Underwater Control Ratings—
N67	Chief Petty Officer.
N68	U.C. 1st Class (P.O. and Confirmed Leading Rate).
N69	U.C. 2nd Class.
N70	U.C. 3rd Class.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	TORPEDO AND ANTI-SUBMARINE BRANCH—*continued.*
	Underwater Weapons Ratings—
N71	Chief Petty Officer
N72	U.W. 1st Class (P.O. and Confirmed Leading Rate).
N73	U.W. 2nd Class.
N74	U.W. 3rd Class.
	COXSWAINS.
N76	Chief Petty Officer or Acting Chief Petty Officer.
N78	Petty Officer Coxswain.
	SURVEYING RECORDER BRANCH.
N90	Chief Petty Officer.
N91	S.R. 1st Class (P.O. and Confirmed Leading Rate).
N92	S.R. 2nd Class.
N93	S.R. 3rd Class.
	TACTICAL COMMUNICATION BRANCH.
	Tactical Communication Instructors—
N120	Chief Communication Yeoman (T.C.I.).
N121	Communication Yeoman (T.C.I.).
N122	Chief Communication Yeoman.
N123	Tactical Communications Ratings technically qualified as—Communication Yeoman.
N124	Leading Tactical Communication Operator.
N125	Tactical Communication Operator.
N126	Ordinary Tactical Communication Operator.
	RADIO COMMUNICATION BRANCH.
	Radio Communication Instructors—
N136	Chief Radio Communication Supervisor (R.C.I.).
N137	Radio Communication Supervisor or Leading Radio Communication Operator (R.C.I.).
	Radio Communication Operators—
N138	Chief Radio Communication Supervisor.
N139	Radio Communication Operator technically qualified as Radio Communication Supervisor.
N140	Leading Radio Communication Operator.
N141	Radio Communication Operator.
N142	Ordinary Radio Communication Operator.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	ENGINEERING MECHANIC BRANCH.
N152	Chief Engineering Mechanic.
N153	Engineering Mechanic Ratings technically qualified as Petty Officer Engineering Mechanic.
N154	Leading Engineering Mechanic.
N155	Engineering Mechanic 1st Class.
N156	Engineering Mechanic 2nd Class.
	Mechanicians—
N166	Chief Mechanician and Mechanician 1st Class.
N167	Mechanician 2nd Class or Acting Mechanician 2nd Class.
	REGULATING BRANCH.
N180	Master-at-Arms.
N181	Regulating Petty Officer and Leading Patrolman.
	AIRCREW.
N191	Pilots Class I. and II.
N192	Observers Class I. and II.
N193	Aircrewman (T) (A) or (S).
	NAVAL AIRMAN BRANCH.
	Aircraft Handlers—
N200	Chief Petty Officer.
N201	A.H. 1st Class (P.O. and Confirmed Leading Rate).
N202	A.H. 2nd Class.
N203	A.H. 3rd Class.
	Safety Equipment Ratings—
N204	Chief Petty Officer
N205	S.E. 1st Class (P.O. and Confirmed Leading Rate).
N206	S.E. 2nd Class.
N207	S.E. 3rd Class.
	Meteorological Observers—
N220	Chief Petty Officer.
N221	M.O. 1st Class (P.O. and Confirmed Leading Rate).
N222	M.O. 2nd Class.
N223	M.O. 3rd Class.
	Photographers—
N224	Chief Petty Officer.
N225	Photographer 1st Class (P.O. and Confirmed Leading Rate).
N226	Photographer 2nd Class.
N227	Photographer 3rd Class.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	NAVAL AIRMAN BRANCH—*continued.*
	Mechanics (A)—
N208	Chief Airman Fitter (A).
N209	Petty Officer Airman Fitter (A) (P.O. and Confirmed Leading Rate technically qualified as Petty Officer).
N210	Leading Airman Mechanic (A).
N211	Naval Airman 1 Mechanic (A).
	Mechanics (E)—
N212	Chief Airman Fitter (E).
N213	Petty Officer Airman Fitter (E) (P.O. and Confirmed Leading Rate technically qualified as Petty Officer).
N214	Leading Airman Mechanic (E).
N215	Naval Airman 1 Mechanic (E).
	Mechanics (O)—
N216	Chief Airman Fitter (O).
N217	Petty Officer Airman Fitter (O) (P.O. and Confirmed Leading Rate technically qualified as Petty Officer).
N218	Leading Airman Mechanic (O).
N219	Naval Airman 1 Mechanic (O).
	Aircraft Mechanicians—
N255	Chief Aircraft Mechanician and Aircraft Mechanician 1st Class.
N256	Aircraft Mechanician 2nd Class and 3rd Class.
	PHYSICAL AND RECREATIONAL TRAINING BRANCH.
	Staff Physical Training Instructors—
N266	Chief Petty Officer.
N267	Petty Officer or Leading Rate.
	Physical Trainers.
N268	Chief Petty Officer.
N269	P.T. 1st Class (P.O. and Confirmed Leading Rate).
N270	P.T. 2nd Class.
	* ELECTRICAL BRANCH—NEW PATTERN.
	Electricians—Power—
N625	Chief Electricians (Power).
	Other Ratings technically qualified as—
N626	Electrician (Power) (P.O. and Confirmed Leading Rate).
N627	Leading Electrical Mechanic (Power).
N628	Electrical Mechanic (Power) 1st Class.
N629	Electrical Mechanic (Power) 2nd Class.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	*ELECTRICAL BRANCH—NEW PATTERN—*continued.*
	Electricians (Electronics)—
N630	Chief Electrician (Electronics).
	Other ratings technically qualified as—
N631	Electrician (Electronics) (P.O. and Confirmed Leading Rate).
N632	Leading Electrical Mechanic (Electronics).
N633	Electrical Mechanic (Electronics) 1st Class.
N634	Electrical Mechanic (Electronics) 2nd Class.
	Electricians (Air)—
N635	Chief Electrician (Air).
	Other ratings technically qualified as—
N636	Electrician (Air) (P.O. and Confirmed Leading Rate).
N637	Leading Electrical Mechanic (Air).
N638	Electrical Mechanic (Air) 1st Class.
N639	Electrical Mechanic (Air) 2nd Class.
	Radio Electricians—
N640	Chief Radio Electrician.
	Other ratings technically qualified as—
N641	Radio Electrician (P.O. and Confirmed Leading Rate).
N642	Leading Radio Electrical Mechanic.
N643	Radio Electrical Mechanic 1st Class.
N644	Radio Electrical Mechanic 2nd Class.
	Radio Electricians (Air)—
N645	Chief Radio Electrician (Air).
	Other ratings technically qualified as—
N646	Radio Electrician (Air) (P.O. and Confirmed Leading Rate).
N647	Leading Radio Electrical Mechanic (Air).
N648	Radio Electrical Mechanic (Air) 1st Class.
N649	Radio Electrical Mechanic (Air) 2nd Class.
	*ELECTRICAL BRANCH—OLD PATTERN.
	Electricians—
N279	Chief Electrician.
	Other ratings, technically qualified as—
N280	Electrician (P.O. and Confirmed Leading Rate).
N281	Leading Electrical Mechanic.
N282	Electrical Mechanic 1st Class.
N283	Electrical Mechanic 2nd Class.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	*ELECTRICAL BRANCH—OLD PATTERN—*continued.*
	Electricians (Air)—
N284	Chief Electrician (Air).
	Other ratings, technically qualified as—
N285	Electrician (Air) (P.O. and Confirmed Leading Rate).
N286	Leading Electrical Mechanic (Air).
N287	Electrical Mechanic (Air) 1st Class.
N288	Electrical Mechanic (Air) 2nd Class.
	Radio Electricians—
N289	Chief Radio Electrician.
	Other ratings, technically qualified as—
N290	Radio Electrician (P.O. and Confirmed Leading Rate).
N291	Leading Radio Electrical Mechanic.
N292	Radio Electrical Mechanic 1st Class.
N293	Radio Electrical Mechanic 2nd Class.
	Radio Electricians (Air)—
N294	Chief Radio Electrician (Air).
	Other ratings, technically qualified as—
N295	Radio Electrician (Air) (P.O. and Confirmed Leading Rate).
N296	Leading Radio Electrical Mechanic (Air).
N297	Radio Electrical Mechanic (Air) 1st Class.
N298	Radio Electrical Mechanic (Air) 2nd Class.
	SUPPLY AND SECRETARIAT BRANCH.
	Writers.
N310	Chief Petty Officer.
N311	Petty Officer and Leading Rate qualified as Petty Officer.
N312	Other ratings.
	Store Ratings (S)—
N313	Chief Petty Officer (S).
N314	Petty Officer (S) and Leading Rate qualified as Petty Officer (S).
N315	Other ratings (S).
	Cooks—
N316	Chief Petty Officer.
N317	Petty Officer and Leading Rate qualified as Petty Officer.
N318	Other ratings.
	Officers' Stewards—
N319	Chief Petty Officer.
N320	Petty Officer and Leading Rate qualified as Petty Officer.
N321	Other ratings.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	SUPPLY AND SECRETARIAT BRANCH—*continued.*
	Officers' Cooks—
N322	Chief Petty Officer.
N323	Petty Officer and Leading Rate qualified as Petty Officer.
N324	Other ratings.
	Stores Ratings (V)—
N326	Chief Petty Officer (V).
N327	Petty Officer (V) and Leading Rate qualified as Petty Officer.
N328	Other ratings.
	Butchers—
N329	Chief Petty Officer.
N330	Petty Officer and Leading Rate qualified as Petty Officer.
N331	Other ratings.
	SHIPWRIGHT BRANCH.
	Artisans—
N336	Chief Petty Officer Artisan.
N337	Artisans 1st Class, 2nd Class and 3rd Class.
N338	Artisans 4th Class and 5th Class.
	SAILMAKERS' BRANCH.
N350	Chief Sailmaker.
	Other ratings technically qualified as—
N351	Sailmaker.
N352	Sailmaker's Mate.
	DIVER'S BRANCH.
N360	Chief Petty Officer.
N361	Diver Class I. (P.O. and Confirmed Leading Rate).
N362	Diver Class II. (Cuff Badge).
N363	Diver Class III. (Cuff Badge).
	SICK BERTH BRANCH.
N380	Chief Petty Officer.
N381	Petty Officer and Leading Rate technically qualified as Petty Officer.
N382	Other ratings.
	Advanced Nurses—
N383	Chief Petty Officer.
N384	Petty Officer and Leading Rate technically qualified as Petty Officer.
N385	Other ratings.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	SICK BERTH BRANCH—*continued.*
	X-ray Assistants—
N386	Chief Petty Officer.
N387	Petty Officer and Leading Rate technically qualified as Petty Officer.
N388	Other ratings.
	Masseurs—
N389	Chief Petty Officer.
N390	Petty Officer and Leading Rate technically qualified as Petty Officer.
N391	Other ratings.
	Hygiene Inspectors—
N392	Chief Petty Officer.
N393	Petty Officer and Leading Rate technically qualified as Petty Officer.
N394	Other ratings.
	Laboratory Assistants—
N395	Chief Petty Officer.
N396	Petty Officer and Leading Rate technically qualified as Petty Officer.
N397	Other ratings.
	Mental Nurses—
N398	Chief Petty Officer.
N399	Petty Officer and Leading Rate technically qualified as Petty Officer.
N400	Other ratings.
	Operating Room Assistants—
N401	Chief Petty Officer.
N402	Petty Officer and Leading Rate technically qualified as Petty Officer.
N403	Other ratings.
	Chiropodists—
N560	Chief Petty Officer.
N561	Petty Officer and Leading Rate technically qualified as Petty Officer.
N562	Other ratings.
	Dietitians—
N563	Chief Petty Officer.
N564	Petty Officer and Leading Rate technically qualified as Petty Officer.
N565	Other ratings.
	Dispenser—
N566	Chief Petty Officer.
N567	Petty Officer and Leading Rate technically qualified as Petty Officer.
N568	Other ratings.

APPENDIX "C"—*continued.*

Pattern No.	*Rating.*
	SICK BERTH BRANCH—*continued.*
	Occupational Therapists—
N569	Chief Petty Officer.
N570	Petty Officer and Leading Rate technically qualified as Petty Officer.
N571	Other ratings.
	Orthoptists—
N572	Chief Petty Officer
N573	Petty Officer and Leading Rate technically qualified as Petty Officer.
N574	Other ratings.
	Aviation Medicine—
N575	Chief Petty Officer.
N576	Petty Officer and Leading Rate technically qualified as Petty Officer.
N577	Other ratings.
	DENTAL BRANCH.
N450	Chief Petty Officer.
N451	Petty Officer and Leading Rate technically qualified as Petty Officer.
N452	Other ratings.
	BAND BRANCH.
N661	Chief Petty Officer Musician.
N662	Petty Officer Musician.
N663	Leading Musician.
N664	Musician.
N665	Ordinary and Recruit Musician.
N666	Junior Musician.

* New pattern Electrical Branch Badges will be issued as stocks of the corresponding old pattern badges are exhausted.

APPENDIX "D".

SCHEDULE OF BADGES FOR W.R.A.N.S. RATINGS.

Vocab. No.	*Rating.*	*Colour.*
	MISCELLANEOUS BADGES.	
31415 (N415)	Small crown for addition to badges	Gold wire.
40415	Small crown for addition to badges	Blue on Blue.
33415 (N415B)	Small crown for addition to badges	Blue on White.
31416 (N416)	Large crown for addition to badges	Gold wire.
40416	Large crown for addition to badges	Blue on Blue.
33416 (N416B)	Large crown for addition to badges	Blue on White.
31417 (N417)	Star for addition to badges	Gold wire.
40417	Star for addition to badges	Blue on Blue.

APPENDIX "D"—*continued.*

Vocab. No.	*Rating.*	*Colour.*
	MISCELLANEOUS BADGES—*continued.*	
33417 (N417B)	Star for addition to badges	Blue on White.
31008 (N11) 1 stripe	Good Conduct Badge	Gold wire.
31009 (N11) 2 stripe	Good Conduct Badge	Gold wire.
31010 (N11) 3 stripe	Good Conduct Badge	Gold wire.
40008 1 stripe	Good Conduct Badge	Blue on Blue.
33008 (N11B) 1 stripe	Good Conduct Badge	Blue on White.
33009 (N11B) 2 stripe	Good Conduct Badge	Blue on White.
33010 (N11B) 3 stripe	Good Conduct Badge	Blue on White.
	HAT BADGES.	
40600	Chief Wran	Blue on Blue.
40601	P.O. Wran	Blue on Blue.
	RATING BADGES.	
31001 (N1)	P.O. Wran	Gold wire.
40001	P.O. Wran	Blue on Blue.
33001 (N1B)	P.O. Wran	Blue on White.
31002 (N2)	Leading Wran	Gold wire.
40002	Leading Wran	Blue on Blue.
33002 (N2B)	Leading Wran	Blue on White.
	BRANCH BADGES.	
	Stores (S) Category—	
31293 (N313)	Chief Wran Stores (S)	Gold wire.
40605	Chief Wran Stores (S)	Blue on Blue.
33605	Chief Wran Stores (S)	Blue on White
31294 (N314)	Petty Officer Wran Stores (S)	Gold wire.
40294	Petty Officer Wran Stores (S)	Blue on Blue.
33294 (N314B)	Petty Officer Wran Stores (S)	Blue on White.
31295 (N315)	Other Ratings Stores (S)	Gold wire.
40295	Other Ratings Stores (S)	Blue on Blue.
33295 (N315B)	Other Ratings Stores (S)	Blue on White.
	Stores (V) Category—	
31310 (N326)	Chief Wran Stores (V)	Gold wire.
40611	Chief Wran Stores (V)	Blue on Blue.
33611	Chief Wran Stores (V)	Blue on White.
31311 (N327)	Petty Officer Wran Stores (V)	Gold wire.
40311	Petty Officer Wran Stores (V)	Blue on Blue.
33311 (N327B)	Petty Officer Wran Stores (V)	Blue on White.
31312 (N328)	Other Ratings Stores (V)	Gold wire.
40312	Other Ratings Stores (V)	Blue on Blue.
33312 (N328B)	Other Ratings Stores (V)	Blue on White.

APPENDIX "D"—*continued.*

BRANCH BADGES—*continued.*

Vocab. No.	*Rating.*	*Colour.*
	Cooks Category—	
31297 (N316)	Chief Wran Cook (S)	Gold wire.
40634	Chief Wran Cook (S)	Blue on Blue.
33634	Chief Wran Cook (S)	Blue on White.
31298 (N317)	Petty Officer Wran Cook (S)	Gold wire.
40298	Petty Officer Wran Cook (S)	Blue on Blue.
33298 (N317B)	Petty Officer Wran Cook (S)	Blue on White.
31299 (N318)	Other Ratings Cooks (S)	Gold wire.
40299	Other Ratings Cooks (S)	Blue on Blue.
33299 (N318B)	Other Ratings Cooks (S)	Blue on White.
	Writers (General Duties) and (Pay)—	
31289 (N310)	Chief Wran Writer (G.D.) or (P)	Gold wire.
40642	Chief Wran Writer (G.D.) or (P)	Blue on Blue.
33642	Chief Wran Writer (G.D.) or (P)	Blue on White.
31290 (N311)	Petty Officer Wran Writer (G.D.) or (P)	Gold wire.
40290	Petty Officer Wran Writer (G.D.) or (P)	Blue on Blue.
33290 (N311B)	Petty Officer Wran Writer (G.D.) or (P)	Blue on White.
31291 (N312)	Other Ratings Writers (G.D.) or (P)	Gold wire.
40291	Other Ratings Writers (G.D.) or (P)	Blue on Blue.
33291 (N312B)	Other Ratings Writers (G.D.) or (P)	Blue on White.
	Writers (Shorthand) Category—	
31308	Other Ratings Writers (Shorthand)	Gold wire.
40308	Other Ratings Writers (Shorthand)	Blue on Blue.
33308	Other Ratings Writers (Shorthand)	Blue on White.
	Sick Berth Attendant Category—	
31352 (N380)	Chief Wran Sick Berth	Gold wire.
40652	Chief Wran Sick Berth	Blue on Blue.
33652	Chief Wran Sick Berth	Blue on White.
31353 (N381)	Petty Officer Wran Sick Berth	Gold wire.
40353	Petty Officer Wran Sick Berth	Blue on Blue.
33353 (N381B)	Petty Officer Wran Sick Berth	Blue on White.
31354 (N382)	Other Ratings—S.B.A.	Gold wire.
40354	Other Ratings—S.B.A.	Blue on Blue.
33354 (N382B)	Other Ratings—S.B.A.	Blue on White.
	Stewards (G) Category—	
31690	Chief Wran Steward (G)	Gold wire.
40690	Chief Wran Steward (G)	Blue on Blue.
33690	Chief Wran Steward (G)	Blue on White.
31691	Petty Officer Wran Steward (G)	Gold wire.
40691	Petty Officer Wran Steward (G)	Blue on Blue.
33691	Petty Officer Wran Steward (G)	Blue on White.
31692	Other Ratings Stewards (G)	Gold wire.
40692	Other Ratings Stewards (G)	Blue on Blue.
33692	Other Ratings Stewards (G)	Blue on White.

APPENDIX "D"—*continued.*

BRANCH BADGES—*continued.*

Vocab. No.	*Rating.*	*Colour.*
	Radio Communication Operator Category—	
31149 (N138)	Chief Wran Radio Communication Supervisor	Gold wire.
40725	Chief Wran Radio Communication Supervisor	Blue on Blue.
33725	Chief Wran Radio Communication Supervisor	Blue on White.
31150 (N139)	Wran Radio Communication Supervisor	Gold wire.
40150	Wran Radio Communication Supervisor	Blue on Blue.
33150 (N139B)	Wran Radio Communication Supervisor	Blue on White.
31151 (N140)	Ratings professionally qualified as Leading Wran Radio Communication Operator	Gold wire.
40151	Ratings professionally qualified as Leading Wran Radio Communication Operator	Blue on Blue.
33151 (N140B)	Ratings professionally qualified as Leading Wran Radio Communication Operator	Blue on White.
31152 (N141)	Wran Radio Communication Operator (Able Rating)	Gold wire.
40152	Wran Radio Communication Operator (Able Rating)	Blue on Blue.
33152 (N141B)	Wran Radio Communication Operator (Able Rating)	Blue on White.
31153 (N142)	Other Ratings Radio Communication Operator	Gold wire.
40153	Other Ratings Radio Communication Operator	Blue on Blue.
33153 (N142B)	Other Ratings Radio Communication Operator	Blue on White.
	Regulating Category—	
31172 (N180)	Chief Wran Regulating	Gold wire.
40802	Chief Wran Regulating	Blue on Blue.
33802	Chief Wran Regulating	Blue on White.
31173 (N181)	Petty Officer Wran Regulating	Gold wire.
40173	Petty Officer Wran Regulating	Blue on Blue.
33173 (N181B)	Petty Officer Wran Regulating	Blue on White.

APPENDIX " D "—*continued.*

Vocab No.	*Rating.*	*Colour.*
	BRANCH BADGES—*continued.*	
	Radar Plot Category—	
31062 (N47)..	Chief Wran Radar Plot	Gold wire.
40749	Chief Wran Radar Plot	Blue on Blue.
33749	Chief Wran Radar Plot	Blue on White.
31063 (N48)..	Petty Officer Wran Radar Plot	Gold wire.
40063	Petty Officer Wran Radar Plot	Blue on Blue.
33063 (N48B)	Petty Officer Wran Radar Plot	Blue on White.
31064 (N49)..	Leading Wran Radar Plot	Gold wire.
40064	Leading Wran Radar Plot	Blue on Blue.
33064 (N49B)	Leading Wran Radar Plot	Blue on White.
31065 (N50)..	Wran Radar Plot (Able Rating)	Gold wire.
40065	Wran Radar Plot (Able Rating)	Blue on Blue.
33065 (N50B)	Wran Radar Plot (Able Rating)	Blue on White.
31753	Other Ratings Radar Plot	Gold wire.
40753	Other Ratings Radar Plot	Blue on Blue.
33753	Other Ratings Radar Plot	Blue on White.
	Motor Transport Driver Category—	
31678	Petty Officer Wran Motor Transport Driver	Gold wire.
40678	Petty Officer Wran Motor Transport Driver	Blue on Blue.
33678	Petty Officer Wran Motor Transport Driver	Blue on White.
31679	Other Ratings Motor Transport Driver	Gold wire.
40679	Other Ratings Motor Transport Driver	Blue on Blue.
33679	Other Ratings Motor Transport Driver	Blue on White.

Badges also worn by naval ratings are shown with the equivalent " N " series numbers.

(DV 930/51/13.)

(*Navy Order* 747 *of* 1959.)

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Registrar

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C.N.O.'s 597-619/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
8th August, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

5538/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

RESTRICTED.

597.—ACNB—General Messages.

In accordance with Navy Order 336 of 1959, the state of ACNB general messages as at the 1st July, 1960, is shown in the appendix to this order.

APPENDIX.

The following F messages may now be withdrawn—

1959—
052 *see* C.N.O. 338/60
130 *see* Amdt. No. 2 A.B.R. 10

1960—
004 *see* C.N.O. 504/60.
045 *see* amendment A.B.R. 18.

2. As at 0001Z, 1st July, 1960, the following F messages are still in force—

1959—

134	141	142	168
176	182	202	204

1960—

003	016	020	034	040	051	056	057	063	064
065	068	070	071	076	080	094	097	100	102
103	104	107	112	122	124	125	126	129	132
133	134	136	137	138	139	141	142	143	145
147	148	149.							

3. The following RF messages may now be withdrawn—

1959—
060

1960—

001	007	015 *see* S.T.I.
002	009	016 *see* S.T.I.
003	010	017 *see* S.T.I.
004 *see* RANAMO	011 *see* S.I.	
005 *see* RANAMO	012 *see* S.I.	
006 *see* S.I.	013 *see* RANAMO.	

4. As at 0001Z, 1st April, 1960, the following RF messages are still in force—

1960—
014
018
019
020.

(H.N.B. 77/5/8.)

(*Navy Order* 336 *of* 1959.)

UNCLASSIFIED.

598.—Naval Identity Cards—Monthly Returns.

Reports of the loss of Naval Identity Cards to Navy Office are to be discontinued.

2. Records of lost, damaged or destroyed identity cards are to be kept by the ship or establishment as appropriate.

(DNI 63/201/8.)

UNCLASSIFIED.

599.—R.A.N. Central Canteen and Relief Fund—Constitution of Committees.

Navy Order 953 of 1959 is to be amended as follows—

(*a*) *Delete* paragraph 9.

(*b*) *Insert* in its stead, new paragraph 9—

" Proposals for inclusion in the agenda of the meetings should be forwarded by administrative authorities to the Secretary R.A.N. Relief Fund and the Secretary, R.A.N. Central Canteen Fund, Victoria Barracks, Melbourne, when called for."

2. Navy Order 4 of 1960 is hereby cancelled.

(DPS 8/52/15.)

(*Navy Order* 4 *of* 1960.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

600.—Visits by Personnel to Areas other than their Own.

When personnel, either uniformed or civil, are to visit areas other than their own, a letter giving the following details is to be forwarded to the administrative authority of the area to be visited in sufficient time for the necessary arrangements to be made.

For Signal Use Only. Not to be used in letters.	
A	Name rank and position of visitor or visitors. If an overseas visitor the vote to which expenditure is to be charged
B	Means of travel. Time (local) date and place of arrival. If by air the airline's name and flight number, and whether quoted time of arrival is at airport or city terminal
C	Whether accommodation is required, if so preferences and period of booking. If private accommodation is being used, address and telephone number
D	Whether a car is required on arrival. If so, where. (*Note.*—Unless special circumstances apply motor transport is provided to and from city terminals)
E	Whether programme arranged or if the programme is to be arranged by the authority being visited. Transport requirements if any, to be stated. Whether uniform or civilian clothes will be worn. Any other relevant remarks including time of departure and details of mode of transport e.g. flight number, airline and time in case of air travel.

2. If the journey is of an unexpected nature, or at short notice the details may be forwarded by signal, in which case the letters shown in the first column of the table should be used as a " Signal Format ".

E.g.

ACNB
FOICEA
Info. WATSON
NIRIMBA
C.N.O. 601/1960
A. LT. CDR. BLANK. ASSIST TO DW
B. AIR, ANA FLIGHT 176 16 SEP. 1730K CITY TERMINAL.
C. NOT REQUIRED 16 LIME ST. DARLING POINT FL. 1234
D. YES. CITY TERMINAL
E. ARRANGED.
UNIFORM
CALL FOIC A M 17TH.
WATSON P M 17TH—CAR.
NIRIMBA A M 18TH—CAR,
DEPART FOR MELBOURNE 18TH 1645K. CITY TERMINAL
TAA FLIGHT 190—CAR.

(DTSR 77/5/17.)

UNCLASSIFIED.

601.—Ratings—Recommendations for Re-engagement.

In certain branches there are senior ratings who gained rapid advancement some years ago when rosters were empty. Some rosters are now blocked and the retention of any Chief Petty Officer or Petty Officer whose service is only just adequate may prevent the advancement of an ambitious young man who would in due course give much better service.

2. Notwithstanding shortages in individual branches, only those ratings who display zeal and energy in carrying out their duties are to be recommended by the Captain for re-engagement. Those who perform their every-day tasks sufficiently well to avoid being disciplined but without enthusiasm are not to be recommended.

3. Re-engagement is subject to Naval Board approval and is not automatic for any Petty Officer or man by virtue of his seniority. It is dependent upon the recommendation of the Captain based on efficient and enthusiastic performance of his duty by the rating concerned and also on examination of his service record both by the Captain and the Naval Board.

4. This order will be reprinted for posting on notice boards.

5. Navy Order 865 of 1958 is hereby cancelled.

(DMT 307/201/12.)

(*Navy Order* 865 *of* 1958.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

602.—T.A.L.B.E. (Talk and Listen Beacon Equipment)—Departmental Responsibilities.

(*A.F.O.* 1812/1959.)

General and technical information on T.A.L.B.E. is given in A.P. 2554D, Volume 1.

2. The responsibility for testing and maintenance of T.A.L.B.E. in the Fleet Air Arm is as follows—

(*a*) *Aircrew*—

(i) Testing T.A.L.B.E. on personal issue, at weekly intervals during flying periods, in accordance with AP.2554D, Volume 1, Part 2, chapter 1, paragraphs 11 to 13 inclusive.

(ii) Ensuring that the batteries fitted in T.A.L.B.E. on personal issue are not aged over 6 months from the date of manufacture.

(*b*) *Squadron Safety Equipment and Survival Officer*—

Supervising and keeping a record of the tests carried out by aircrew as in (*a*) (i) above.

(*c*) *Safety Equipment and Survival Officer*—

(i) Keeping a record of the tests carried out by aircrew as in (*a*) (i) above when no Squadron S.E.S.O. is borne.

(ii) Leak testing, at six monthly intervals, T.A.L.B.E. on personal issue to aircrew in accordance with AP.2554D, Volume 1, Part 2, chapter 1, paragraphs 14 to 20 inclusive.

(*d*) *Air Electrical Department*—

(i) Testing of T.A.L.B.E. and batteries in accordance with AP.2554D, Volume 1, Part 2, chapter 1, paragraphs 11 to 13 inclusive, on transfer from the Air Store to the Safety Equipment Section, or on initial issue direct to aircrew.

(ii) Maintenance of T.A.L.B.E. within the limits laid down in AP.2554D, Volume 1, Part 2, chapter 1, paragraphs 21 to 29 inclusive.

(iii) Certification of all T.A.L.B.E. and batteries found unserviceable by aircrew and/or Safety Equipment Section Tests.

3. As Le Clanche type batteries are used in the R.A.N. in lieu of the Kalium batteries used in the R.N., the tests laid down in AP.2554D, Volume 1, Part 2, chapter 1, paragraph 10 are not applicable. Similarly the reference to shelf life in paragraph 9 of that chapter is also not applicable.

4. The Eveready Battery type Q.590 used in R.A.N. equipments has a shelf life of six months from the date of manufacture. Batteries in excess of this age are not to be issued to or carried by flying personnel.

(DAMR 519/259/25.)

RESTRICTED.

603.—Wireless—Aerial Outfits A.P.H., A.R.U. and A.J.D. Replacement of Pattern 53300 Extension Tube.

Reports have been received which indicate that faulty extension tubes, pattern 53300, used with aerial outfits A.P.H., A.R.U. and A.J.D., may still be fitted in H.M.A. ships.

2. Certain extension tubes, pattern 5330 used in aerial outfits A.P.H., A.R.U. and A.J.D. are subject to an unacceptably high insertion loss. This results in a reduction in range which varies according to the frequency in use.

3. The faulty extension tubes were first put into service in July, 1952 and may be distinguished from normal tubes in the following manner—

(*a*) *Normal Tubes.*—The tube is riveted to the end cap at both ends, the heads of the rivets being almost flush with the surface of the tube.

(*b*) *Faulty Tubes.*—The tube is riveted to the end cap at one end and screwed to the end cap at the other by four in number round head O.B.A. screws, the heads of which rise approximately ¼ inch above the surface of the tube.

4. Stocks held by (S)N.S.O.'s are to be examined and arrangements made for modification of defective tubes. These modified tubes will be identified by the suffix " A " after the pattern number.

5. Ships' staffs are to inspect the extension tubes and if any of these are found to be of the type specified in paragraph 2 (*b*) above, the following action is to be taken—

Insert an item in the next Defect List to cover the work of replacing the defective tubes worded as follows—

" To replace defective patt. 53300 extension tube in accordance with C.N.O. 603/1960, pattern 53300 extension tube has an unacceptably high insertion loss."

The work is to be carried out by dockyards.

6. On replacement, defective extension tubes are to be returned to Store for modification and subsequent return to stock.

(DEE 518/51/69.)

UNCLASSIFIED.

604.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 1486/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. Commanding Officers of H.M.A. ships who are unable to comply within three months from the date of this order are to report the fact specially to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition &c., which may be involved.*
RNC 1061XA RNC 1064XA RNC 1072XA RNC 1073XA RNC 1195XB	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1200XB RNC 1328XC	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 927 RNC 1067XA RNC 1187XB	SC 109	Q.F. 4.7-in.
RNC 926	SC 122	Q.F. 4.7-in.; Q.F. 4.5-in. Impulse torpedo.
RNC 937	SC 150	
RNC 6204 RNC 6205 RNC 6219 RNC 6229 RNC 6235 RNP 1489 RNP 1497	ASN/T 190–054	Q.F. 4.7-in.; Q.F. 4-in. (F.A.).
KA 906 KA 907 KA 910 KA 911	FNHP 022	Q.F. 40/60.
SPDN 5074 SPDN 5229 SPDN 5232 SPDN 5234 SPDN 5236 SPDN 5238 SPDN 5241 SPDN 5246 SPDN 5330 SPDN 5333 SPDN 5336 SPDN 5337 SPDN 5340	FNHP 020	Q.F. 40/60.

2. Attention is drawn to article 211 of Naval Magazine and Explosive Regulations, B.R. 862 and paragraphs 6, 7 and 9 of article 53 of Naval Cordite Regulations B.R. 862A.

3. R.A.N. Armanent Depots.—Separate instructions have been issued.

(DW 729/57/51.)

RESTRICTED.

605.—Gun Mountings—4.5-in. R.P. 41, Mark 6 Series Mountings—Supply of Cartridge 4.5-in. (F.A.). Drill for Tuning Purposes.

(*A.F.O.* 1126/1960.)

When tuning the elevation auto-control system of the 4.5-in. mark 6 series mountings, the correct balance of the elevating mass is achieved by placing a complete round in the breech of one gun and a complete round in the loading tray of the other gun.

2. Experience has proved that the use of a separate loading " Drill " round in the breech is unsatisfactory whilst the gun is in simple harmonic motion, the round having a tendency to wander up and down the bore.

3. To obviate this, a fixed ammunition " Drill " round (Store Reference No. LX. 144) will be issued (one per ship) for tuning and balancing purposes.

4. Armament Depots will issue when available without demand, 1 in No. cartridge 4.5-in. (F.A.) Drill to Battle and Daring Class Destroyers and Frigates Type 12, packed in a container N.4 for stowage. The round is to be kept in this package when not in use.

5. Warrants of Naval Armament Stores will be amended.

(DW 728/65/5.)

UNCLASSIFIED.

606.—Gun Mountings—4.5-in. Twin R.P. 41, Mark 6 Series—Painting of V.S.G. Units.

In future manufacture of 4.5-in. twin R.P. 41 mark 6 series mountings, component V.S.G. units will be unpainted to assist in heat dissipation.

2. Ships and establishments are to arrange for the paint coating to be removed from existing units when they are next removed from the mounting for overhaul. The casing is to be preserved with a coating of O.M. 65.

3. Gunnery Equipment Depots are to take similar action with spare units before issue.

(DW 736/259/14.)

UNCLASSIFIED.

607.—A/S Mortar, Mark 10—Pitch Indication Dial—Replacement of Joints.

(*A.F.O.* 1487/1960.)

(*a*) *Ships and establishments concerned*	Ships and establishments so fitted, Dockyards and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	A/S Mortar mark 10.
(*c*) *Part of equipment affected*	Pitch indication dial.
(*d*) *Modification No.* ..	To be known as modification No. 15 to mounting. The " List of Modifications " in Chapter I. of B.R. 1709(1) will be amended.
(*e*) *Purpose of modification* ..	To minimize condensation on the window of the pitch indication dial, by excluding as much moisture as possible before sealing the unit.
(*f*) *Nature of modification* ..	Ring. Joint A.M.E. 32/41 (item 123 of drawing A.M.E. 6280 Sheet 2) and Joint, Window A.M.E. 37/21 (item 124 of drawing A.M.E. 6280, Sheet 2) which are made of " Cork-insert ", are to be removed and replaced by joints made of rubber insertion.

(*g*) *How to be done* .. The existing "Corkinsert" joints are to be removed; the inside of the Trunnion Indicating Gear thoroughly dried and the unit resealed using the new rubber insertion joints, *the operation being carried out only during a dry and warm period.*

(*h*) *Supply of modification kits* Sufficient rubber insertion, E2 (*c*) AP8551 to be demanded from Naval Stores quoting "Modification No. 15 to A/S Mortar, mark 10 mounting".

(*j*) *By whom to be done* .. Ships' staff, Dockyards, Establishments and Gunnery Equipment Depots.

(*k*) *When to be done* .. At the earliest opportunity.

(*l*) *How to be treated* .. As a defect.

(*m*) *Report on completion of modification* When this modification has been applied to the equipment, a report, which is to include the maker's name and serial No. of the A/S Mortar mark 10 mounting, is to be rendered to—

Director, Weapons,
Department of the Navy,
Victoria Barracks, Melbourne.

2. Navy Order 1033 of 1959 is relevant.

(DW 707/51/37.)

(*Navy Order* 1033 *of* 1959.)

RESTRICTED → Cancelled C NO 538/62

608.—Torpedoes 18-in., Mark 30 and 21-in., Mark 20—Primary Batteries.

(*A.F.O.* 1548/1960.)

Instances have occurred in the R.N. in which perchloric acid electrolyte has leaked from the filling plug of acid chambers of E.D.P. 3 primary batteries of Mark 20(E) torpedoes and, consequently, these batteries have been temporarily withdrawn from service.

2. To prevent this leakage the following instructions must be observed at all times when screwing down the filling plug of filled E.D.P. 1 type 2 (mark 30 torpedo), E.D.P. 3 (mark 20(E) torpedo) when re-issued and E.D.P. 4 (mark 20(S) torpedo) primary batteries.

(*See* B.R. 1545—Advance Information on Servicing and Preparation Instructions for the 18-in. Mark 30 Torpedo, Chapter 9, paragraph 30, and VERNON Pamphlet 234—Advance Information on Servicing and Preparation for the 21-in. Mark 20(E) and (S) Torpedoes, Chapter 11, paragraph 35)—

(*a*) Thoroughly wet the entire surface of the washer with clean water.

(*b*) For E.D.P. 1 batteries and E.D.P. 3 batteries fitted with smaller breather sacs place the combined plug key and sac inflator in position on each cell in turn and gently squeeze the bulb to keep the sac extended while the plug is screwed down as tightly as possible by hand. Care should be taken not to overtighten or undertighten by hand. For E.D.P. 4 batteries place the plug key *without* inflator in position on each cell in turn and screw the plug down by hand.

(*c*) Remove the plug key and finally tighten down the plug with the torque spanner provided, set at 32-lb. in. Normally the use of the torque spanner should result in only slight further tightening of the plug.

Notes.

(i) These instructions apply to battery filling plugs fitted with either flat rubber washers or "O" ring seals.

(ii) The sac inflator should be used at all times with E.D.P. 1 batteries and E.D.P. 3 batteries fitted with small breather sacs regardless of the filling instructions supplied with each battery which state that it should only be used above certain temperatures. The inflator should never be used when tightening the plugs of E.D.P. 4 batteries.

(iii) Torque spanners will be added to the tool kits of these batteries.

3. The following additional precautions are also to be observed—

(*a*) Before filling, the acid chambers of all batteries are to be examined for cracks or ejection of knock-out discs. Because of the transparent material of the acid chamber, this inspection can conveniently be carried out by placing a torch in the filling aperture.

(*b*) All filled E.D.P. 1, E.D.P. 3 and E.D.P. 4 batteries are to be inspected for acid leakage six months after being filled and at three monthly intervals thereafter. To examine properly for leakage the cover priming mechanism complete should be removed and the underside of the rubber packing sheet on top of each acid chamber examined.

4. Depending on service experience the intervals between inspections may be extended to six months at a later date. Frigates and submarines should transfer their torpedoes to the nearest Depot Ship, Escort Maintenance Ship or Armament Depot for these inspections, and where possible, replacement torpedoes will be issued in lieu.

5. If examination reveals acid leakage, the battery is to be emptied in accordance with the relevant Servicing Instructions (B.R. 1545 or V.P. 234) and returned to the nearest Armament Depot or R.A.N.T.E. Both the battery and the interior of the torpedo are to be thoroughly cleaned with copious supplies of warm distilled water and then dried with swabs.

6. E.D.P. 1 batteries will always be issued with small breather sacs, E.D.P. 3 batteries may be issued with either large or small sacs and E.D.P. 4 batteries will always be issued with large sacs. Should these large sacs be removed at any time from the acid chambers they are not to be re-used but are to be replaced by new sac/plug units. Sacs must always be of the same type as the one removed.

7. When applying the 5 lb. per sq. in. air pressure test for water-tightness detailed in B.R. 1545 (Chapter 3, paragraph 13 (7) and Chapter 4, paragraph 13 (8), and V.P. 234 (Chapter 4, paragraph 19, Chapter 5, paragraph 24 and Chapter 6, paragraph 17), it is essential that this pressure is not exceeded and that accurately calibrated pressure gauges be used. (The redesign of the apparatus used for applying the 5 lb. per sq. in. test, to include a large scale pressure gauge is under consideration.) In addition, the pressure is to be held at 2½ lb. per sq. in. for five minutes when raising and releasing.

8. All E.D.P. type batteries are being redesigned to overcome these difficulties, and revised instructions will be promulgated when the redesigned batteries are issued.

9. Navy Order 368 of 1960 is hereby cancelled.

(DW 712/51/57.)

(*Navy Order* 368 *of* 1960.)

UNCLASSIFIED.

609.—Alteration and Addition Item—Aircraft Carrier H.M.A.S. MELBOURNE—Cancellation.

Alteration and addition item No. 70 being no longer a requirement is withdrawn and Navy Order 323 of 1959 is hereby cancelled.

(DCNTS 1213/52/155.)

(*Navy Order* 323 *of* 1959.)

UNCLASSIFIED.

610.—Naval Stores—Accounting—Furnishings made to Specified Requirements.

(*A.F.O.* 885/1960.)

In order to simplify accounting procedures, and to reduce the multiplicity of ledger pages in the accounts of H.M.A. ships and establishments, it has been decided that curtains, overcases, carpets, woollen table covers and items of a similar nature which are normally made up to specified requirements should be identified by the use to which they are put (e.g., in the case of curtains for doors, screens, scuttles or windows, &c.—paragraph 2 of Navy Order 1044 of 1959 *Curtains and Overcases* refers) or by location, and the material in all cases.

2. In future, therefore, it will be sufficient for one ledger page to be raised for each generic item (e.g., all curtains for scuttles will be accounted for on one ledger page). Details of the type of material and predominant colour and where appropriate the sizes, should be abstracted on the back of the ledger pages or on permanent loan continuation pages, forms A.S. 153B, as necessary, together with an indication of the location of the item(s) within the ship or establishment.

3. Article 1826 of A.B.R. 4 Naval Storekeeping Manual will be amended.

(DNAS 514/51/4.)

(*Navy Order* 1044 *of* 1959.)

UNCLASSIFIED.

611.—Naval Stores (General) (Class B, Group 10B)—Lightweight Ladders Pattern 12395—Revised Allowances.

Navy Order 777 of 1959 is to be amended to include allowances of pattern 12395 Boat Ladder, to H.M.A.S. LONSDALE as follows—

Paragraph 3—Under " Pattern 12395 ". After " G.M.W.D." *add* " H.M.A.S. LONSDALE (for R.A.N.R. Diving Training) .. .. .. 1 No."

(DNAS 506/61/17.)

(*Navy Order* 777 *of* 1959.)

UNCLASSIFIED.

612.—Naval Stores (General) (Class F, Group 5)—Continuous Cine Film Processing Machines, Patterns 162081 and 162082—Introduction.

(*A.F.O.* 146/1960.)

Manufacture of existing types of continuous film processing machines model KT. 136 has ceased and new versions are now being produced. Certain components of the new machines, such as tanks, film spindles and waterpiping, are not interchangeable with those embodied in the old models. Fresh pattern numbers will therefore be allocated to the new machines as detailed in paragraph 3 below.

2. To enable the machine to be used to its full capacity and to facilitate the handling of 35-mm. film an interlocking split spool, 35-mm. x 400 ft. to which pattern number F5/162059 has been allocated has been introduced into Naval Service.

3. The following items will be added to the Rate Book and Authorized List of Naval Stores under class F, group 5 (N.A.T.O. Group 6740)—

Pattern No.	*Description.*	*Ships' Accounting Classification*
162081	Machine, continuous processing, 16/35-mm. (KT. 136), 220/230 volt, A.C., 50 cycles complete with push-on flange and guard	P
162059	Split spool, interlocking, 35-mm. x 400 ft., for C.P. Machine pattern F5/162081	P

4. The scales of allowances of the new patterns will be as follows—

Pattern No.	*Allowance.*	
F5/162081	H.M.A.S. MELBOURNE	1 No.
F5/162059	H.M.A.S. MELBOURNE	4 No.

5. Machine pattern F5/9512 will be marked " O " in the Rate Book and Authorized List of Naval Stores.

6. Admiralty has advised that the relevant publications will be amended.

(DNAS 519/55/44.)

UNCLASSIFIED.

613.—H.M.A. Ships—Thickness of Paint Films—Fire Risk.

Recent tests have shown that fire-retardent paints will prevent spread of burning only if the paint film thickness is less than .004-ins. As film thickness increases, the paint becomes more likely to ignite and burn away from the source of heat and therefore may constitute a grave fire risk.

2. The thickness of a paint film will vary with the method of application but it is unlikely to be less than .001-ins. No more than three coats of paint, excluding primer, can be safely applied. After a standard paint system has received two repaints, it will have reached its maximum safe value and is to be completely removed before any further paint is added.

3. To achieve the planned life of six years between occasions of stripping to bare metal, an interval of 2 years is required between repaints of interior fire-retardent surfaces. It should be possible to achieve this by careful initial application and by regular cleaning of paintwork. Alteration of paint schemes for decorative purposes will entail more frequent stripping to bare metal and is therefore to be avoided.

4. Captains are to ensure that no excessive thickness of paintwork is allowed to accumulate and that attention is drawn to the grave fire risk caused by thick paint films.

5. A.B.R. 19/1956 will be amended.

6. Navy Order 655 of 1958 is hereby cancelled.

(DNC 1211/51/151.)

(*Navy Order* 655 *of* 1958.)

UNCLASSIFIED.

614.—Damage Control Equipment—Safekeeping in H.M.A. Ships.

The Naval Board views with concern the large losses of Damage Control Equipment that have recently been reported by H.M.A. ships. This equipment is vital to ships safety and must be maintained at all times in its correct stowage and ready for immediate use.

2. The various Heads of Departments are to be issued, on permanent loan, with the damage control equipment (*a*) allowed for the particular requirement of their departments, and (*b*) stored or stowed in compartments for which they are responsible. Any items that cannot conveniently be allocated on this basis are to be issued on permanent loan to the A.B.C.D. Officer. Officers having charge of equipment are responsible to the Captain for its stowage and safekeeping, and are to ensure that it is adequately maintained to ensure its immediate readiness for use.

3. The following instructions for the safekeeping of Damage Control Equipment are to be observed—

(*a*) Damage Control Equipment is to be used only in an emergency, or when exercising an emergency, and is to be returned to its correct stowage after use. To assist identification, equipment is to be marked with the deck and main watertight section markings of its correct stowage (e.g. 3F).

(*b*) To avoid misuse, hoses for various purposes are to be distinctively marked by ships' staff by painting each end of the hose with a 15-in. band of paint in the following colours—

Firefighting hoses	Signal Red.
Prewetting hoses	French Grey.
Washdeck hoses	Grass Green.
Freshwater hoses	Azure Blue.

(*c*) All firefighting nozzles are to be firmly attached to hoses which are to be firmly attached to hydrants. Hoses are to be flaked down in the racks provided.

(*d*) All Damage Control Equipment in open stowages is to be checked in position during regular rounds by D.C. Patrols and duty officers. Immediate action is to be taken to investigate and remedy discrepancies.

(*e*) All Damage Control Equipment not in open stowages is to be locked up when not in use, and the keys held in HQI. Duplicate keys for fireparty lockers are to be mounted in glass fronted boxes on or near the lockers.

(*f*) Standstill musters of Damage Control Equipment are to be arranged at six monthly intervals by the A.B.C.D. Officer and the departmental officers concerned, the result being reported to the Captain. In addition frequent musters are to be conducted of the more important stores involved, and use is to be made of planned maintenance inspections as a further check on equipment held.

4. The Naval Storekeeping Manual A.B.R. 4 will be amended.

(DNC 501/51/9.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

615.—Introduction of New and Alternative Items for Use in Action and General Messing.

The following items of instant and easily prepared foodstuffs are available on demand from H.M.A. Victualling Yards.

(*a*) *Instant Foods*—

Beverages.—Instant Coffee (Nescafe or Bushells), Instant Coffee (High Roast), Ricory, Milk Powder, Sterilized Whole Milk.

Soups.—Chicken Flavour Booster, Chicken Cubes, Bouillon Cubes.

Dessert.—Dessert Mix in Chocolate or Vanilla Flavour.

(*b*) *Ready Foods*—

(i) Soup powders in the following flavours—
Chicken Noodle, Mushroom, Cream of Chicken, Tomato, Pea and Vegetable, Minestrone, Oxtail, Pea and Ham, Vegetable and Tomato, Turkey Noodle, Chicken and Rice.

(ii) Dessert powders in the following flavours—
Butterscotch, Strawberry, Chocolate, Vanilla.

2. The instant foods can be prepared by the addition of boiling water, or, if desired, boiling milk and will provide a hot drink, a soup and a custard dessert in action messing and useful alternative items for general messes.

3. The ready foods will provide alternative items to those already included in the Fixed Issuing Price List for provisions for use in general messes.

4. Details of the packs and present prices (*See* para. 5) of the items available are set out hereunder.

Beverages.	*Pack.*	*Makes following quantity per can/cube/packet.*	*Price.* s.	d.
Coffee, Powdered Instant (Nescafe or Bushells)	12 x 1 lb. can ..	8 gallon per can	23	9 per lb.
Coffee, Powdered Instant "High Roast"	12 x 1 lb. can ..	8 gallon per can	23	8 per lb.

Beverages.	*Pack.*	*Makes following quantity per can/cube/packet.*	*Price.*
			s. d.
Coffee, Powdered Instant with Chicory (" Ricory ")	12 x 2 lb. can ..	8 gallon per (2 lb. can)	8 10 per lb.
Milk, powdered, instant ..	16-lb. tins ..	16 gallons ..	1 7 per lb.
Milk, sterilized, whole ..	48 x 14-oz. cans..	14 oz. ..	0 8 per can
Soups—			
Soups, Bouillon, Cubes ..	Packet of 6 cubes	⅓ pint per cube	0 8 per pkt.
Soups, Chicken, Cubes ..	Packet of 6 cubes	⅓ pint per cube	0 8 per pkt.
Soups, Chicken Flavour Booster	3-lb. tins ..	13 gallons ..	12 0 per lb.
Soups, Powdered, in cans—			
Oxtail	5-lb. cans ..	5¾ gallons ..	33 0 per can
Pea and Vegetable ..	5-lb. cans ..	6⅛ gallons ..	33 0 per can
Cream of Chicken ..	5-lb. cans ..	7¼ gallons ..	33 0 per can
Pea and Ham	5-lb. cans ..	5¾ gallons ..	33 0 per can
Tomato	5-lb. cans ..	6⅛ gallons ..	29 0 per can
Mushroom	5-lb. cans ..	7¼ gallons ..	36 0 per can
Chicken and Rice ..	5-lb. cans ..	6¾ gallons ..	33 0 per can
Soups, Powdered, in packets—			
Chicken Noodle ..	5 packets per can	1 gallon per packet; i.e.	27 0 per can
Turkey Noodle	5 packets per can		27 0 per can
Minestrone	5 packets per can	5 gallons per can	33 0 per can
Vegetable and Tomato ..	5 packets per can		33 0 per can
Desserts—			
Dessert Mix Instant (Chocolate or Vanilla)	4 number packets per 1-lb. pack	4 packets = ½ gallon	3 0 per lb.
Dessert Powder—			
Butterscotch, Chocolate, Strawberry, Vanilla	5-lb. can ..	Approx. 3 gallons	2 9 per lb.

Note.—The details given regarding the estimated volume of beverage, soup or dessert which the various packs may be expected to produce relate to the packs now being obtained. Packs vary, however, between contractors and occasionally between states. When non-standard packs are supplied against a demand for any of the packs listed above the number of packs supplied will be that estimated to provide approximately the same volume of beverage soup or dessert as the standard packs demanded.

5. As new and different packs of these soups and soup powders at varying prices are coming into production, it is not intended, at present, to include these items in the list of Fixed Issuing Prices for Provisions during 1960. They are therefore to be charged at prices furnished by the Yard concerned. Returns of these items (whether of standard or non-standard pack) will not be accepted at H.M.A. Victualling Yards.

6. Navy Orders 113 and 370 of 1959 are hereby cancelled.

(DV 912/52/1.)

(*Navy Orders* 113 *and* 370 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

616.—Books of Reference and Air Publications—Accounting.

Following review of the procedure for accounting for Books of Reference, Air Publications, &c., in H.M.A. ships and commissioned establishments, as laid down in Naval Storekeeping Manual, A.B.R. 4, Chapter 25, the following minor variations in procedure are to be brought into operation—

(*a*) It will no longer be necessary for Custodian Officers to sign forms A.S. 1099E when books are drawn from the Supply Officer.

(*b*) It will no longer be necessary for Supply Officers to initial forms A.S. 123Y when books are returned by Custodian Officers.

(*c*) A diagonal line is to be drawn through the " number of copies " columns of forms A.S. 123Y, the number of copies involved in the transaction being shown in the left hand space and the total on loan to the particular officer concerned being shown in the right hand space.

(*d*) Custodian Officers may, if they so desire, delegate to subordinate officers or ratings, authority to sign forms A.S. 123Y on behalf of the Custodian Officer. Such delegation should be in writing and a copy thereof, together with specimen signatures of the officer or ratings concerned should be forwarded to the Supply Officer.

2. Further aspects of existing procedure are receiving consideration following the abovementioned review.

(DNAS 465/51/1.)

UNCLASSIFIED.

617.—Books—Loose-Leaf Secret and Confidential C.B.'s—Reduction of Page by Page Musters.

(*A.F.O.* 1609/1960.)

In order to reduce the mustering task on C.B.'s it has been decided that page by page mustering of loose-leaf Confidential and Secret C.B.'s need only be carried out on the following occasions—

(*a*) On first receipt;

(*b*) On paying off into reserve, or for refit.

2. At quarterly muster or on transfer, the procedure for bound books is to be followed, i.e., the books are to be sighted and the copy numbers checked with the C.B. register.

3. When an amendment is embodied in a loose-leaf Confidential or Secret C.B., only the pages immediately preceding and following the revised pages need to be checked with the latest State of Report. A revised insertion certificate worded as follows—

" Revised pages as stated in notification No.....of C.B..... have been embodied in copy No.....of C.B.....The pages immediately preceding and following the amending pages have been checked with the State of Report dated....."

is to be issued in future by the originating department with each amendment.

4. The foregoing rules do not apply to loose-leaf Secret and Confidential Communication Publications.

(HNB 465/254/46.)

UNCLASSIFIED.

618.—Printed Forms—Replenishment Demands.

It has been brought to notice that a large number of urgent casual demands and signals are being lodged for priority supplies of forms which, with the cases of over-demanding forms referred to in Navy Order 1053 of 1959, indicates laxity by ships and services when periodical demands are being prepared.

2. Demanding officers are to ensure that stocks of all forms are reviewed when periodical replenishment demands are being prepared.

3. Where casual demands cannot be avoided, requests for supply by air should be kept to an absolute minimum because of the high cost of transport. All such requests should be authorized by the Commanding Officer and should be restricted to supplies which cannot be produced on board or obtained from other ships &c., and which are essential for the efficiency of the ship.

(DNAS 465/51/26.)

(*Navy Order* 1053 *of* 1959.)

UNCLASSIFIED.

619.—Forms A.D. 346—Trials of Electric Generating Machinery—Introduction of New Series.

(*A.F.O.* 1331/1959.)

The A.D. 346 series of forms (O) Oil driven; (R) Steam Reciprocating driven; (T) Turbine driven; and (P) Paralleling, at present in use were designed for D.C. generator sets and, as such, are not suitable for recording results of trials on A.C. generator sets, which are increasingly coming into service in H.M.A. ships. In addition, there have been no forms for the gas turbines as prime movers for both D.C. and A.C. generator sets.

2. A complete new series of forms A.D. 346 has therefore been produced to cover all types of prime movers and both types of generators. There are separate forms for engine trials and generator trials, the latter including parallelling trials. The forms are designated—

A.D. 346—Cover.
A.D. 346 (*a*)—Steam Turbine driven.
A.D. 346 (*c*)—Steam Reciprocating driven.
A.D. 346 (*d*)—Internal Combustion Engine driven.
A.D. 346 (*e*)—D.C. Generator.
A.D. 346 (*f*)—A.C. Generator.

and the complete forms for a particular generator set will comprise one A.D. 346 cover, one of A.D. 346 (*a*), (*c*) or (*d*) and one of A.D. 346 (*e*) or (*f*).

3. The forms are now available and should be used by dockyard officers and overseeing staff when recording results of trials of both D.C. and A.C. generator sets, the use of A.D. 346 forms (O), (R), (T) and (P) being discontinued. The distribution of the completed forms for both the engine maker's tests and on board tests are given on the back of the A.D. 346 cover.

4. It is essential that, as they are sent to ships and headquarters for record purposes, all the relevant columns of the new forms be completed in all respects. The figures should be checked against the permitted limits before the generator set is accepted and, if it is accepted with inferior performance, the fact and reasons for acceptance should be recorded on the forms.

5. The new forms should be demanded in the usual way; demands should be restricted to the minimum quantities essential.

(DNAS 464/55/56.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 620-649/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
15th August, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

5540/60.

CONTENTS.

CONTENTS—*continued.*

Cancelled vide C NO 427/62

Section 1.

ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

620.—Medical Diagnosis—International Classification—Statistics.

In conformity with a SEATO agreement the firm diagnose shown on forms A.F. Med. 14 are to be amplified by the Medical Officers signing the forms before rendition. Box 16 is to contain the firm diagnosis as before, suffixed by the international code number taken from the publication "International Statistical Classification of Diseases, Injuries and Causes of Death—1948, Volumes I. and II." These publications are issued with each medical officer's library. They are not carried in H.M.A. ships without a medical officer. Effective date for the above action will be the 1st October, 1960.

2. The three digit category is to be used—

e.g. 001 Respiratory Tuberculosis.
374 Keratitis.

3. Vessels not carrying a medical officer will continue as before. The code numbers for cases who are nursed on board and sent to duty will be applied at Navy Office.

4. In regard to cases sick on shore, or in civilian hospitals, the code numbers are to be applied by the naval medical officer responsible for compilation of form A.F.Med. 14.

5. Every endeavour is to be made to obtain a meticulous diagnosis from the medical practitioners who attend patients sick on shore or treated in hospitals other than naval hospitals.

6. This order will be included in the reprinted Medical Documentation Instructions now being revised.

(MDG 327/54/25.)

UNCLASSIFIED.

621.—R.A.N. Corrosion Committee—Revised Terms of Reference and Membership.

Recent developments in Naval Defence continue to highlight the need for high performance and efficiency of ships and equipment and for the need for economic use of personnel and materials during all stages of a ship's life. Corrosion and fouling are big obstacles in achieving these needs causing—

(*a*) Lowered performance and high running costs due to increases in ship resistance.

(*b*) A lowering of structural efficiency of ships because of the need for allowances for corrosion in certain areas.

(*c*) Large effort by ships' staff and dockyards in maintenance and repair work.

Cancelled vide C NO 163

2. *Formation of Committee.*—With this in mind, the Naval Board set up the R.A.N. Corrosion Committee in 1957 with the main task of investigating ways of overcoming or reducing the effects of corrosion and fouling. It consists of a main committee

which is responsible generally for all its activities, together with four sub-committees set up to direct and carry out detailed work on particular aspects of corrosion. The sub-committees are—

Corrosion Survey Sub-Committee.—Responsible for the survey of the occurrence of corrosion, metallurgical aspects, and for features of design (including materials) which influence corrosion.

Paints and Coatings Sub-Committee.—Responsible for paints, non-metallic coatings and surface preparation.

Cathodic Protection Sub-Committee.—Responsible for investigations into methods of cathodic protection and their application to ships and equipment.

Underwater Paints and Fouling Sub-Committee.—Responsible for research into the prevention of fouling, and for underwater paints. Because of its structure, this sub-committee is largely independent, but is linked with the R.A.N. Corrosion Committee for administrative purposes.

3. *Constitution.*—The terms of reference and membership of the R.A.N. Corrosion Committee—Main Committee and Sub-Committees—have been revised and are now as shown in Appendices A to E of this order.

4. *Responsibility.*—The R.A.N. Corrosion Committee is responsible for recommending necessary action to the appropriate Directors but the responsibility for taking executive action on these recommendations lies with the Director concerned.

5. *Operation.*—To enable the R.A.N. Corrosion Committee to operate effectively it is required that—

(*a*) Commanding Officers, Directors and Heads of Establishments keep the Committee informed of the problems encountered, the action taken, costs and suggestions for alleviation.

(*b*) Naval Establishments, Dockyards and H.M.A. ships be visited as necessary to facilitate investigation of corrosion and fouling problems. Correspondence should be through official channels using forms A.S. 2022 and A.S. 2071Z where appropriate. Authorities concerned are to give every assistance to members of the committee and its sub-committees carrying out investigations in their commands.

6. *Exchange of Information.*—One important function of the R.A.N. Corrosion Committee is to disseminate all information as widely as possible, consistent with security regulations, so that unnecessary duplication of effort is avoided. To do this the R.A.N. Corrosion Committee will—

(*a*) Provide liaison with Admiralty, United States Navy and Royal Canadian Navy.

(*b*) Send minutes of its meetings, reports or appropriate extracts to interested parties.

(*c*) Disseminate, in the appropriate manner to interested parties, the results of investigations and information received from overseas.

7. *Co-operation.* It is emphasized that the value to the Navy of the R.A.N. Corrosion Committee depends on the Committee being informed of the Navy's problems. All comments or suggestions which may have a bearing on the corrosion problems of the Navy would be appreciated by the Committee.

Appendix A.

R.A.N. CORROSION COMMITTEE—CONSTITUTION OF MAIN COMMITTEE.

Membership—

The Deputy Chief of Naval Technical Services (Chairman)	(DCNTS).
The Director of Naval Construction	(DNC).
The Director of Marine Engineering	(DME).
The Director of Electrical Engineering	(DEE).
The Director of Weapons	(DW)
The Director of Aircraft Maintenance and Repair ..	(DAMR)
The Director of Scientific Services	(DSS)
The Fleet Engineer Officer	(FEO)
The General Manager, Garden Island Dockyard ..	(GMGID)
The Senior Scientific Officer, Garden Island Dockyard ..	(SSO GID)
The General Manager, Williamstown Dockyard ..	(GMWD)
The Dockyard Scientific Officer, Williamstown Dockyard	(DSO WD).
The Engineer Officer, Flinders Naval Depot	(EO FND)
The United Kingdom Naval Technical Liaison Officer ..	(UKNTLO)
The Defence Standards Laboratories (two representatives)	(DSL).
The Department of Works	(Works Department).
The Australian Coastal Shipping Commission	(ACSC).
A secretary from the Naval Technical Services Branch, Navy Office.	

Terms of Reference—

(*a*) To explore the incidence of corrosion and fouling problems in H.M.A. ships, establishments, air stations and their associated equipment.
(*b*) To examine existing and potential methods for the prevention of corrosion and fouling for the reduction of its effects and for the correction of conditions arising from corrosion.
(*c*) To institute sub-committees to investigate in detail by service and laboratory trial and literature survey, particular corrosion and fouling problems.
(*d*) To co-ordinate all work in the R.A.N. on corrosion and fouling, to co-operate with other interested scientific and technical bodies and to propose items for extra-mural research.
(*e*) To receive reports from its sub-committees and to guide their work as necessary.
(*f*) To report annually to the Chief of Naval Technical Services.
(*g*) To disseminate knowledge gained as widely as possible.

Appendix B.

CORROSION SURVEY SUB-COMMITTEE—CONSTITUTION.

Membership.

One representative from each of the following—
Director of Naval Construction.
Director of Marine Engineering.
Director of Weapons.
Defence Standards Laboratories.
Flag Officer, Commanding, H.M. Australian Fleet.
General Manager, Garden Island Dockyard (two representatives).
Secretary, R.A.N. Corrosion Committee.
Chairman, by election.
A secretary from the Naval Technical Services Branch, Navy Office.

Appendix B—*continued.*

Terms of Reference.

(*a*) To carry out the directions of and to report annually (or as required) to the R.A.N. Corrosion Committee.
(*b*) To determine the incidence and relative importance of corrosion in H.M.A. ships, establishments and their associated equipments.
(*c*) To assess the causes and the most likely method of combating such corrosion (i.e. cathodic protection, protective coatings, design or material improvements or any other method).
(*d*) To investigate and recommend means of preventing corrosion by design or material improvements and the use of metallic coatings.
(*e*) To co-operate with all sub-committees of the R.A.N. Corrosion Committee.
(*f*) To co-opt additional members (where necessary from outside the Department) to deal with specific problems.

Appendix C.

PAINTS AND COATINGS SUB-COMMITTEE—CONSTITUTION.

Membership.

One representative from each of the following—
Director of Naval Construction (Chairman).
General Manager, Garden Island Dockyard.
Flag Officer in Charge, East Australia Area (Shipwright Officer).
Director of Naval and Air Stores.
Flag Officer Commanding, H.M.A. Fleet (Seaman Officer).
Fleet Painting Instructor.
Defence Standards Laboratories.
A secretary from the Naval Technical Services Branch, Navy Office.

Terms of Reference.

(*a*) To carry out the directions of and to report annually (or as required) to the R.A.N. Corrosion Committee.
(*b*) To examine paint and other non-metallic coating specifications, systems and procedures for use in H.M.A. ships, establishments and their associated equipments.
(*c*) To recommend painting or coating systems appropriate to the surface to be protected and to prepare relevant specifications and procedures.
(*d*) To acquaint themselves with new materials and to make recommendations for both laboratory and service trials of those which appear suitable for naval service.
(*e*) To co-operate with the Commonwealth Paint Committee in rationalizing specifications and testing procedures.
(*f*) To co-operate with all sub-committees of the R.A.N. Corrosion Committee.
(*g*) To co-opt additional members (where necessary from outside the Department) to deal with specific problems.

Appendix D.

CATHODIC PROTECTION SUB-COMMITTEE—CONSTITUTION.

Membership.

One representative from each of the following—
Director of Naval Construction (Chairman).
Director of Electrical Engineering.
Defence Standards Laboratories.
A secretary from the Naval Technical Services Branch, Navy Office.

APPENDIX D—*continued.*

Terms of Reference.

(*a*) To carry out the directions of and to report annually (or as required) to the R.A.N. Corrosion Committee.
(*b*) To investigate and recommend means of preventing corrosion in H.M.A. ships, establishments and their associated equipments by the use of cathodic protection methods with impressed current and galvanic systems.
(*c*) To investigate and recommend means of preventing corrosion caused by stray currents.
(*d*) To co-operate with all sub-committees of the R.A.N. Corrosion Committee.
(*e*) To co-opt additional members (where necessary from outside the Department) to deal with specific problems.

APPENDIX E.

UNDERWATER PAINTS AND FOULING SUB-COMMITTEE—CONSTITUTION.

Membership.

One representative from each of the following—
Director of Naval Construction.
Defence Standards Laboratories.
Commonwealth Scientific and Industrial Research Organization.
Australian National Line.
Maritime Services Board of New South Wales.
General Manager, Garden Island Dockyard (Secretary).
And representatives of commercial shipping interests.
Chairman by election.

Terms of Reference.

(*a*) To co-ordinate the work on underwater paints and fouling of all the bodies represented on the sub-committee.
(*b*) To create a pool of expert knowledge on underwater paints and fouling from which recommendations could be issued to these bodies.
(*c*) To report annually (or as necessary) to the R.A.N. Corrosion Committee.
(*d*) To co-operate with all sub-committees of the R.A.N. Corrosion Committee.
(*e*) To co-opt additional members where necessary from outside the Department, to deal with specific problems.

(DCNTS 8/52/11.)

UNCLASSIFIED.

622.—Use of Service Aircraft for Transport to Australia of Private Parcels.

Defence personnel serving overseas are not to send private parcels to Australia by means of service aircraft. Goods sent to Australia in this manner are, if found, liable to seizure and the pilot of the aircraft or other persons having custody of the goods may be proceeded against for an offence against the Customs Act.

2. Goods should be sent to Australia through normal channels, i.e. by Parcel Post or as freight properly manifested.

3. This order will be reprinted for posting on notice boards.

4. Navy Order 732 of 1958 is hereby cancelled.

(HPB 184/3/5.)

(*Navy Order* 732 *of* 1958.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

623.—"Flight Deck" Quarterly Magazine—Contributions to Winter Issue.

Contributions to the winter issue of "Flight Deck" magazine should be forwarded to reach Navy Office by the 14th October.

2. H.M.A.S. MELBOURNE, R.A.N.A.S. Nowra and other authorities concerned with aviation are to forward photographs and newsletters covering matters of interest.

(DAWOT 465/1/19.)

UNCLASSIFIED.

624.—Instructional Films and Filmstrips—Serial No. S.A. 668, "Corrections in the Fire Control System", Parts 1-4 (Revised)—Distribution; Serial No. S.A. 165, "Corrections in the Director System"—Obsolete.

(*A.F.O.* 1273/1960.)

Copies of the revised edition of the Admiralty filmstrip, Serial No. S.A. 668 "Corrections in the Fire Control System", in four parts, are being obtained and the initial distribution will be made, without demand, by the S.N.S.O., Sydney, on the following scale—

Service.	*No. of Copies.*
Flinders Naval Depot (for Gunnery School)	1
H.M.A.S. HUON	1
H.M.A.S. LEEUWIN	1
H.M.A.S. LONSDALE	1
H.M.A.S. MORETON	1
H.M.A.S. TORRENS	1
R.A.N. Film Library, Sydney	1

2. Details of the strips are as follows—

Part 1—Surface Firing, Training (31 frames). Azimuth Gun deflection and its components, lateral convergence.

Part 2—Surface Firing, Elevation (46 frames). Tangent elevation, clock range, the target range correction, wind range correction, muzzle velocity range correction, spotting corrections, dip, tilt.

Part 3—A.A. Firing, Training (30 frames). Lateral and wind deflection, drift, lateral convergence.

Part 4—A.A. Firing, Elevation (48 frames). Vertical deflection, tangent elevation, dip, wind correction, external and internal ballistics, tilt, vertical convergence.

3. The revised edition of Parts 1–4 of this filmstrip replaces the original strip S.A. 165 "Corrections in the Director System" which has now been declared obsolete. Copies of the latter are to be withdrawn from service and destroyed.

(DNAS 519/56/97.)

UNCLASSIFIED.

625.—Members on Duty in North America—Pay in Dollars.

1. *Short Term Duty*

(*a*) With effect from 24th May, 1960, members appointed to North America on short term duty may draw in dollars, the amount of pay (less Australian commitments) which accrues during the period of service in that country, whether the member lives in or out. Pay credits accrued prior to departure will not be paid in dollars.

(*b*) This approval is to be administered in accordance with the provisions of Section 16 (paragraphs 34 to 41) of Treasury Instructions relating to the Audit Act and Treasury Regulations.

2. *Intermediate and Long Term Duty.*—With effect from 24th May, 1960, members appointed for intermediate or long term duty may draw in dollars, the amount of pay (less Australian commitments) which accrues during travel to or service in North America and an amount not exceeding any undrawn credit which accrues during the six months immediately preceding departure from Australia.

3. Interim Pay Instructions will be amended.

(HPB 252/1/19.)

UNCLASSIFIED.

626.—Payment of Marriage Allowance following Divorce.

Where a member is divorced, Marriage Allowance will not be payable following the grant of the Decree Nisi unless—

(*a*) the wife of the member is awarded alimony at a rate not less than £4 14s. 6d. per week and the wife has custody of the children; or

(*b*) the member has custody of the children and maintains them.

2. The contents of this order will be incorporated in Interim Pay Instructions.

(HPB 252/5/4.)

UNCLASSIFIED.

627.—Promotion to the Special Duties List—Seaman Specialization.

Revised instructions for promotion to the Seaman specialization of the Special Duties List are promulgated in the appendix to this order. There are shortages in the numbers required for the (G) and (T.A.S.) sub-specializations and it is hoped that more candidates for promotion will come forward than in recent years.

2. One reason for the lack of candidates appears to be that very few ratings seek recommendations for promotion until they have achieved the rating of Petty Officer and in many cases the specialist qualification of G.I. or T.A.S.I. They are in some cases very close to, if not over, the upper age limit for promotion of 34 years. In this regard it must be remembered that long courses in the United Kingdom precede promotion, so that a candidate may be over age, for practical purposes, for nearly a year before attaining his 34th birthday.

3. It is essential that suitable ratings receive recommendations for promotion on form A.S. 198 as early as possible in their Service careers. The regulations allow for first recommendations on obtaining the H.E. Certificate (four Second Class passes or better, including Practical Mathematics), no matter how junior the candidates may be. The early notification of potential S.D. officers will enable suitable drafting to be carried out.

4. This order is being reprinted for posting on notice boards.

APPENDIX.

GENERAL REGULATIONS.

Eligibility and Reports (*A.S.* 198).

1. Ratings applying to be considered as candidates for promotion to the S.D. lists must be serving on Permanent Naval Forces engagements; they must have attained certain minimum qualifications according to the requirements of the various specializations, and state the sub-specialization for which they wish to be considered; each applicant must also be recommended by his Commanding Officer. Applicants must subsequently complete the full professional and educational qualifications prescribed in order to qualify for consideration by the appropriate Selection Board.

2. Half-yearly reports (forms A.S. 198) are to be rendered on all candidates in accordance with the arrangements laid down for each sub-specialization.

3. Selection of sub-specialization when first applying to be considered as a candidate for S.D. rank is, as a general rule, to be regarded as final, but transfer to another sub-specialization may be allowed, at Naval Board discretion, according to the requirements of the Service.

Educational Requirements.

4. Candidates for S.D. rank are required to show their educational fitness by passing an examination in certain subjects of the Higher Educational Test or an equivalent examination, as provided in Q.R. & A.I., Appendix 2, part 6, and in current Navy Orders.

5. Ratings in possession of educational qualifications equivalent to or higher than the Leaving Certificate of Victoria may be granted exemption at the discretion of the Naval Board from all or part of the H.E.T. examination for the purpose of promotion to the S.D. list. Exemption in respect of a Leaving Certificate will usually be granted on a basis of subject for subject, but in view of the diversity of subjects involved, each case will be determined on its merits by the Naval Board. Applications for exemption should be made to the Naval Board through the usual channels.

Character.

6. Character must be such as would, if continued, qualify for the award of the Long Service and Good Conduct Medal before the completion of 22 years service, extensions beyond this period being disregarded. The award at any time of a character inferior to " Good " will disqualify a candidate.

Misconduct.

7. If a candidate should misconduct himself in a manner which would disqualify him within the terms of paragraph 6 above, the matter is to be reported to the Naval Board and his name is to be removed from the list of candidates for S.D. rank.

APPENDIX—*continued.*

Unsuitability.

8. If a candidate is found to be unsuitable for promotion to S.D. rank the fact is similarly to be reported to the Naval Board, whether he has previously been recommended or not.

Age.

9. All candidates are to be within the age limits of 25 and 34 years on promotion to Acting Sub-Lieutenant.

Medical Examination.

10. Medical fitness is to be verified before a candidate appears before a Selection Board. As all selected candidates proceed to the United Kingdom for pre-promotion courses, medical fitness is to be determined in accordance with the current instructions regarding medical examinations of personnel proceeding for service abroad.

Drafting of Candidates for S.D. Rank.

11. Candidates for promotion should be encouraged to complete their qualifications within as short a time as possible and, so far as it is practicable to do so, this requirement will be borne in mind in drafting candidates who have obtained only a part of the qualifications required.

Failed Candidates.

12. Candidates who fail to reach the required standard in any of the pre-qualifying courses for promotion to Acting Sub-Lieutenant (S.D. List) will be reverted to general service as ratings but, if they are still qualified under the appropriate regulations set out in this appendix, may subsequently be selected to undergo the courses again at a later date.

13. The disposal of candidates who fail to reach the required standard in any of the post-qualifying courses or fail to qualify for confirmation in rank, will remain at the discretion of the Naval Board.

Selection Boards.

14. Before a rating is promoted to the Special Duties List he will be required to appear before a Selection Board. Boards will generally be convened in January and July, and will interview candidates before embarkation for the United Kingdom.

SEAMAN SPECIALISTS (G), (T.A.S.), (B), (P.R.) AND (P.T.) SUB-SPECIALIZATION.

Eligibility.

15. A Seaman Branch rating may apply to be considered as a candidate for promotion to the above sub-specializations of the Seaman S.D. list if—

(*a*) either he has qualified educationally for S.D. rank (*see* para. 4), *or*

(*b*) he has qualified professionally in seamanship for S.D. rank *and*

(*c*) he is recommended by his Commanding Officer as a potential S.D. candidate.

Note.—At the time of application the candidate must state whether he wishes to qualify as a (G), (T.A.S.), (B), (P.R.) or (P.T.) sub-specialist.

APPENDIX—*continued.*

Reporting on Candidates by Commanding Officers.

16. As soon as the above requirements are fulfilled the Commanding Officer should forward to the Naval Board a report on form A.S. 198, together with a copy of the rating's Service Certificate and History Sheet. Page 2 of the Service Certificate must be endorsed that the rating is a recommended S.D. candidate. A.S. 198 reports only should be rendered thereafter every six months on 31st May and 30th November, until the candidate is promoted or ceases to be eligible.

Completion of Qualifications.

17. When a candidate has been accepted as a potential S.D. Officer, and initial form A.S. 198 has been raised, he must then complete the educational and professional qualifications. In addition he will require—

(*a*) Sea Service of not less than one year as acting or confirmed Petty Officer.

(*b*) A certificate to say that he has had sufficient bridge experience at sea to make him familiar with the duties of the officer of the watch.

(*c*) If a T.A.S. candidate he must have held 2nd class or higher T.A.S. specialist qualification for one year in a sea-going ship.

(*d*) If a P.R. candidate he must have qualified as a P.R.I. or R.P. 1 and in addition must have served one year in a sea-going ship as R.P. 2 or higher.

(*e*) If a P.T. candidate he must have held P.T. 2 or higher specialist qualification for 1 year.

Note.—(G) candidates who are not G.I.'s will, after selection for promotion courses, undergo preliminary training before commencing such courses. Similarly non-T.A.S.I.'s will complete the T.A.S.I. course as a preliminary step.

Selection Boards.

18. Selection Boards will be convened by the Flag Officer Commanding H.M.A. Fleet, the Flag Officer in Charge, East Australia Area or the Commodore Superintendent of Training, and will interview all candidates who have completed the above qualifications, provided vacancies still exist for promotion in the relevant sub-specializations. *See also* paragraph 14.

Order of Selection.

19. The order of selection for courses in the United Kingdom is determined by consideration of professional and educational qualifications, reports on form A.S. 198, age, length of service and the length of time since qualifying.

Re-engagement.

20. The current instructions regarding the re-engagement of ratings sent abroad for courses will apply.

SYLLABUSES, EXAMINATIONS, ETC.

Seamanship Examination for S.D. Rank.

21. Before taking this examination a candidate must have—

(*a*) Passed professionally for Petty Officer. (For this purpose a candidate from the Sailmaker Branch may take the Petty Officers' Seamanship examination.)

(*b*) Served four years in sea-going ships since age 17½ or date of entry, if later;

(*c*) A certificate from his Captain that he has a reasonable chance of passing a S.D. seamanship examination;

(*d*) A certificate of medical fitness for S.D. rank.

APPENDIX—*continued.*

22. A candidate who passes this examination before qualifying educationally will be required to requalify should he fail to obtain the educational qualification within three years.

23. The constitution of a Seamanship Board will be—

A Captain or Commander as President;
One General List Lieutenant-Commander or Lieutenant (N.D.);
Two Lieutenants or Sub-Lieutenants (S.D.) (B).

If the last-named are not available S.D. officers of the (G), (T.A.S.) or (P.R.) sub-specializations may sit in lieu.

24. The syllabus for the examination is shown in detail on form A.S. 440. 75 per cent. overall marks, with not less than 60 per cent. in any one section, are required to qualify.

Bridge Experience Certificate.

25. Each candidate to take the Seamanship examination (paragraphs 21–24) will be required to hold a valid Bridge Experience Certificate, stating that he has had sufficient experience on the Bridge at sea to make him familiar with the duties of the Officer of the Watch.

26. The award or renewal of this certificate should be recorded on form A.S. 198 reports. It will remain valid for three years after the date of award or renewal; whenever practicable arrangements should be made to ensure that it is renewed within this period.

TRAINING IN THE UNITED KINGDOM.

Pre-promotion Training.

27. Courses in the United Kingdom are designed to broaden the candidates' knowledge of matters outside the scope of their own sub-specializations and to facilitate the transition from rating to officer status. So far as practicable the courses are arranged in order that candidates from a number of various sub-specializations can be merged for training in the subjects of common interest.

28. Groups of candidates for promotion to the (G), (T.A.S.), (B), (P.R.), (C) and (P.T.) sub-specializations will undertake courses simultaneously and all successful candidates will be promoted to Acting Sub-Lieutenant with equal seniority.

29. Pre-promotion training will be divided into the following three phases—

(*a*) The Communications Acquaintance Course for all except (C) candidates—one week.
The Seamanship course for (C) candidates only—two weeks.

(*b*) Sub-specialization courses (16–22 weeks). *See* note.

(*c*) The Navigation Course—six weeks.

Note.—Candidates who do not require the full 22 weeks' sub-specialist course will be given other instruction during any vacant period or start their course at a suitably later date, at the discretion of the Captains of their respective sub-specialist schools.
Further details of this instruction can be found in Q.R. & A.I. Article 0536.

Navigation.

30. The S.D. Officers' pre-qualifying Navigation course is limited to the basic principles, e.g., navigation in pilotage waters. Because of the limited time available for this subject it is essential that all prospective candidates should be given experience

APPENDIX—*continued.*

on the bridge at sea to familiarize themselves with the duties of the officer of the watch (paragraphs 25–26). Similarly all candidates should be encouraged to include Navigation as an optional subject in their educational qualification. There is some evidence that this important aspect of a candidate's training has not been given sufficient attention in the past.

Post-promotion Training.

31. When successful members of pre-promotion classes have been promoted they will proceed to the following post-promotion training before returning to Australia or taking up exchange appointments with the Royal Navy—

(*a*) The S.D. Officers' Course—six weeks.

(*b*) The A.B.C.D. Course—two weeks.

(*c*) The Acquaintance Course, varying according to specialization. Non-T.A.S. officers will take a three weeks' T.A.S. course, non-G officers a three weeks' G course, non-C candidates a one week C course, whilst (P.R.), (P.T.) and (C) candidates will take one week's diving instruction.

(*d*) Any other sub-specialist training required.

Exchange Service.

32. In order to consolidate their instruction and to obtain experience in a wider field than is available in Australia it is the Naval Board policy that many newly promoted S.D. officers will be nominated to the Admiralty for two years' exchange service with the Royal Navy before returning to Australia.

(DOA 7/201/4.)

Cancelled vide N.O. 468/62

UNCLASSIFIED.

628.—Prizes—Herbert Lott Naval Trust Fund Prizes.

The Herbert Lott Naval Trust Fund is provided to encourage efficiency in fighting practices. The Board of Trustees have recently extended the scope of the Fund to include prizes for certain courses held in Australia.

2. The prizes are awarded to the best qualifiers in the qualifying examinations of the courses listed in paragraph 5. The prizes consist of cash awards of £10 sterling, and are awarded at the discretion of the Naval Board.

3. R.N.Z.N. ratings undergoing courses in Australia are eligible to compete.

4. R.A.N. officers (except Upper Yardmen, Pilots and Observers) undergoing course in the United Kingdom will compete with R.N. officers for prizes of £15 sterling in certain courses, the details of which are issued by Admiralty Fleet Order.

5. The results of all candidates, stated as an overall percentage, for the courses listed hereunder are to be reported to the Naval Board.

Gunnery Instructor.
T.A.S. Instructor.
P.R. Instructor.
Clearance Diver 1st Class.
Tactical Communication Instructor.
Radio Communication Instructor.
Chief Engine Room Artificer and Chief Mechanician.
Mechanician.
Mechanical Training Course.

Chief Ordnance Artificer.
Chief Electrical Artificer.
Petty Officer Electrician (P) and (E).
Petty Officer Radio Electrician.
Chief Aircraft Artificer.
Aircraft Mechanician.
Petty Officer Air Fitter (A).
Petty Officer Air Fitter (E).
Petty Officer Air Fitter (O).
Aircraft Handler 1st Class.
Petty Officer Electrician (Air).
Petty Officer Radio Electrician (Air).

6. The scheme will operate on an annual basis from 1st April, 1960. Where less than six ratings compete at a qualifying examination no award will be made but candidates will be aggregated over a period until the required number has been reached from which to judge the winner.

(DMT 211/1/1.)

UNCLASSIFIED.

629.—Ratings—Employment of Shorthand Typists.

Sufficient Writer ratings qualified as Shorthand Typists are now available to fill the majority of complement billets in H.M.A. ships and establishments.

2. If ratings are to gain practical experience and retain the competency achieved on course, it is essential that they be regularly employed on shorthand duties.

3. Whenever it is practicable without detriment to their routine clerical duties, these ratings should be made available to Staff Officers and Heads of Departments for the taking of shorthand notes.

(DMT 303/31/5.)

UNCLASSIFIED.

630.—Ratings—Seaman Branch—Eligibility for Coxswain.

(*A.F.O.* 1414/1960.)

It has been decided to vary the present conditions regarding the eligibility of ratings to be recommended for Coxswain.

2. In future Seaman ratings who have qualified as Chief Petty Officers or are confirmed Petty Officers, but who do not possess an Instructor's specialist qualification may be recommended to undergo a Coxswain's course. Recommendations are subject to ratings having had not less than three years' continuous " V.G. " conduct immediately preceding the date of recommendation for the course, and having had previous character not lower than " Good " during the ten years preceding the date of recommendation.

3 ABR 10, article 1145 will be amended.

(HPB 303/21/32.)

UNCLASSIFIED.

631.—Training of Seamen Officers—Navigation.

(*A.F.O.* 581/1960.)

The Naval Board consider it important that positive steps should continue to be taken to improve the practical knowledge and increase the experience of all Seaman officers in the art of navigation. To this end, Commanding Officers should arrange, when possible, for the following—

(*a*) When safe navigation and other responsibilities permit, Officers of the Watch to take astronomical observations during their watches.

(*b*) On long passages, seamen officers to take turns in carrying out the duties of Navigating Officers in addition to the officer so appointed.

(*c*) On coastal passages, the Officer of the Watch to plan and execute a passage for his watch between a given point of departure and a given destination.

(*d*) Before coming to an anchorage, another officer beside the Navigating Officer to be detailed to prepare and carry out the " run-in " combining it with a blind approach if appropriate.

(*e*) A plan for departure from anchorage or berth to be prepared by the harbour Officer of the Day.

(DOA 311/4/40.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES,

UNCLASSIFIED.

632.—Radar Type 974—Synchro Differential Transmitter J.S.C. No. 972-9859 (Formerly A.P. 100122 Rotary Transformer), Class F, Group 18, Correct Marking.

(*A.F.O.* 875/1960.)

Advice has been received from the Admiralty that some synchro differential transmitters J.S.C. No. 972–9859 (class F, group 18), which were formerly known as rotary transformers, A.P. F.1A (1)/100122, and which are incorporated in azimuth stabilization units, pattern F1A(1)/100009, incorrectly bear the marking A.P. 10861.

2. H.M.A. ships and establishments fitted with radar type 974 are to inspect the synchros fitted in the stabilization units, pattern 100009 and spare synchros carried on board to ensure that the synchros are clearly marked with either J.S.C. No. 972–9859 or A.P. No. 100122 and that any other pattern numbers are obliterated.

3. (S)N.S.O.'s are to take appropriate action regarding units held in store.

(DNAS 519/68/2.)

UNCLASSIFIED.

633.—Wireless—Type 691/691EF Transmitter and Type C.U.H. Receivers —Modification of Blower Motors A.P. 67067 to A.P. 67067A.

Details of the modification of the blower motor A.P. 67067 fitted in type 691/691EF transmitters and type C.U.H. receivers have now been received from the Admiralty (para. 1 of Navy Order 648 of 1959 refers).

2. All A.P. 67067 blower motors, either fitted in type 691/691EF transmitters and type C.U.H. receivers or held as spares, in R.A.N. ships and establishments are to be modified to A.P. 67067A blower motors by the following action—

(*a*) *H.M.A.* ships.—To include an item in the next main defect list worded as follows—

" To modify blower motors A.P. 67067 fitted in type 691/691EF transmitter and type C.U.H. receivers, or carried on board as spares to A.P. 67067A in accordance with A.S.W.E. Drawing No. C.221336 ".

The work is to be carried out by dockyard.

(*b*) *H.M.A. establishments.*—Demand from the appropriate (Superintending) Naval Stores Officer the requisite number of A.P. 67067A blower motors.

The replacement of the fitted A.P. 67067 blower motors in fitted equipments is to be carried out by ships' staff. All A.P. 67067 blower motors are to be returned to the appropriate (Superintending) Naval Store Officer after the above action for subsequent modification to A.P. 67067A.

3. The use of grease X.G. 275 for lubrication of the bearings of the A.P. 67067A blower motor is to continue.

4. Navy Order 648 of 1959 is relevant.

(DEE 518/51/67.)

(*Navy Order* 648 *of* 1959.)

UNCLASSIFIED.

634.—Magnetic Compasses—Adjustment for Conditions of D.G. both OFF and ON.

(*A.F.O.* 1547/1960.)

A number of instances have come to light wherein the requirements of Q.R. & A.I., Article 3457 (3), have not been complied with, in that the adjustment of compasses in H.M.A. ships and R.F.A.'s has been carried out for the condition of D.G. OFF only.

2. The attention of Commanding Officers and of authorities responsible for drawing up programmes for H.M.A. ships on proceeding to sea after refit, &c., is therefore drawn to this requirement in respect of H.M.A. Ships and R.F.A.'s degaussed by coils. It is pointed out that such a ship, should she not be provided with up-to-date deviation tables for conditions of D.G. both OFF and ON, is not in a satisfactory condition from the navigational aspect. Moreover, the swing with D.G. ON affords the only proof that the compass corrector coils are functioning properly, and it is evident that, if the use of degaussing ever became operationally necessary this would be at short notice, so that time would not then be available to effect repairs or adjustment.

3. Occasions may arise when, for operational reasons, time cannot be spared to carry out the second swing (with D.G. ON), but in general four hours should be allowed for the purpose of adjusting compasses and compass corrector coils and for swinging ship under both conditions of D.G.

(DEE 519/53/95.)

RESTRICTED.

635.—Director Aim Camera Recording—Policy and Instructions.

(*A.F.O.* 2660/1959.)

General Policy and Use—

Photographic recording and subsequent analysis of Director Error in Aim is now considered necessary at specified times such as at System Installation, Setting to Work and during O.G.C.T.'s, whether the method of aiming is Visual, Blind Manual or Auto Follow. It is also most desirable to use this method of recording to provide additional data for the analysis of certain A.A. and S.U. practices, both firing and non-firing.

2. Certain accessories for use in conjunction with the Cameflex camera will be provided for use when recording—

(*a*) Error in aim on surface targets up to a range of 20,000 yards; telephoto-lens; 36-in. focal length.

(*b*) Splashes of fall of shot in surface firings up to a range of 20,000 yards, mainly when marking fall of shot for line; telephoto lens.

(*c*) Fall of shot for range and the firing ship simultaneously in surface throw-off firings; twin Cameflex camera throw-off mounting.

(*d*) Fall of shot for line and error in aim simultaneously in surface throw-off firings; twin Cameflex camera throw-off mounting.

3. The camera can also be used for recording error in aim and N.B.T.'s simultaneously in A.A. firings. In their present form the cameras have been used successfully in trials, recording director error in aim and N.B.T.'s, on A.A. towed targets up to a range of 10,000 yards.

4. A time base is provided in the camera by connecting it to the event recorder in the T.S.

5. The evaluation of the film is done by a trained operator using a cine theodolite evaluator.

6. The equipment has been developed mainly for use in Flyplane and M.R.S. 3 fitted ships but can, when the occasion arises, be used elsewhere.

Equipment, provisioning and installation.

7. The scale of provisioning of Cameflex cameras and their accessories is laid down in Confidential Navy Order 59 of 1960. A few of the items listed are not yet held in Australia notably the camera brackets for the mk. 6 and 6* directors, the camera control units and the cable harnesses, but all of these are expected shortly.

8. Full installation and alignment instructions will be included in B.R. 869 the " Manual of Operation of Gunnery Cameras ", now being re-written. Maintenance instructions are now being written for inclusion in the " Manual of Photography ", B.R. 870, Part 2. Prior to the issue of these new books, H.M.S. EXCELLENT has issued an I.P.S. pamphlet, P.M. 5, briefly covering installation, alignment and maintenance. This pamphlet is being issued to all ships and authorities concerned.

9. Briefly, the equipment consists of a camera clamped onto an adjustable mounting plate bolted to a camera bracket which itself is secured to the elevating structure of the director. Only the camera bracket varies between directors; the M.R.S. 3 camera bracket is a permanent fitting mounted externally above and behind the 903 radar aerial; the mk. 6 and 6* bracket is fitted for the particular occasion and bolts

onto the right hand pivot head bearing in the director, to the right of the Director Officer's position. The Director Officer's binoculars are removed for the occasion. The modification to the pivot head bearing was published in Navy Order 452 of 1960.

10. The camera is connected electrically by a cable harness to the camera control unit which is hooked for the occasion onto three pins at the rear of the director, the pins in the M.R.S. 3 director being a part of the director. In the mk. 6 and 6* director the pins are on the control unit mounting plate which has now been fitted as a permanent fixture *vide* Navy Order 903 of 1959. Each cable harness consists of three cable forms, the cable forms being of different lengths for M.R.S. 3 and mk. 6 and 6* directors. The 24V. power supply and the time base from the event recorder are brought via permanent cabling to the control unit mounting plate or, in the M.R.S. 3 director, to the vicinity of the three pins and are connected by one of the cable forms to the camera control unit. The camera is then operated by a button held in the hand of the Director Officer. The permanent wiring modification for mk. 6 and 6* directors was published in Navy Order 453 of 1960.

11. The camera should be fully assembled except for the magazine before mounting on the director. Great care should be taken when mounting the camera. When assembled it is awkward to handle and, since it is a delicate optical instrument, serious damage can easily be caused by carelessness. All cable harnesses must be properly secured to keep them clear of obstructions as the director is moved in elevation. Cameras must be unshipped when no longer required and are never to be left unnecessarily exposed to the weather. It must also be noted that the elevating motion of the director is apt to be depression heavy when the camera is shipped and when in hand operation the handwheel must be firmly held. It does not appear however to have any marked effect on auto performance.

Organization.

12. The organization for obtaining cameras and camera equipment, for obtaining assistance in setting them up and for having the films processed and assessed, will be laid down in Fleet and East Australia Area Technical Orders. Generally speaking, the installation and alignment of the camera in the director should be the responsibility of the ship's ordnance staff. The operation of the camera itself, such as setting of aperture, loading magazines, changing filters, &c., should be the responsibility of the photographer rating who is borne in the ship in some cases and who will join the ship with the camera equipment in other cases. The actual operation of a camera during a shoot, i.e. starting and stopping the camera, remains the Director Officer's responsibility. Films will then be processed and assessed either in the Flagship or ashore by the Base Photographic Team.

Training.

13. Syllabuses for ordnance and photographer ratings will be amended to include instruction on the use of this equipment.

Repairs and Adjustments.

14. The only work which may be carried out to this equipment in ships without Photographic personnel is to be repair to the harness or camera control unit, which is the responsibility of the Electrical Officer. The camera body must **not** be stripped. All other work on this equipment will be carried out by qualified Photographic personnel.

(DW 519/55/35.)

(*Confidential Navy Order* 59 *of* 1960 *and Navy Orders* 903 *of* 1959 *and* 452 *and* 453 *of* 1960.)

UNCLASSIFIED.

636.—G.R.U.S. Mark 3 and Gyro Stabilizers, Type 3—Precautions during Operations and Maintenance.

Failures of the G.R.U.S. mark 3 and Gyro Stabilizers type 3 in service have occurred due to causes which may be grouped in two categories—

(*a*) Those due to faults in design or manufacture.

(*b*) Those due to incorrect operation or maintenance.

Some measures to eliminate failures in category (*a*) have been taken and others are being developed as rapidly as possible. The purpose of this order is to give information designed to eliminate failures in category (*b*).

Air Supplies.

2. It is vital that the air supply to the gimbal bearings is maintained without interruption. Failure of this supply will almost certainly result in permanent and serious damage beyond the capacity of ship's staff to repair; therfore, whenever the stabilizer is running, the emergency air bottle is to be kept charged to 2,500 p.s.i. and the valve connecting this bottle to the stabilizer air supply is to be open.

3. A further degree of security can be gained by maintaining pressure on the H.P. air main while the stabilizer is in use. The stop valve connecting the main to the stabilizer air system should be shut; in the event of failure of the G.A.S.U., this valve can be opened, thereby maintaining the pressure in the emergency air bottle and prolonging the period during which the stabilizer can remain in use. Air should always be available on the H.P. main in this manner when at the first degree of readiness and under any other conditions when it is important that the stabilizer be kept running.

4. A modification will shortly be introduced to fit a non-return valve between the H.P. air main and the stabilizer air system, thereby making it possible to keep the main connected while the G.A.S.U. is running; this should not be done before the modification has been carried out, as with the present arrangements there would be a risk of the air in the emergency bottle being lost if the pressure in the H.P. main dropped.

5. Whenever the stabilizer is in use the compartment is to be manned by a rating who understands the operation of the system in emergency.

Servos.

6. There is a serious risk of damage to the stabilizer if any of its servos runs away; this condition could be caused by any of the following—

(*a*) If an amplifier is seriously out of balance.

(*b*) If there is serious loss of gain in a servo amplifier.

(*c*) If an amplifier is withdrawn from the rack without first switching off the servo motor.

These conditions could be caused during maintenance, unless care is exercised to prevent them.

Maintenance.

7. Care is necessary during the maintenance of the upper gyro unit to avoid moving any slave gimbal servo gear train manually, e.g. by rotating level or cross level stop gear; if this occurred the mechanical advantage exerted would be high and

there would be every likelihood of damaging other parts of the unit in which the clearances are small. Moreover, the air bearings of the gimbal system may be damaged if they are moved at a time when the air supply unit is not operating.

8. Instructions for the maintenance of the G.R.U.S. Mark 3 are given in the pamphlet D.N.O. 10263 (Gyro Rate Unit Stabilizer Mark 3—Notes on Fault Finding) and this should be carefully studied before attempting to rectify any defects.

9. For Gyro Stabilizers type 3, the instructions in B.R. 908, Chapter 7, paragraphs 1 and 32–36 are relevant.

(DW 737/53/15.)

UNCLASSIFIED.

637.—Gun Mountings—4.5-in. Twin R.P. 41 Mark 6 Series—Replacement of Moving Coils in Oil Servo Units Marks 5 and 5*.

Experience has shown that the methods employed by the Fleet when changing defective moving coils of Oil Servo Units mk. 5 and 5* have sometimes resulted in insufficient support being given to the new coil during the drilling and dowelling operation.

2. Any distortion of the coil upsetting the centring and freedom of movement of the coil will adversely affect the transducer performance.

3. B.R. 2014B, Chapter 10, paragraph 39 (as amended by A.F.O. " P." 95/58) describes an approved method of changing moving coils. This method involves making up a jig detailed in Navy Order Diagram Issue 14/60, for centring and supporting the coil whilst clamping and drilling. It is considered that its use will greatly facilitate the fitting of spare coils.

4. Arrangements have been made for the manufacture of the necessary jigs which will be distributed, 1 No. to ships and establishments concerned in due course.

5. If not already marked, the jig should be marked as follows—" Jig for fitting spare moving coil O.S.U. Mk. 5 and 5*."

6. Navy Order 698 of 1958 is hereby cancelled.

(DW 736/59/66.)

(*Navy Order* 698 *of* 1958.)

UNCLASSIFIED.

638.—Gun Mountings—4.5-in. Twin R.P. 41 Mountings Marks 6, 6* and 6* Mod. 1 Modifications.

The following amendments and additions are to be made to Navy Order 406 of 1960.

AMENDMENTS.

Page 2, paragraph 3, line 9—After " " F " Mk. 6* " *insert:* " Mod. I.".

Page 15, Mod. 71, column 5—*Delete* " bell-mounting," *insert:* " bell mouthing."

Page 15, Mod. 75—

Column 2—*Insert:* " See also Mod. 92 ".

Columns 3 and 4—*Delete* " (*c*) N55396/1,2,5–12 ".

Column 5—*Delete:* " (*c*) Recoil replenishing tank filling pipe ".

Page 32, Mod. AN. 83—

Column 3—*Delete:* " K506A (G.S. motor starter) ", " K506 (Training motor starter) ". *Insert:* " D.E.E.F. 24503 (G.S. motor starter) ", " D.E.E.F. 24504 (Training motor starter) ".

Column 5—*Insert:* " When the new interiors are fitted, the AP. 7773 resilient mountings are to be replaced by AP. 7772 ".

ADDITIONS.

APPENDIX " A "—MKS. 6 AND/OR 6*—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
89	Mks. 6 and 6* ..	N.36322, Sheets 1 and 2	—	Rammer cylinder guard cover. To provide an easier access to the throttling plug at the forward end of the rammer cylinder. Cut a 4-in. square hole in the rammer cylinder guard cover. Manufacture and fit an access cover and joint. Secure by 4 No. ⅜-in. dia. hex. head whit. screws
90	—	—	—	—
91	—	—	—	—
92	Mks. 6 and 6* ..	N.37235 .. N.55396/1 2, 5–12	N.55396/1 2, 5–12 Purolator Micronic Filter, Model M.F. 2604	Recoil system filling pipes. Fit a sintered filter in the filling lines to the recoil system replenishing tanks to prevent ingress of dirt and consequent contamination of oil

ADDITIONS—*continued.*

APPENDIX "C" MKS. 6 AND/OR 6*—A.N. MODIFICATIONS.

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 98	Mks. 6 and 6* Navy Order 259 of 1960	N.51450 (A.N.)	—	Resite the revolving structure turntable clinometer plane on the upper roller path plate
A.N. 99	Mks. 6 and 6* Navy Order 260 of 1960	N.46101/17 N.36339 Rev.	—	Zero securing gear for cradle. Seating for ends of breast shore
A.N. 100	Mks. 6 and 6* ..	N.37310 ..	—	Remove drill loading tray doors and fittings at rear of gunshield and replace by ⅜-in. steel cover plates and ⅛-in. thick O.R.S.R. gaskets

APPENDIX "D" MK. 6* MOD. 1—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE.

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
30	—	N.36322, Sheets 1 and 2	—	Rammer. Cylinder guard cover. To provide an easier access to the throttling plug at the forward end of the rammer cylinder. Cut a 4-in. square hole in the rammer cylinder guard cover. Manufacture and fit an access cover and joint. Secure by 4 No. ⅜-in. dia. hex. head whit. screws
31	—	—	—	—

ADDITIONS—*continued.*

APPENDIX "D"—MK. 6* MOD. 1—ADMIRALTY MODIFICATIONS—REVOLVING STRUCTURE—*continued.*

Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
32	N.37235 and N.55396	N.55396/1, 2, 5–12 Purolator Micronic Filter, Model M.F. 2604	—	Recoil system filling pipes. Fit a sintered filter in the filling lines to the recoil system replenishing tanks to prevent ingress of dirt and consequent contamination of oil

APPENDIX "F"—MK. 6* MOD. I.—A.N. MODIFICATIONS.

A.N. Mod. No.	*Remarks.*	*Drawings.*	*Supply of Mod. Parts.*	*Description.*
A.N. 1	Navy Order 259 of 1960	N.51450 (A.N.)	—	Resite the revolving structure turntable clinometer plane on the upper roller path plate
A.N. 2	Navy Order 260 of 1960	N.46101/17 N.36339 Rev.	—	Zero securing gear for cradle. Seating for ends of breast shore

(DW 736/259/14.)

(*Navy Orders* 259, 260 *and* 406 *of* 1960.)

UNCLASSIFIED.

639.—Gun Mountings—40-mm., Mark 5 and 5* Mod. O Equipment—Power Firing Gear Clutch, Elimination of Sluggishness in Operation—Modification No. 34.

(*a*) *Ships, establishments and authorities concerned* — Ships and establishments so fitted.

(*b*) *Type and mark of equipment* — 40-mm. Mk. 5 and 5* Mod. O mountings.

(*c*) *Part of equipment affected* — Latch of power firing gear clutch.

(*d*) *Purpose of modification* .. — To provide additional passages for oil flow from one side of the latch to the other during its operation, and thus eliminate the dashpot action.

(*e*) *Nature of modification* .. The power firing gear clutch, as shown on Drawing No. G.R. 6651, is to be drained of oil and sufficiently dismantled so that the latch, item 3/G.R.6701, can be extracted.

Two in number ¼-in. diameter holes are to be drilled in the root of the recess of the latch, one hole at bottom centre and the other diametrically opposite.

The power firing gear clutch is then to be reassembled and between 1⅛ and 1¼ pints of oil (OC.160) are injected; a visual check is to be made to ensure that this quantity of oil does not fill the gearbox.

(*f*) *Drawing No. or C.N.O. Diagram* Drawing No. D.N.O. 11041. Navy Order Diagram Issue 14/60.

(*g*) *By whom to be done* .. Ships' staffs and establishments.

(*h*) *When to be done* .. On the next occasion of a refit.

Note.—As an interim measure power firing gear boxes are to be drained (two plugs) for a period of not less than three hours. Boxes are then to be replenished with 1 pint of oil (O.C. 160).

2. Navy Order 678 of 1958 is hereby cancelled.

(DW 736/64/35.)

(*Navy Order* 678 *of* 1958.)

UNCLASSIFIED.

640.—Gun Mountings—40-mm., Mark 9*—Motor Generator Cradle Replacement—Mod. No. 15 (Firm's Mod. No. A.D. 325)—Fitting of Test Sight Switch—Removal of Slewing Facility and Modification to Electrical Panel, Mod. No. 16 (Firm's Mod. No. 387).

(*a*) *Ships, establishments and authorities concerned* Ships, establishments and Gunnery Equipment Depots and H.M.A. dockyards.

(*b*) *Types and marks of gun mountings* The following 40-mm. mk. 9* mountings—For Mod. No. 15—(i) Reg. Nos. 38 to 106 inclusive and Reg. Nos. 114 to 229 inclusive. For Mod. No. 16—(ii) to (iv) (*see* (*c*) below) Reg. Nos. 38 to 293, 306 to 315, 330 to 340 and 381 to 414, all inclusive.

Note.—All other mountings were modified during manufacture.

(*c*) *Parts of gun mounting affected* (i) Motor generator cradle where applicable —*see* paragraph (*b*) above—Mod. No. 15.

(ii) Electrical panel; (iii) Training limit switches; (iv) Test sight switch—Mod. No. 16.

(*d*) *Purpose of modification* .. (i) To improve the housing and general access to the motor generator.

(ii) To increase the range over which the elevation speed can be adjusted.

(iii) To restrict training speed. This part of the modification incorporates the modification already promulgated and included in B.R. 209—Handbook for 40-mm. mks. 9 and 9* mountings.

(iv) To ensure that the mounting will not move in power when carrying out sight alignment tests.

(*e*) *Nature of modification* .. (i) To fit new cradle and rewire as necessary.

(ii) (*a*) To remove the resistance mounting plate Part No. 11516 and replace by Mounting Plate No. 12176 which carries—A 4-micro-farad capacitor. Economy resistance. Training generator field resistance. Elevation generator field resistance.

(*b*) Remove slewing relay switch type Q, No. 3 Reference 5C/4102 and replace by 100 ohm solenoid parallel resistance complete, Part No. 12184.

(*c*) Replace existing terminal units by Terminal Unit A, Part No. 11510, complete with Terminal Index Card, Part No. 12174 and Terminal Unit B, Part No. 11511, complete with Terminal Index Card, Part No. 12175.

(iii) To remove from the Left and Right Training Limit Switches, Part Nos. 10037 and 10038 respectively, the high-speed micro switch, type 1A, Metal Clad (Air Ministry Reference No. 5C/4098). The two micro switch actuating levers and rollers, Part Nos. 10678 and 10652 respectively, rendered redundant, should be removed from the switch assembly and scrapped. The hole exposed by removing the high-speed micro switches should be blocked by using the ⅜-in. B.S.F. bolts and lock nuts originally used as adjusting tappets for the micro switches. A washer of " Langite " or other suitable material should be fitted.

(iv) To drill and fit test sight switch to side of ammunition rack.

(v) To rewire as necessary.

(*f*) *C.N.O. Diagram* .. Nil.

(*g*) *By whom to be done* .. Dockyard, refitting authorities or Gunnery Equipment Depot.

(*h*) *When to be done* .. At first opportunity.

(*j*) *How to be treated* .. As a defect.

(*k*) *Supply of material* .. The following modification parts should be demanded through Gunnery Equipment Stores in accordance with current practice, quoting the Register No. of the mounting concerned—

For (i)—set of re-designed motor generator cradle, Drawing No. 10068.

For (ii)—set of parts for electrical panel.

For (iv)—test sight changeover switch, Drawing No. 12110.

Full fitting instructions will be enclosed in each set of parts supplied. The micro switches, Air Ministry Pattern No. 5CW/4098 removed, should be returned to the nearest Naval Store Depot (F.F.5 refers).

2. Navy Order 699 of 1958 is hereby cancelled.

(DW 736/64/34.)

(*Navy Order* 699 *of* 1958.)

RESTRICTED.

641.—2-in. Rocket Flare Launcher, Mark 5—Modification.—Resiting of Firing Push and Check Firing Lamp.

(*A.F.O.* 1358/1960.)

(*a*) *Ships, establishments and authorities concerned* All ships and establishments fitted with the equipment.

(*b*) *Type and mark of launcher* 2-in. rocket flare launcher, mark 5.

(*c*) *Part of launcher affected* .. Firing push and check fire lamp.

(*d*) *Purpose of Modification* .. To safeguard personnel in the event of a rocket motor bursting.

(*e*) *Nature of modification* .. (i) Remove firing push A.P. 7081 from launcher barrel and resite in a position where the operator is shielded from the blast. Where this is impracticable the firing position should be sited at a safe distance of 12 to 20 feet from the launcher.

(ii) Re-route cable A.P. 13132 from the breech switch to original position of firing push into junction box A.P. 12404.

(iii) Remove cable A.P. 13132 between firing push (original position) and safety switch.

(iv) Remove check fire lamp A.P. 5543 from launcher barrel and resite adjacent the new position of the firing push on the fixed structure. Remove connecting cable A.P. 13956 to junction box.

Cancelled 189/62

(v) Replace cable A.P. 13108 from safety switch to junction box (both on launcher) by cable A.P. 13109.

(vi) Run two new cables A.P. 24275 from the fixed structure junction box to the firing push in its new position.

(vii) Run one new cable A.P. 24221 from the fixed structure junction box to the check fire lamp in its new position.

(*f*) *Drawing No. or Navy Order Diagram* Navy Order Diagram Issue 14/60 Drawing No. Part D.E.E. 16975/R2.

(*g*) *By whom to be done* .. (i) Ships in Commission and Establishments where already installed—by Dockyard with Ship's Staff assistance.

(ii) New installations—by shipbuilder or installation authority as arranged by the Overseer or dockyard authorities concerned.

(*h*) *When to be done* .. As soon as possible.

(*i*) *How to be treated* .. As a defect.

2. Admiralty has advised that B.R. 924, Addendum 1—The 2-in. Rocket Flare Launcher, Mark 5, will be amended in due course.

(D.W. 736/69/1.)

UNCLASSIFIED.

642.—Alteration and Addition Item—Aircraft Carrier—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier H.M.A.S. MELBOURNE—

Class List Item No. 132. *Classification* " A ".

Item: " To air condition the Aircraft Instrument Repair Workshop by fitting a Type " A " self contained air conditioning unit in accordance with Navy Office Drawing No. 221/84 R1. The deck head of the compartment is to be insulated as necessary ".

Note.—A further restriction on fuel and/or stores equal to the added weight is to be imposed. The nett added weight is 2,700 lb. at 54.13 feet K.G.

References: (*a*) FOICEA Memorandum N30/1/1 dated 4th April, 1960.

(*b*) Garden Island Drawing No. 253/51.R1 (N.O. Drawing 221/84.R1).

(DCNTS 1213/252/2.)

UNCLASSIFIED.

643.—Alteration and Addition Item—Aircraft Carrier H.M.A.S. MELBOURNE.

Navy Order 1008 of 1958 is to be amended as follows—

Delete item (*b*) and *insert* in its stead—

" (*b*) To remove F.E.T.O. and install a work bench."

(DCNTS 1213/52/133.)

(*Navy Order* 1008 *of* 1958.)

UNCLASSIFIED.

644.—Naval Stores—Returns by H.M. Ships and Ships of other Commonwealth Navies.

Returns of naval stores from H.M. ships and ships of other Commonwealth Navies are to be accepted at H.M.A. Dockyards and Naval Store Depots in the following circumstances—

(*a*) The items are of R.A.N. pattern or of Admiralty pattern, currently in use in the R.A.N.

(*b*) The ships concerned are operating for long periods from R.A.N. bases.

(*c*) The ships are under refit at an H.M.A. Dockyard.

(*d*) When a new item is supplied in lieu.

2. The accounting arrangements in regard to such returns (including returns from submarines of the Fourth Submarine Squadron) are to be as follows—

(*a*) Items surveyed as repairable or serviceable and which are replaced from R.A.N. stocks	To be taken on R.A.N. charge and credited at serviceable or repairable value — less prescribed administration charges.
(*b*) Items surveyed as repairable or serviceable and which are replaced by items held on Admiralty Account	To be taken on charge on Admiralty Account—no financial adjustment involved.
(*c*) Items surveyed for sale	To be taken on Admiralty, &c., Sale Charge for disposal. Proceeds of sale to be credited to the Government concerned less prescribed charges.
(*d*) Items surveyed as arisings	To be taken on R.A.N. Sale Charge. No credit to be given to the Government concerned.
(*e*) Items returned by submarines of the Fourth Submarine Squadron as surplus to requirements and surveyed as serviceable.	To be taken on charge on Admiralty Account.

(DNAS 501/56/43.)

UNCLASSIFIED.

645.—Naval Stores (General) (Class F, Group 2B) Adaptors B.C. Jaw Type like Pattern 2131A—Withdrawal from Service.

Experience has revealed that Jaw brand bayonet cap adaptors, accounted for under class F, group 2B, part 3 as like pattern 2131A adaptors, when used in conjunction with metal type lampholders fitted in H.M.A. ships constitute an electrical hazard.

2. Adaptors, Jaw brand, like pattern F2B3/2131A are therefore to be withdrawn from service in the R.A.N. Stocks held by ships and establishments should be disposed of in accordance with current authorized procedure.

3. Adaptors ring grip No. 25 accounted for under class F, group 2B, part 3 should be demanded in lieu in future.

(DNAS 518/64/10.)

UNCLASSIFIED.

646.—Painting of Decks in Compartments Containing Explosives—Precautions against Static Electricity.

Navy Order 816 of 1959, paragraph 3, is to be amended as follows—

Add sub-paragraph "(*c*) Area of deck at top and bottom of revolving structure cordite hoists in 4.5-in. Mk. 6 turrets on which cartridge loading numbers stand".

(DW 1211/51/47.)

(*Navy Order* 816 *of* 1959.)

UNCLASSIFIED.

647.—Testing of Calorifiers and Pressure Vessels.

(*A.F.O.* 1131/1960.)

When testing a calorifier (or similar pressure vessel) a suitable liquid (i.e., water or oil) must be used. To use air, even at quite low pressures, is dangerous because, should the vessel fail, the potential energy stored in the compressed air will suddenly be released.

2. An accident recently reported from one of H.M. ships shows what may happen—

A copper calorifier (for domestic hot water) had been repaired by the ships' staff. To save time it was tested with compressed air from the L.P. air main. When the pressure reached 59 lb./sq. in., one end blew off, damaging fittings in the compartment and injuring two ratings who were blown violently into a corner.

3. The instructions in paragraph 1 do not apply to H.P. Air Reservoirs and cylinders for compressed gases which are covered by the regulations laid down in Sections V. and VI., Chapter V. of B.R. 16 (50)—"Engineering Manual".

4. Admiralty has advised that the Engineering Manual will be amended in due course.

(DME 177/51/21.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

648.—Fixed Issuing Prices for Provisions and Victualling Allowances as from 1st July, 1960.

The supplementary list of issuing prices for fresh fruit and vegetables which has operated since 1st April, 1960, has been amended as from 1st July, 1960, and revised price lists have been distributed to all H.M.A. ships and establishments.

2. Consequent on the revision of these prices the following rates of victualling allowances per head, per diem, will apply from 1st July, 1960—

	s.	d.
Messes of more than 300	6	5
Messes of 300 and less	6	7
Additional for ships attached to the strategic reserve	0	4
H.M.A.S. MELVILLE	6	11
H.M.A.S. TARANGAU	7	0
R.A.N.C.	7	6
R.A.N.A.T.E.	7	6
Junior Recruit Training Establishment	7	6

3. Navy Order 376 of 1960 is hereby cancelled.

(DV 903/51/28.)

(*Navy Order* 376 *of* 1960.)

Section 7.
CANCELLED LIST.

UNCLASSIFIED.

649.—Cancellation of Navy Order.

Navy Order 132 of 1959 is hereby cancelled.

(DCNTS 1224/51/50.)

With reference to Navy Order 1094 of 1959, Navy Orders 473 to 663 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

C.N.O.'s 650-662/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
17th August, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

5632/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

650.—Aircraft Radio—Use of 8 Mcs. DCA Frequency on Cross Country Flights.

In order to improve the communication coverage with aircraft in areas not adequately covered by VHF and 3 and 5/6 mcs. communications, DCA communication units now maintain an 8 mcs. watch as shown in the appendix.

2. FAA aircraft with HF radio are required to be capable of 8 mcs. communication with DCA when on cross country flights except as follows—

(*a*) Carrier borne aircraft proceeding to coastal aerodromes.

(*b*) Flights between Adelaide, Melbourne, Sydney, Canberra, where there is adequate VHF coverage.

3. Crystals will be supplied without demand, 10 for each frequency to H.M.A.S. MELBOURNE and 10 for each frequency to H.M.A.S. ALBATROSS.

4. Crystals for frequencies are—

8922 Kcs.	ZBC 9387.
8896.5 Kcs.	ZBC 9361.5.

APPENDIX.

Area A.—8922 Kcs. at—

Darwin, Wyndham, Broome, Port Hedland, Carnarvon, Perth, Albany, Kalgoolie, Ceduna, Adelaide, Leigh Creek, Alice Springs, Meekatharra.

Area B.—8896.5 Kcs. at—

Darwin, Katherine, Tennant Creek, Alice Springs, Brisbane, Charleville, Cloncurry, Rockhampton, Townsville, Cairns, Thursday Island, Sydney.

(DSD 16/8/5.)

UNCLASSIFIED.

651.—Commonwealth and Foreign Ensigns and Flags—Allowances.

The appendix to this order contains a list of Commonwealth and Foreign Ensigns and Flags together with their allowances.

2. Demands by ships and H.M.A.S. CRESWELL to complete to allowances should be forwarded to SNSO, Sydney, by H.M.A.S. CERBERUS to NSO, Port Melbourne and H.M.A.S. LEEUWIN to DNSOi/c, Fremantle.

3. Ships and establishments holding ensigns in excess of this order should return them to the nearest Naval Stores Depot.

4. The relevant establishment of sea stores should be noted as necessary to indicate that Admiralty allowances of Foreign Ensigns and National Flags therein are not applicable to H.M.A. ships.

5. Navy Order 1002 of 1958 is hereby cancelled.

APPENDIX.

Commonwealth Flags and Ensigns—

Canada	National Flag *†‡
Ceylon	National Flag *†‡
Ghana	National Flag †‡ Naval Ensign †
India	National Flag *†‡
Malaya	Federation Flag †‡ Naval Ensign *†‡
New Zealand	National Flag *†‡ Red Ensign *†‡
Pakistan	National Flag *†‡
Singapore §	National Flag *†‡ And/or Ensign *†‡
Union of South Africa	Union Flag †‡ Naval Ensign *†‡
United Kingdom	Union Flag *†‡ Blue Ensign *†‡ Red Ensign *†

Foreign Ensigns—

Albania
Argentina
Belgium
Brazil
Bulgaria
Burma ||†*
Cambodia †*
Chile
China (Nationalist) †*
China (Peoples Republic) ‡†*
Colombia
Costa Rica
Cuba
Czechoslovakia
Denmark ||†
Dominican Republic
Ecuador
Eire
Finland
France ‡†*
Germany (Federal Republic) ‡†
Greece ||†
Guatemala
Honduras
Hungary
Iceland
Indonesia ‡||†*
Iraq
Israel
Italy ||†
Japan ‡||†*
Jordan
Korea ||†*
Korea (Peoples Republic) †
Laos †
Lebanon
Liberia †
Luxemburg
Mexico
Netherlands †*
Nicaragua
Norway ||†
Panama †
Persia
Peru
Philippines Republic †*
Poland
Portugal †*
Puerto Rico
Roumania
Salvador
Seato Flag ‡†*
Spain
Sweden ||†
Switzerland
Thailand ||†*
Turkey
United Arab Republic (Egypt and Syria)
United Nations ‡†*
Uruguay
United States of America ‡†*
U.S.S.R. ‡||†*
Venezuela
Vietnam (South) §†*
Vietnam (North) §†
Yugoslavia

APPENDIX—*continued.*

Notes—

(*a*) Except where stipulated for Commonwealth countries, only the ensigns of the countries listed above will be available for issue. Where there is no recognized ensign, the national flag will be used. (*See* Note (*c*).)

(*b*) Ensigns listed which are not specifically allowed to ships or establishments may be demanded from SNSO, Sydney, or NSO, Port Melbourne, on temporary loan for either instructional or ceremonial purposes when required.

(*c*) 1 No. of each of the ensigns of countries marked † and the national flags of the countries marked || form the permanent instructional outfit for H.M.A.S. CERBERUS and H.M.A.S. CRESWELL. 1 No. of each national flag and ensign marked ‡ is allowed to H.M.A.S. LEEUWIN for Junior Recruit Training.

(*d*) All frigates and above in commission (except surveying ships) are to hold 1 No. of each of the ensigns of countries marked *.

(*e*) NOICNG, NOICNA and frigates employed on surveying duties and minesweepers in commission are to hold 1 No. each of the following only—

Union Flag
New Zealand National Flag
Ensigns of France, Netherlands, Portugal and United States of America.

(*f*) Six breadth ensigns are to be used by all ships, and 8 breadth by establishments. However, having regard to stocks held, size 8 will continue to be issued to ships for a period and size 12 will be issued to establishments until stocks are exhausted.

(*g*) § Further information on these flags will be promulgated in due course.

(DSD 510/54/22.)

(*Navy Order* 1002 *of* 1958.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

652.—Educational and Vocational Training—Facilities for Part-time Study.

The Services Vocational and Educational Training Scheme (SVETS) exists to provide facilities whereby officers and men of the Services may undertake study in their own time with a view to improving their educational qualifications or to obtaining vocational training in readiness for their eventual return to civil life.

2. Details of the Services Resettlement Organization under which certain naval personnel are eligible for resettlement training are contained in Navy Order 79 of 1959.

Eligibility.

3. All officers and ratings of the Naval Forces appointed or enlisted for full-time continuous service are eligible to take the courses described in paragraphs 4 and 5, subject to the conditions set out in the remaining paragraphs of this order.

Courses Available.

4. Attendance Courses.—An officer or rating may enrol for any part-time attendance course offered by any teaching institution in Australia which is administered by a public authority, provided that attendance can be effected in normal off-duty hours. Enrolment in an attendance course will not be permitted if attendance is likely to interfere with the normal execution of Service duties nor will enrolment affect the availability of an officer or rating for re-appointment or draft to meet the ordinary requirements of the Service.

Correspondence Courses.

5. An officer or rating may enrol for any correspondence course offered by any teaching institution in Australia which is administered by a public authority. He may also enrol for such courses offered by private institutions as may be specifically approved from time to time, though these will normally be limited to those for which suitable alternative courses from public institutions are not available.

Details of Approved Correspondence Courses.

6. The following lists of approved correspondence courses are supplied to Education Officers of ships and establishments without demand by the Director, Naval Education Service—

(*a*) A list of technical type correspondence courses available through State technical correspondence schools.

(*b*) A list of approved correspondence courses from private institutions.

7. Education Officers may amplify the information contained in the above lists by applying to any of the listed teaching institutions for a copy of its handbook of courses.

8. Courses from private institutions which are not contained in the list of approved courses, but which are considered by Education Officers to be within the provisions of paragraph 5, should be submitted to DNES for consideration.

9. Correspondence courses in certain University subjects are available through the University of Queensland and the University of New England. Details of these courses may be obtained on application to the Registrars.

Refund of Fees.

10. Subject to satisfactory progress on course, a member will be eligible to a refund of fees in accordance with the following scale—

(*a*) Members with less than 15 years' service at time of enrolment for course or course unit—75 per cent. of cost of course.

(*b*) Members with 15 years' service or more at time of enrolment for course or course unit—100 per cent. of cost of course.

Note.—" Service " is defined as total service, not necessarily continuous, with H.M. Australian Armed Forces.

11. The cost of a course includes all compulsory fees, including examination fees (if any), but does not include cost of text books, instruments and incidental expenses.

12. The following will be regarded as " satisfactory progress "—

(*a*) Successful completion of any course (or course unit) whilst still serving and within two years of the date of enrolment.

(*b*) Successful completion of 50 per cent. of a course (or course unit) before discharge from the Service, provided that the period between the date of enrolment and the date of discharge does not exceed 18 calendar months.

13. A course (or course unit) will be regarded as successfully completed when any of the following conditions has been fulfilled—

(*a*) In connection with any type of course, a final examination, internal or external, has been passed to the satisfaction of the teaching institution.

(*b*) In connection with any type of course, all prescribed work assignments have been completed to the satisfaction of the teaching institution, regardless of final examination results.

(*c*) In connection with an attendance course, the student has made at least 80 per cent. of the possible attendances or has made attendances and has been granted " attendance credits " such as will bring the total of attendances and attendance credits to at least 80 per cent. of the possible attendances, provided however, that the total of attendance credits does not exceed 30 per cent. of the possible attendances.

Attendance Credit Cards.

14. The Education Officer will complete an attendance credit card for each member who enrols for an attendance course, and will endorse the card whenever the member is prevented by Service duties from making a scheduled attendance. Stocks of form AS 2092Z, the Attendance Credit Card, are available on demand from SNSO, Sydney.

Administrative Procedure.

15. Application for a course is to be made direct to the teaching institution on part A of form AS 2091Z obtainable from the Education Officer. Stocks of form AS 2091Z, the Application for Correspondence Course or Attendance Course, are available on demand from SNSO, Sydney.

16. The form must bear the endorsement of the Education Officer before being submitted to the teaching institution. The name, official number and rank or rating of the applicant must also be entered on parts B, C and D of the form.

17. If the application is acceptable, part B of form AS 2091Z (Notice of Acceptance) will be returned to the student. This part will show the fee to be paid and a remittance for this amount must then be forwarded by the student direct to the teaching institution.

18. When the fee is paid and enrolment effected, the teaching institution will return part C of the form (Notice of Enrolment) to the student who must hand it to his Education Officer. Education Officers are to forward these notices of enrolment in monthly batches to DNES after recording details of enrolments in form AS 396, Education Officer's Journal, or form AS 396Z, Education Officer's Report, as applicable. Failure to forward these notices may prejudice the student's eventual claims to refund of fees.

19. When a course (or course unit) has been completed in accordance with paragraph 13 of this order, the student must apply to the teaching institution for the return of part D of form AS 2091Z (Certificate of Completion) and must hand this certificate, together with an application for refund of fees, to the Education Officer for forwarding to the Director, Naval Education Service, Department of the Navy, Victoria Barracks, Melbourne. Where fees, other than those receipted by the teaching institution on part C (Notice of Enrolment), have been paid, receipts for such fees must be forwarded with the application for refund of fees.

20. Refund will be effected as a miscellaneous credit to the pay account of the officer or rating concerned.

(DNES 325/53/5.)

(*Navy Order* 79 *of* 1959.)

UNCLASSIFIED.

653.—Instructional Films and Film-strips—Serial No. A.614, " Boats and Boatwork "—Distribution.

Copies of Parts 8 and 9 of the Admiralty film Serial No. A.614, " Boats and Boatwork " are being obtained and the initial distribution will be made, without demand, by SNSO, Sydney, on the following scale—

Service.	*No. of copies.*
H.M.A.S. MELBOURNE	1
H.M.A.S. HUON	1
H.M.A.S. LEEUWIN	1
H.M.A.S. LONSDALE	1
H.M.A.S. MORETON	1
H.M.A.S. PENGUIN	1
H.M.A.S. RUSHCUTTER	1
H.M.A.S. TARANGAU	1
H.M.A.S. TORRENS	1
Flinders Naval Depot	1
R.A.N. Film Library, Sydney	1

2. Distribution of Parts 1 to 7 of the film has already been made, without demand, by SNSO, Sydney, on the abovementioned scale.

3. Details of the complete film are as follows—

Part 1. *Ships' Boats.*—Shows the types of boats in Service use, their construction, particularly that of a whaler, also the types of davits in use in H.M. ships. Running time 24 minutes. One spool.

Part 2. *Pulling.*—Shows the correct method of pulling on oar. Running time 12 minutes. One spool.

Part 3. *The Sea Boat.*—This part shows the rigging, lowering and hoisting of the whaler when used as a sea boat and explains how the Robinson Disengaging Gear Works. Running time 17 minutes. One spool.

Part 4. *Principles of Sailing.*—Explains, by means of animated diagrams and models, the basic principles of sailing. These are then demonstrated practically in the sailing of a whaler. Running time 22 minutes. One spool.

Part 5. *Handling of Boats Under Sail.*—This part is primarily intended for coxswains of sailing boats and shows how to handle a whaler under various conditions of wind and sea. Running time 15 minutes. One spool.

Part 6. *Handling of Power Boats.*—Deals with the effects of a propeller on boat handling and shows the principles of the Kitchen Rudder. Running time 12 minutes. One spool.

Part 7. *Hints to Coxswains.*—Shows the problems a young coxswain has to face when in charge of a boat being towed and under sail. Running time 14 minutes. One spool.

Part 8. *The Motor Whaler at Sea.*—This part gives a general description of the boat, together with its uses. The drills for lowering and hoisting are also included. Running time 16 minutes. One spool.

Part 9. *Sailing the Motor Whaler.*—This part explains the basic principles of sailing the motor whaler, including rigging the boat, gybing, reefing, and setting and handling the spinnaker. Running time 19 minutes. One spool.

(DNAS 519/56/95.)

UNCLASSIFIED.

654.—Instructional Films and Film-strips—Serial No. H.1229, " The Mystery of the Three Clocks "—Distribution.

(*A.F.O.* 519/1960.)

Copies of the religious film Serial No. H.1229, " The Mystery of the Three Clocks " are being obtained and initial distribution will be made, without demand, by SNSO, Sydney, on the following scale—

Service.	*No. of copies.*
Flinders Naval Depot	1
R.A.N. Film Library, Sydney	1

2. The film demonstrates by analogy with scientific experiments and facts, that Man is a creature of free will placed in a universe governed by Divine Law.

3. The film has a running time of 35 minutes and is issued on one spool.

4. The showing of this film is subject to the following copyright conditions, which are to be strictly observed—

(*a*) The film is available to Chaplains for showing in H.M.A. ships and establishments to Naval personnel and their families. It is not to be shown to purely civilian audiences and on no account is it to be made available to non-Service users.

(*b*) The film is always to be shown in its entirety, no deletions are permitted.

(*c*) The film is religious, and is to be used by the Chaplains themselves for religious and educational purposes only. It is not to be shown as part of an entertainment programme and no admission charge is to be made.

(DNAS 519/56/73.)

UNCLASSIFIED.

655.—Leave for Examination Purposes.

In normal circumstances University and Technical Colleges arrange for examinations to be conducted in ships or shore establishments. This arrangement is, however, not always possible and therefore, in order to enable members to attend examinations where they are not conducted in ships or establishments, leave up to five days with pay in any leave year may be granted in the following circumstances—

(*a*) Examinations as part of a course under the Services' Vocational and Educational Training Scheme; and

(*b*) Examinations as part of a civil schooling course on a " part-time " or " own time " basis where the fees are met by the Commonwealth.

2. Travelling and Meal Allowance are not payable and expenses for travel or living expenses incurred by a member in attending examinations will not be reimbursed.

3. Any leave in excess of five days required by a member to attend examination should, at the option of the member, be debited against long leave due or accruing or as leave without pay under the provisions of Navy Order 644 of 1959, paragraph 58.

(HPB 319/1/7.)

(*Navy Order* 644 *of* 1959.)

UNCLASSIFIED.

656.—Surgical, Orthopaedic and Artificial Aids and Appliances.

This order concerns the supply of surgical and artificial aids and appliances such as surgical footwear, spinal braces, walking calipers, splints, abdominal belts and Calaids (hearing aids).

2. Except where the issue of a Calaid is involved, if the Naval medical officer attending the patient considers the item is necessary for treatment, it may be procured with the approval of the local Naval administrative authority.

3. Surgical footwear required to remedy a permanent disability is to be issued on repayment at the current price for light boots.

4. Where it is considered justified by the nature of the orthopaedic defect, initial supply of two pairs of surgical footwear may be made; thereafter, replacement is to be made by one pair only of footwear.

5. Artificial hearing aids (Calaids) are produced by the Commonwealth Acoustic Laboratories of the Department of Health.

6. The supply of Calaids will be effected under the following conditions—

(*a*) A report by an ear, nose and throat specialist is to be obtained and supplied to the Commonwealth Acoustic Laboratories who will report if the aid will be of sufficient benefit to justify its issue.

(*b*) These reports are to be incorporated in the report of a medical board of survey.

(*c*) The MDG will decide if the aid is to be issued and his approval is not to be anticipated.

(*d*) Calaids will remain the property of the Commonwealth Department of Health and should be recovered and returned to that Department on the death of a serving member.

(*e*) Calaids will be supplied and maintained by the Acoustic Laboratories for a flat initial charge. Initially this charge will be £15, but it will be reviewed in the light of costs from time to time.

(*f*) After the recipient ceases to be a Navy responsibility, the aid may be retained and maintenance will be continued but no batteries supplied; members should be informed that the Calaid is to be returned to the Commonwealth Department of Health on death after discharge.

7. Branch Acoustic Laboratories are established in all capital cities.

8. It is not generally known that hearing aids are liable to damage as the result of currents induced by diathermy machines. Personnel issued with hearing aids should therefore be instructed to remove the aid prior to undergoing short-wave therapy. The danger of damage to hearing aids should also be brought to the notice of physiotherapists and other personnel operating diathermy machines in H.M.A. ships and establishments.

9. Navy Order 810 of 1958 is hereby cancelled.

(MDG 1009/51/11.)

(*Navy Order* 810 *of* 1958.)

UNCLASSIFIED.

657.—Temporary Rental Allowance.

In future, applicants for Temporary Rental Allowance will not be required to produce certificates from estate agents to support their claims, except where required by the Naval Board in exceptional circumstances. This does not imply a relaxing of the requirement for the member to conduct a proper search for suitable accommodation.

2. To enable consideration to be given to the claim each applicant should submit a statement showing details of his efforts to secure unfurnished premises and, failing success in that direction, the extent of his search for cheaper furnished premises.

3. In preparing his statement the applicant should refer to the following points which govern eligibility for the allowance—

(*a*) The search must not be limited to furnished premises. The applicant must, to be regarded as eligible, establish himself as a genuine seeker for unfurnished premises at a rental he can afford to pay. There is no other criterion in this matter and the applicant therefore must not restrict his search to premises where the rent approximates his rent norm (I.P.I. 231/41 (*d*) refers).

(*b*) Where, failing initial success in his search for unfurnished premises, he is forced to occupy furnished premises, the applicant must continue his search for unfurnished premises in accordance with (*a*) or for cheaper furnished premises.

(*c*) The applicant's search must be conducted over a reasonable area and not confined to the inner residential suburbs or to an area which has certain personal advantages when reasonable premises at lower rentals are available in other areas. Many persons living in Sydney and Melbourne journey daily from the more outlying suburbs to the city, taking 60 to 90 minutes from residence to place of employment and this is not considered excessive.

(*d*) Where furnished premises are leased the applicant must show—

(i) that he was faced with no alternative but to accept the premises leased;

(ii) that the rental under the lease is reasonable by comparison with existing rental charges for similar furnished premises.

4. Where an applicant has rejected any accommodation either for unfurnished premises or cheaper furnished premises he must give details of the accommodation rejected and the reasons for rejection.

5. Before entering into a lease an applicant should check with the Billeting Officer for the area on the probable date on which a service residence will become available to him, he should make every endeavour to have a release clause inserted in the lease and, wherever possible, should submit details of the proposed lease for approval.

6. This order will be reprinted for posting on notice boards.

7. Navy Order 449 of 1960 is hereby cancelled.

(HPB 252/8/21.)

(*Navy Order* 449 *of* 1960.)

5632/60.—3

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

658.—Guns—Examination, Stowage and Carriage of Spare Barrels in H.M.A. Ships.

(*A.F.O.* 1594/1960.)

In particular instances, QF barrels are issued to H.M.A. ships for carriage as spares. The 40/60 barrels are supplied greased and are to be stowed horizontally and in the boxes in which supplied but, when this is not possible (due to space limitations), the barrels may be stowed horizontally (unboxed) off the weather deck.

2. 40/60 barrels are preserved externally with phosphate/grease and internally with grease LG 280. Bores are not closed and are accessible for examination and preservation, which is to be carried out by ships' staff at frequent intervals.

3. At 2-yearly intervals H.M.A. ships are to requisition the nearest NAD to clean, examine and represerve barrels carried as spares. BR 291, Table F, item 14, col. 3, will be amended to provide for a visual inspection to be carried out concurrently with this examination.

4. Admiralty has advised that BRs 291 and 292 will be amended in due course.

(DW704/51/5.)

UNCLASSIFIED.

659.—Naval Stores (General) (Class B, Group 9H)—Monel Metal Wire, Patterns 5788, 5784, 5785—Amendment to Description.

(*A.F.O.* 1432/1960.)

The description " Monel metal " at present applicable to patterns B9H/5788, 5784 and 5785, has been amended to read as follows—

" Wire, Nickel-Copper Alloy, BS 3075, NA 13 (Monel metal), cold drawn (soft annealed finish) ".

2. Admiralty has advised that the Rate Book and Authorized list of Naval Stores, BR 810, will be amended accordingly.

(DNAS 506/51/53.)

UNCLASSIFIED.

660.—Naval Stores (General) (Class E, Group 9)—Allocation of New Pattern Numbers.

(*A.F.O.* 1229/1960.)

To facilitate accounting by eliminating duplicated pattern numbers and to regularize the situation where items are now accounted for under other than Admiralty pattern numbers or Joint Service numbers, new Admiralty pattern numbers have been assigned to the items under class E, group 9 of the Rate Book and Authorized List of Naval Stores, BR 810 as detailed in the appendix to this order.

2. Records should be amended accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*g*) of ABR 4 (Naval Storekeeping Manual).

3. The relevant publications will be amended.

APPENDIX.

Description.	*Old Pattern.*	*New Pattern.*
Oil, CD in quart jar	92	92
Oil, CD in gallon jar	92	938
Oil, NEOX	13395	943
Oil, Shell Fusus " A " in 5-gallon drum	10229	10229
Oil, Shell Fusus " A " in 1-gallon can	10229	10228

(DNAS 512/91/26.)

UNCLASSIFIED.

661.—Naval Stores (Technical) (Class F, Group 1A1) W/T—Obsolete Stores.

(*A.F.O.* 901/1960.)

The stores detailed in the appendix to this order are now obsolete. Any stocks held in H.M.A. ships or establishments are to be returned to the nearest (S)NSO who is to dispose of them and any stocks already held in accordance with existing instructions. No items referred to herein require mutilation for security reasons before disposal.

2. No further returns of the items are to be taken on main or repairable ledger charge.

3. Strict adherence to the pattern numbers quoted is essential.

APPENDIX.

Pattern.	*Description.*	*Pattern.*	*Description.*
W236	Absorber unit	7154	Bracket
W576B	Switch, magnetic	W7255A	Transformer
1453A	Bolts, &c.	W7456	Rectifier unit
W1609	Lead	W7861	Strip
2415	Indicator	50764	Clamp
2613	Board terminal	50768	Clamp
W3134	Card	50769	Clamp
W3787	Lead, unscreened	55298A	Counting Mechanism
3823	Indicator	56016	Board
4133	Frame upper	57293	Filter unit
4145	Mount	58146	Framework
4712	Coils, magnet	59238	Case
5533	Mount	60412	Plug
5586A	Transformer	60926	Plug, miniature
6254	Framework	66087	Ammeter
6783	Mount	66088	Ammeter
W7134	Control unit	66555	Transformer

(DNAS 518/51/252.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

662.—ABR 91—Naval Artificer Apprentices—General Instructions.
ABR 697—Manual of Instructions for the Junior Recruits Training Establishment.

ABR 91—" Naval Artificer Apprentices—General Instructions " and ABR 697—" Manual of Instruction for the Junior Recruits Training Establishment " have now been published and distribution is being effected.

(HPB 303/35/8.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

FOR OFFICIAL USE ONLY. C.N.O. 663/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
19th August, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

5633/60.

UNCLASSIFIED.

663.—Books—Distribution of Non-accountable Publications During June, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series contained in the appendix to this order, have been distributed to ships and services during June, 1960. Section 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments, referred to in the appendix to this order, are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	25th March, 1960.
Aeroplane	1st April, 1960.
Aeroplane	8th April, 1960.
Aeroplane	22nd April, 1960.
Aeroplane	29th April, 1960.
Aeroplane	Index, Volume 97, August to December, 1959.
Manual of A.B.C.S.C. Cataloguing in Australia (Provisional)	Amendment List No. 5.
Fibres and Plastics	Volume 21, No. 4, April, 1960.
Fibres and Plastics	Volume 21, No. 5, pp. 127–156, May, 1960.
Flight	25th March, 1960.
Flight	1st April, 1960.
Flight	8th April, 1960.
Flight	15th April, 1960.
Flight	22nd April, 1960.
Flight Index	Volume LXXVI., July–December, 1959.
Joint Services Recognition Journal	Volume 15, No. 2, February, 1960.
Joint Services Recognition Journal	Volume 15, No. 3, March, 1960.
Journal of the British Institute of Navigation	Volume XIII., No. 29, April, 1960.
Journal of the Royal Naval Medical Service	Volume XLVI., No. 1, Winter, 1960.
List of Propellant Lots accepted for Naval Service, 1958	Amendments Nos. 7 and 8.
Manual of the Audit Act and Treasury Regulations	Issue No. 29 dated 15th March, 1960, pages 1–16.
N.A.M.A.N.	N.2077–N.2090 dated 31st May, 1960.
United States Naval Institute Proceedings	Volume 86, No. 5, May, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 10	3.
B.R. 16	40.
A.B.R. 21	Australian Amendment No. A.N.1.
B.R. 100/1958	Amendment No. 3.
B.R. 125	Volume 1, 1959/60, Supplement No. 10, April, 1960.
B.R. 125	Volume 1, New Entries No. 10, April, 1960.
B.R. 129 (3) (1)	(List of Special Service Stations), 16th Edition, Supplement No. 6.
B.R. 226C (7)	Amendment No. 5.
B.R. 922/1958	2.
B.R. 1145 (1)	3.
B.R. 1145 (2)	3.
B.R. 1156	3.
B.R. 1159	Amendments Nos. 2, 3, 4, 5, 6, 7, 8 and 9.
B.R. 1370	Amendment No. 5.
B.R. 1557 (1) B	3.
B.R. 1616 (1) (2)	5.
B.R. 1625	5.
B.R. 1647/1954	3.
B.R. 1672 (1)	4.
B.R. 1771 (5)	5.
B.R. 1771 (17)	3.
B.R. 1822 (1)	17.
B.R. 1834	15.
B.R. 1837 (3), Division R, Section R.A.	3.
B.R. 1837 (3), Division R, Section R.K.	5.
B.R. 1837 (3), Division R, Section R.X.	6.
B.R. 1837 (3), Division S, Section S.C.	5.
B.R. 1837 (3), Division S, Section S.D.	6.
B.R. 1837 (3), Division S, Section S.R.	3.
B.R. 1837 (3), Division S, Section S.W.	4.
B.R. 1837 (7), Division L, Section L.A.	9.
B.R. 1837 (7), Division L, Section L.L.	10.
B.R. 1837 (8), Division M, Introduction	19.
B.R. 1837 (8), Division M, Section M.D.	9.
B.R. 1837 (8), Division M, Section M.L.	11.
B.R. 1837 (8), Division M, Section M.V.	13.
B.R. 1837 (8), Division M, Section M.X.	8.
B.R. 1935 (B)	1.
B.R. 1958	Amendment No. A.N.1.
B.R. 2014B–1957	Volume No. 2, Amendment No. A.N. 2
B.R. 2018	5.
B.R. 2106 (1)	4.
B.R. 2106 (2)	5.
B.R. 2111 (10).	1.
B.R. 2111 (14)	1.
B.R. 2111 (14)	Correction to A.F.O.P. 199/60 Amendment No. 1.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 2112 G.C.	2.
A.B.R. 5008	Australian Amendment No. A.N.1.
A.B.R. 5015	Australian Amendment No. A.N.1.
A.B.R. 5017	Australian Amendment No. A.N.1.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 158, 159, 160 and 161.
957C, Volume 1 (2nd Edition)	A.I.L. 1/60.
1086, Book 2 (2nd Edition)	A.L. 95.
1086, Book 3, Part 2 (2nd Edition)	Erratum A.L. 125 and 126.
1086, Book 4, Part 3 (2nd Edition)	A.L. 82.
1086, Book 6 (2nd Edition)	A.L. 101.
1086, Book 8, Part 2 (2nd Edition)	A.L. 14 and 15.
1086, Book 9 (2nd Edition)	A.L. 131.
1086, Book 10 (2nd Edition)	A.L. 96 and 97.
1086, Book 12, Part 1 (2nd Edition)	A.L. 176, 177, 178, 179 and 180.
1086, Book 12, Part 2 (2nd Edition)	A.L. 10.
1086, Book 15 (2nd Edition)	A.L. 145 and 147.
1181, Vol 2	(A.L. 108)–Orange label. (A.L. 107)–B.89 (A.L. 109)–B.90.
1181C, Vol. 1 and Vol. 6, Part 1	A.I.L. 1/60 A.I.L. 2/60 A.I.L. 3/60 A.L. 33 and 34.
1181C, Vol. 6, Parts 2, 3 and 4	A.L. 40 and 41.
1182 (N), Vol. 1	A.L. 22 and 23.
1182 (N), Vol. 4, Part 6	A.L. 2.
1182A (N), Vol. 1	A.I.L. 1/60 A.L. 15.
1182A, Vol. 2, Part 1	C.42 C.43 C.44 C.45 E.23.
1182B, Vol. 4, Part 6 (Issue 1)	A.L. 14.
1182C, Vol. 1	A.I.L. 1/60 A.L. 143.
1182C (N), Vol. 1	A.I.L. 1/60.
1182C, Vol. 1 and Vol. 6, Part 1	A.I.L. 1/60 A.I.L. 2/60 A.I.L. 3/60.
1182C, Vol. 2	(A.L. 82)–B.23 (A.L. 81)–F.19.
1182E, Vol. 1	A.L. 80.
1182E (N), Vol. 1	A.L. 14 and 15.
1182E, Vol. 2	(A.L. 75)–D.19 (A.L. 1 inc.) (A.L. 76)–E.1 (Alt. 1 inc.) (A.L. 77)–E.2.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1234E	A.L. 21.
1275A, Vol. 1, Section 13	A.L. 27.
1275A, Vol. 1, Section 15	A.L. 22.
1275A, Vol. 1, Section 16	A.L. 36.
1275A, Vol. 1, Section 17	A.L. 27 and 29.
1275A, Vol. 1, Section 18	A.L. 32.
1275A, Vol. 1, Section 20	A.L. 54, 55, 56 and 57.
1275A, Vol. 1, Section 24	A.L. 42, 43, 44, 45, and 46.
1275A, Vol. 1, Section 26	A.L. 23 and 24.
1275A, Vol. 1, Section 27	A.L. 21.
1275A, Vol. 2	(A.L. 93)–C.14 (Alt. 1 inc.).
1275A, Vol. 6, Section 20	A.L. 9.
1275B, Vol. 1, Section 10	A.L. 11.
1275B, Vol. 1, Section 14	A.I.L. 1/60 A.I.L. 2/60.
1275B, Vol. 1, Section 16	A.L. 24 and 25.
1275B, Vol. 2	(A.L. 50)–D.23.
1275E, Vol 1	A.L. 97.
1275G, Vol. 1	A.L. 62 and 63.
1275G, Vol. 2, Part 1	(A.L. 143)–A.6 (Alt. 1 inc.) (A.L. 147)–C.30 (A.L. 146)–E.8 (A.L. 140)–G.3.
1275T, Vol. 1	A.L. 86.
1355A, Vol. 1	A.L. 72.
1355C, Vol. 1	A.L. 60.
1355C, Vol. 4, Part 6 (Issue 1)	A.L. 21.
1464B, Vol. 1	A.L. 171.
1464C, Vol. 2, Part 1	No. 2 (A.L. 23 inc.).
1464D, Vol. 1	A.L. 200, 201, 203, 204, 205, 206, and 207.
1464G, Vol. 1	A.L. 162.
1469F, Vol. 1	A.L. 27.
1492A, Vol. 1	A.I.L. 1/60.
1538P, Vol. 1 and Vol. 6, Part 1	A.L. 36.
1538P, Vol. 6, Parts 2 and 4	A.L. 42.
1641H, Vol. 2, Part 3	A.L. 55.
1641P, Vol. 1, Part 2 and Vol. 5	A.L. 47 and 48.
1641S, Vol 1, Parts 1 and 3	A.L. 41.
1641S, Vol. 1, Part 2 and Vol. 5	A.I.L. 1/60 A.L. 32 and 33.
1661B, Vol. 1 (2nd Edition)	A.L. 95.
1661D, Vol. 1 (2nd Edition)	A.L. 115.
1661E, Vol. 1 (2nd Edition)	A.L. 88.
1661F, Vol. 1	A.L. 85, 87 and 88.
1664A (2nd Edition), Vol. 1, Book 1.	A.L. 17.
1664A (2nd Edition), Vol. 2, Part 3, Book 2	A.L. 17.
1664C, Vol. 1	A.L. 28.
1664C, Vol. 2, Parts 1 and 3	No. 23.
1664E, Vol. 2	(A.L. 7)–C.2.

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A.P. No.	*A.L. or Leaflet.*
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	D.158
	D.159
	E.126 (A.L. 1 inc.)
	E.130
	E.132
	F.87 (A.L. 1 inc.)
	F. 93 (A.L. 1)
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1803B, Vol. 1	A.L. 174.
1803B, Vol. 2, Part 3	A.L. 98.
1803C, Vol. 2, Part 3	A.L. 51.
1803D, Vol. 1, Book 1	A.L. 58 and 59.
1803D, Vol. 1, Book 3	A.L. 115, 116 and 117.
1803D, Vol. 1, Book 3A	A.L. 19.
1803D, Vol. 1, Book 4	A.L. 85, 86 and 87.
1803D, Vol. 2, Part 2	A.L. 222.
1803D, Vol. 2, Part 3	A.L. 262
1803E, Vol. 1	A.L. 117
1803E, Vol. 2, Part 2	A.L. 77.
1803F, Vol. 1, Book 1	A.L. 25.
1803F, Vol. 1, Book 2	A.L. 21.
1803J, Vol. 2, Part 2	A.L. 34.
1803J, Vol. 2, Part 3	A.L. 43.
1803P, Vol. 1	A.L. 102, 103 and 104.
1803R, Vol. 1	A.L. 74.
1803S, Vol. 1, Book 2	A.L. 16.
1803T, Vol. 6	A.L. 49 and 53.
2234E, Vol. 2, Part 1	(A.L. 47)–F.3
	(A.L. 46)–J.3.
2240A, Vol. 2, Part 1	No. 117.
2276F, Vol. 1	A.L. 83 and 84.
2276J	A.L. 24.
2306B, Vol. 5	A.L. 9.
2337, Vol. 1, Book 1	A.L. 48.
2337, Vol. 1, Book 2	A.L. 41, 42 and 43.
2337, Vol. 2	(A.L. 178)–A.30 (Alt. 2)
	(A.L. 177)–A.31 (Alt. 1)
	(A.L. 175)–A.36
	(A.L. 173)–C.78
	(A.L. 174)–C.79.
2531J, Vol. 3	A.L. 1.
2531N, Vol. 3	A.L. 7.
2538HA, Vol. 2	(A.L. 128)–B.80.
2538HA, Vol. 6, Part 2 (2nd Edition)	A.L. 24.
2554E, Vol. 1	A.L. 4 and 5.
2655, Vol. 1 (2nd Edition)	A.L. 6.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2656A, Vol. 1 (2nd Edition)	A.I.L. 1/60
	A.I.L. 2/60
	A.L. 5 and 6.
2662B	A.L. 27.
2802A (2nd Edition), Vol. 1, Parts 1 and 3	A.L. 41, 42, and 43.
2876E, Vol. 4, Part 6 (N)	A.L. 1.
2887N, Vol. 1 and Vol. 6	A.L. 16, 17 and 18.
2887N, Vol. 2	(A.L. 28)–B.21.
2888H	A.L. 22.
2892F, Vol. 1	A.L. 42.
2892F, Vol. 2	(A.L. 90)–B.75.
2892F, Vol. 4, Part 6	A.L. 3.
2897R, Vol. 1 (2nd Edition)	A.L. 28.
3042, Book 4	A.L. 5.
3042A, Book 1	A.L. 9.
3042A, Book 4	A.L. 4.
3158, Vol. 1 (2nd Edition)	A.L. 14 and 15.
3158, Vol. 2	(A.L. 506)–C.2 (Alt. 22).
3280B	A.L. 14 and 15.
3302, Part 3	A.L. 3 and 4.
3358	A.L. 3.
4099J, Vol. 2	(A.L. 339)–B15 (Alt. 1 inc.)
	(A.L. 334)–G.7
	(A.L. 341)–J.32 (Canc.).
4099J, Vol. 3, Part 2 (App. " A " 2147)	A.L. 49.
4117, Vol. 2	(A.L. 9)–B.3
	(A.L. 12)–B.4.
4269C, Vol. 1	A.L. 65.
4282A, Vol. 1	A.L. 68 and 69.
4282C, Vol. 1	A.L. 37 and 38.
4288, Vol. 1, Part 1	A.L. 52, 53, 54, 55 and 56.
4288, Vol. 1, Part 2 and Vol. 5	A.I.L. 1/60
	A.I.L. 2/60
	A.I.L. 3/60
	A.I.L. 4/60
	A.I.L. 5/60
	A.L. 77.
4288, Vol. 2	(A.L. 356)–B.239 (Alt. 1 inc.)
	(A.L. 342)–B,251
	(A.L. 347)–B.255
	(A.L. 348)–B.256
	(A.L. 349)–B.257
	(A.L. 350)–B.258
	(A.L. 351)–B.259
	(A.L. 352)–B.260
	(A.L. 353)–B.261
	(A.L. 355)–B.262.
4288 (N), Vol. 1, Parts 1 and 2	A.L. 38, 39 and 40.
4288, Vol. 4, Part 6 (N), Issue 2	A.L. 3.
4303B, Vol. 1, Book 1	A.L. 30.
4303E, Vol. 1	Z.L. 58 and 59.
4303E, Vol. 2	(A.L. 5)–B.2 (Alt. 1 inc.).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4303Z, Vol. 1	A.L. 54.
4306A	A.L. 40.
4320A.B.C., Vol. 6, Part 4	A.I.L. 1/60 A.I.L. 2/60.
4320B, Vol. 6, Part 1	A.L. 32.
4340, Vol. 1, Book 2	A.L. 41.
4340, Vol. 2	(A.L. 29)–B.13 (A.L. 28)–D.3.
4343, Vol. 6	A.L. 29 and 30.
4343A, Vol. 2	(A.L. 68)–B.7.
4343B, Vol. 1, Book 2	A.L. 21 and 22.
4343B, Vol. 1, Book 3	A.L. 19 and 20.
4343C, Vol. 1, Book 3	A.L. 13.
4343C, Vol. 2	(A.L. 45)–D.9 (A.L. 47)–Z.6.
4343C, Vol. 6	A.L. 11 and 12.
4343D, Vol. 1, Book 2	A.L. 22 and 23.
4343D, Vol. 1, Book 3	A.L. 51.
4343D, Vol. 1, Book 4	A.L. 21.
4343D, Vol. 2	(A.L. 61)–N.7 (A.L. 60)–0.2 (Alt. 1 inc.).
4343D, Vol. 6	A.L. 69, 71 and 73.
4343E, Vol. 1	A.L. 131.
4343E, Vol. 2	(A.L. 30)–L.3.
4343E, Vol. 6	A.L. 6 and 7.
4343F, Vol. 2	(A.L. 11)–H.2.
4343G, Vol. 1	A.L. 51.
4343Q, Vol. 1	A.L. 2.
4343S, Vol. 1	A.L. 81, 82, 83, 84, 85 and 86.
4343X, Vol. 2	(A.L. 49)–X.2.
4360, Vol. 6	A.I.L. 1/60.
4360B, Vol. 1	A.L. 74.
4360C, Vol. 1	A.L. 34.
4360C, Vol. 3, Part 1	A.L. 7, 8, 9 and 10.
4361, Vol. 6	A.L. 24.
4361G, Vol. 2	(A.L. 157)–G.10 (Alt. 3 inc.).
4411A, Vol. 1	A.L. 8.
4471A, Vol. 1	A.L. 125.
4511, Vol. 1 and Vol. 6	A.L. 59.
4515E, Vol. 3, Part 1	A.L. 5.
4602, Vol. 6	A.L. 21.
4677A, Vol. 1 and Vol. 6	A.I.L. 1/60 A.L. 23.
4685, Vol. 1	A.L. 3.
4707A, Vol. 1	A.L. 4.
A.P. (N), 1001	A.L. 1.
A.P. (N), 1024, Vol. 4, Part 6	A.L. 5.
A.P. (N), 1025	A.I.L. 2.
A.P. (RAN) 101	A.L. 32.
N.A.M.O. Engines	A.L. 54 SI/Ghost/10A (19/2/60).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
N.A.M.O. Gannet	A.L. 22 X.35 (24/2/60) SI/15 (12/2/60).
N.A.M.O. General	A.L. 81 A.L. 81 Errata G.46 (12/2/60) I.99 (Issue 3) (11/3/60) W.71 (10/2/60) X.126 (2/3/60) STI/Flying Clothing/26 (15/2/60) STI/Miscellaneous/242 (24/2/60) STI/Miscellaneous/244 (18/2/60) STI/Miscellaneous/244 (Diagram) STI/RAA/144 (11/3/60).
N.A.M.O. Miscellaneous	A.L. 38.
N.A.M.O. Sea Venom	A.L. 25 and 26 A.25 (18/2/60) STI/177A (25/2/60) STI/186 (11/3/60).
N.A.M.O. Vampire	A.23 (18/2/60) X.45 (Issue 2) (25/2/60) STI/196 (14/3/60).
N.A.M.O. Westland Whirlwind	STI/60 (18/2/60) STI/60 (Diagram) STI/62 (22/2/60) STI/62 (Diagram) STI/65 (2/3/60).
R.A.N.A.M.O. Dakota	SI/RAN/7 (May, 1960).
R.A.N.A.M.O. Ejection Seat	A.L. 1 and 2 No. 12 (May, 1960) No. 13 (May, 1960) STI/RAN/13 (May, 1960) STI/RAN/14 (May, 1960).
R.A.N.A.M.O. Engines General	SI/Engine Accessory/RAN. 2 (Issue 3) (April, 1960).
R.A.N.A.M.O. Gannet	A.28 (May, 1960) STI/RAN/81 (May, 1960).
R.A.N.A.M.O. General	R.72 (April, 1960) R.73 (May, 1960) I.46 (Issue 2) (May, 1960) STI/RAA/RAN. 35 (April, 1960) SI/RAN/11 (May, 1960).
R.A.N.A.M.O. Ghost	STI/RAN/11 (June, 1960).
R.A.N.A.M.O. Sea Venom	R.7 (Issue 2) (May, 1960) SI/RAN/29 (April, 1960).
R.A.N.A.M.O. Vampire Trainer	L.2 (May, 1960).
Air Clues	February, 1960.
Air Pictorial	March, 1960.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Alvis Leonides Mod. Bulletins	Bulletin Folders (5th Edition) containing Sundry Modification Sheets, &c. Explanatory Sheets (4th Edition) (21/4/60) Explanatory Sheets (5th Edition) March, 1960) Mod. No. 524–(61) (4th Edition).
Aviation Studies (International) Ltd. ..	Engine Data Sheets (with Covers) (February, 1960) Military Aircraft Data Sheets (March, 1960) (4 leaves) with cover for Military Aircraft and Missile Data Sheets.
D.C.A. Aeronautical Information Circulars	8/60 (9/5/60) 9/60 (18/5/60) 10/60 (18/5/60) 12/60 (25/5/60) 12/60 (Attachment " A ") 14/60.
D.C.A. Aeronautical Information Publications	A.G.A. (A.L. 21) C.O.M. A.L. 28 General A.L. 35 RAC/2 (A.L. 34) RAC/3 (A.L. 24) with Correction.
D.C.A. Airways Operations Instructions, Vol. 1	A.L. 3 (Corrigendum).
D.C.A. Airways Operations Instructions, Vol. 2	A.L. 8 (with Corrigenda) and 9.
D.C.A. Air Navigation Orders, Part 20, Section 20.8	A.L. 29.
D.C.A. Joint Aviation Standards and Procedures	Interim A.L. 1
D.C.A. NOTAMS	1/60 (1/6/60).
R.A.F. Flight Information Publications Catalogue of Charts, Terminal Approach Procedures, High and Low Altitudes	A.L. 14.
R.A.F. Flight Information Publication, Terminal Approach Procedure Charts S.E. Asia and A/sia	A.L. 7 to T.A.P. Check List 29/2/60 A.L. 8 to T.A.P. Check List 29/2/60 A.L. 9 to T.A.P. Check List 29/2/60 A.L. 10 to T.A.P. Check List 29/2/60 A.L. 11 to T.A.P. Check List 29/2/60 A.L. 12 to T.A.P. Check List 29/2/60.
Standardization Design Memoranda Leaflets	Alphabetical Index, Issue 15 Numerical Index, Issue 38 No. 44, Issue 2 (Cancellation) No. 105, Issue 4 No. 129, Issue 6 No. 279, Issue 1 (Cancellation) No. 348, Issue 1.
Smiths Field Service Bulletins	Issue No. 64 (3/12/59).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Smiths Modification Leaflets	040 (17/12/59) 041 (2/2/60) 042 (2/2/60) 043 (2/2/60) 321 (Issue 2) (1/3/60) 322 (Issue 2) (1/3/60) 478 (December, 1959) 487 (February, 1960) 490 (February, 1960) 491 (March, 1960) 492 (February, 1960) 493 (February, 1960) 494 (February, 1960) 496 (February, 1960) 508 (January, 1960) 509 (February, 1960) 510 (February, 1960) 512 (March, 1960) 513 (March, 1960) 514 (March, 1960) 515 (March, 1960) 516 (March, 1960) 517 (March, 1960)
Sperry Field Service Bulletins	No. TA–691 (A12) 194 (20/11/59).
A.A.P. No. 2, A.B.C.S.C., Class 5821 ..	Sub A.L. 6 (A.L. 11070).
A.A.P. No. 2, A.B.C.S.C., Class 5825 ..	Sub A.L. 6 (A.L. 11051).
A.A.P. No. 2, A.B.C.S.C., Class 5841 ..	Sub A.L. 4 (A.L. 11068).
A.A.P. No. 2, A.B.C.S.C., Class 5895 ..	Sub A.L. 5 (A.L. 11040).
A.A.P. No. 2, A.B.C.S.C., Class 5915 ..	Sub A.L. 5 (A.L. 11002).
A.A.P. No. 2, Group F, Section 3 (12th Edition)	Sub. A.L. 58 (A.L. 11163).
A.A.P. No. 2, Group G, Section 5A, Vol. 2 (5th Edition)	Sub A.L. 29 (A.L. 11174)
A.A.P. No. 2, Group G, Section 5C (13th Edition)	Sub A.L. 42 (A.L. 11144).
A.A.P. No. 2, Group G, Section 5F (6th Edition)	Sub A.L. 29 (A.L. 11164).
A.A.P. No. 2, Group G, Section 5Q (3rd Edition)	Sub A.L. 20 (A.L. 11087).
A.A.P. No. 2, Group G, Section 5U, Vol. 1 (5th Edition)	Sub A.L. 25 (A.L. 11159) with Erratum.
A.A.P. No. 2, Group G, Section 5U, Vol. 2 (4th Edition)	Sub A.L. 35 (A.L. 11160).
A.A.P. No. 2, Group G, Section 6A (13th Edition)	Sub A.L. 47 (A.L. 11120).
A.A.P. No. 2, Group G, Section 6B (10th Edition)	Sub A.L. 36 (A.L. 11089).
A.A.P. No. 2, Group G, Section 105C (4th Edition)	Sub A.L. 40 (A.L. 11127).
A.A.P. No. 2, Group G, Section 106A (8th Edition)	Sub A.L. 32 (A.L. 11177).
A.A.P. No. 2, Group G, Section 106D (4th Edition)	Sub A.L. 22 (A.L. 11138) Sub A.L. 23 (A.L. 11169).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group H, Section 28 (7th Edition)	Sub A.L. 37 (A.L. 11095).
A.A.P. No. 2, Group H, Section 128F ..	Sub A.L. 24 (A.L. 11146).
A.A.P. No. 2, Group H, Section 128F, Vol. 3 (3rd Edition)	Sub A.L. 30 (A.L. 11143).
A.A.P. No. 2, Group H, Section 128F, Vol. 5 (3rd Edition)	Sub A.L. 28 (A.L. 11142).
A.A.P. No. 2, Group K, Section 2 (12th Edition)	Sub A.L. 27 (A.L. 11100).
A.A.P. No. 2, Group K, Section 4 (16th Edition)	Sub A.L. 67 (A.L. 11104).
A.A.P. No. 2, Group K, Section 6 (8th Edition)	Sub A.L. 10 (A.L. 11044).
A.A.P. No. 2, Group T, Section 27H (8th Edition)	Sub A.L. 33 (A.L. 11134).
A.A.P. No. 2, Group Y, Section 10AE (5th Edition)	Sub A.L. 14 (A.L. 11083)
A.A.P. No. 2, Group Y, Section 10AF (3rd Edition)	Sub A.L. 8 (A.L. 11109).
A.A.P. No. 2, Group Y, Section 10AK (5th Edition)	Sub A.L. 15 (A.L. 11110).
A.A.P. No. 2, Group Y, Section 10AQ (4th Edition)	Sub A.L. 9 (A.L. 11112).
A.A.P. No. 2, Group Y, Section 10AS (6th Edition)	Sub A.L. 17 (A.L. 11114).
A.A.P. No. 2, Group Y, Section 10BB (5th Edition)	Sub A.L. 19 (A.L. 11064).
A.A.P. No. 2, Group Y, Section 10E (11th Edition)	Sub A.L. 39 (A.L. 11084).
A.A.P. No. 2, Group Y, Section 10F (8th Edition)	Sub A.L. 34 (A.L. 10992).
A.A.P. No. 2, Group Y, Section 10FB (4th Edition)	Sub A.L. 18 (A.L. 11097).
A.A.P. No. 2, Group Y, Section 10P (4th Edition)	Sub A.L. 13 (A.L. 11079).
A.A.P. No. 2, Group Y, Section 10S (10th Edition)	Sub A.L. 23 (A.L. 11126).
A.A.P. No. 2, Group Y, Section 10T (5th Edition)	Sub A.L. 17 (A.L. 11092).
A.A.P. No. 2, Group Y, Section 10V (3rd Edition)	Sub A.L. 15 (A.L. 11117).
A.A.P. No. 2, Group Y, Section 110E (8th Edition)	Sub A.L. 21 (A.L. 11080).
A.A.P. No. 2, Group Y, Section 110J (6th Edition)	Sub A.L. 14 (A.L. 11081).
A.A.P. No. 2, Group Y, Section 110M (4th Edition)	Sub A.L. 21 (A.L. 11071).

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A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group Y, Section 110QB (6th Edition)	Sub A.L. 12 (A.L. 11118).
A.A.P. No. 2, Group Y, Section 110SB (6th Edition)	Sub A.L. 24 (A.L. 11122).
A.A.P. No. 2, Group Y, Section 110U (7th Edition)	Sub A.L. 14 (A.L. 11123).
A.A.P. No. 2, Group Y, Section 110UB (4th Edition)	Sub A.L. 9 (A.L. 11124).
A.A.P. No. 2, Group Y, Section 110VB (2nd Edition)	Sub A.L. 3 (A.L. 11076).
A.A.P. No. 2, Group Y, Section 310X (3rd Edition)	Sub A.L. 7 (A.L. 11098).
A.A.P. 702.1	A.L. 97 and 100.
A.A.P. 721.79, Vol. 2, Part 2	A.L. 185, 187, 189, 190, 191, 193 and 194.
A.A.P. 727.10, Vol. 3, Part 1	A.L. 3.
A.A.P. 741.00, Vol. 2, Part 1	A.L. 40.
A.A.P. 750.00, Vol. 2, Part 1	A.L. 70 and 73.
A.A.P. 750.00, Vol. 2, Part 2	A.L. 140, 143, 144 and 145.
R.A.A.F. Aircraft Safety Equipment Orders	A.L. 15.
R.A.A.F. Dakota Instructions	A.L. 24.
R.A.A.F. Dakota Orders	A.L. 70.
R.A.A.F. Repair and Maintenance General Instructions	A.L. 327, 328, 329 and 330.
R.A.A.F. Special Technical Instructions ..	Armament—Gunnery Equipment/12 Dakota/7 Dakota/8 Dakota/9 Dakota/10 Electrical/27 Escape Facility/24 Helicopter/30 Instruments/27 Instruments/28 Instruments/29 Instruments/30 Propeller/14 Propeller/15 Propeller/16 Safety Equipment/27 Safety Equipment/28 Safety Equipment/29 Vampire/37 Viper/10.
R.A.A.F. Summary of Defect Reports ..	Airframes—Miscellaneous Equipment Serial No. 3 (11/4/60) Engines and Accessories Serial No. 21 (Period October, 1959 to January, 1960).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Air Diagrams	A.D. 6574 (Issue) (Sheet 6 (A.L. 1)
	O.N. 1344/N.B.
	O.N. 1345A/N.B.
	O.N. 1345B/N.B.
	O.N. 1345C/N.B.
	O.N. 1345D/N.B.
	O.N. 1346A/N.B.
	O.N. 1346B/N.B., Sheet 1
	O.N. 1346B/N.B., Sheet 2
	S.R. 1425/N.B.
	S.R. 1426/N.B.
	S.R. 1426/N.B. (Issue 2)
	S.R. 1427/N.B. (Sheet 1)
	S.R. 1427/N.B. (Sheet 2)
	S.R. 1428/N.B.
	S.R. 1429/N.B.
	S.R. 1430/N.B.
	S.R. 1434/N.B.
Lloyds Shipping Index	30th May, 1960.
Lloyds Shipping Index	7th June, 1960.
Lloyds Shipping Index	13th June, 1960.
Lloyds Shipping Index	20th June, 1960.
Lloyds Shipping Index	27th June, 1960.

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(*Navy Order* 1063 *of* 1958.)

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C.N.O. 664/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
22nd August, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

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664.—A.B.C.D.—Risk and Control Markings and States of Readiness.

(*A.F.O.* 691/1960.)

Present System

The present system of watertight risk and control markings was first introduced in 1942 as a result of experience in the early part of the last war. The risk markings (RED/BLUE) indicate which openings, in the event of underwater damage, are an immediate (or less immediate) risk to the watertight integrity of the ship. The zones of risk markings were revised in 1947 to include lessons learned from war damage incidents. The control markings (X, Y and Z) provide a graded system whereby the ship can be maintained in a high state of preparedness to resist damage, fire and flooding under varying conditions. *Risk* markings are decided by the Naval Board and *Control* markings by the ship's officers to suit ship requirements.

2. The system of gastight ORANGE risk and control markings (A.B.C. and M., &c.) was introduced in 1951 to control openings, in the boundaries of citadels and gas free spaces, which if left open would constitute a risk to gastight integrity. (Gas is used for convenience to denote all contaminating matter of A, B or C origin.)

3. States of Readiness are grades of preparedness of personnel and material designed to enable the ship to withstand damage and gas attack commensurate with the probable risk of attack or damage at any time. The system of risk and control markings was intended to be closely co-ordinated with these States of Readiness.

Shortcomings of the Present System

4. At first, the system of watertight risk and control markings worked reasonably well. When, however, A.B.C. risk and control markings had to be superimposed, the necessity to keep the two systems separate led to a certain amount of overlapping, leading to confusion and difficulty in teaching and learning. Further, the close co-ordination of the system for control of watertight openings with the damage control states of readiness results in certain drawbacks, some major, others less important, viz.—

(*a*) The links between the watertight control markings and the states of readiness have been found difficult for the ordinary man to understand. *Three* principal control markings (X, Y and Z) are used to control the watertight openings in *four* states of readiness so that, unlike the A.B.C. markings and states, there is no self-evident connection between the two things.

(*b*) There are too many qualifying markings.

(*c*) The states and markings at present authorized do not cater for all requirements.

(*d*) There is no authorized and defined provision for peacetime.

Apart from these drawbacks, the system is fundamentally sound and there is no evidence that any other system would work better, if as well, in covering all the requirements of very different ships in very different circumstances.

5. At present, the regulations are such that a ship should have X and Y doors shut at *all* times although undefined relaxations are permitted in peace which may, and almost certainly do, vary greatly from ship to ship. Also, to obtain a higher degree of watertight control it is customary in many ships to pipe " Assume State 3 " on going to sea. This, strictly, should include all those material and personnel measures allied to that state. Usually, all that is done in peace is to close what the ship considers

to be the necessary openings to attain the correct seagoing state. Thus, in peace the regulations are not observed and are consequently brought into disrepute and if war came, a fundamental change in outlook would be needed to achieve real control.

6. The changes in the present system, outlined in this order, are intended to improve it by simplifying it where possible, making the markings as self-evident as they can be, and by imposing only those restrictions on movement within the ship as are essential for the safeguarding of the ship under varying degrees of risk.

Revised System

7. *Watertight Risk.*—A detailed analysis has recently been made of a large number of damage incidents to ships in the last war, relating flooding to the extent of the present RED and BLUE risk zones. From this analysis, the broad conclusion can be drawn that a ship sustaining major underwater damage will either—

(*a*) sink very rapidly in less than half an hour, or,

(*b*) if the first hour is survived, probably be able to be saved by good damage control.

With regard to (*a*), lack of time will generally preclude damage control measures from being fully effective, and the extent of damage and flooding will be such that failure to close openings *above* the RED zone will in no way contribute to the immediate loss of the ship. This equally applies if the ship sustains further damage from a second or more attacks.

With regard to (*b*), effective damage control will here be of prime importance and the rigid control of certain openings above the Red zone (in the Blue zone) may be essential, and will certainly be advisable, to get the ship back on a long tow or in adverse weather conditions, or indeed to meet later attacks. Under these circumstances, bad damage control could easily lose the ship.

It is also possible that, in a future war, even a single conventional explosion may cause sufficient immediate flooding to involve part of the present BLUE zone.

8. In the case of underwater damage from nuclear weapons, it is considered that in general the same ruling can be applied. Flooding will either be so severe as to preclude effective damage control, or more widespread but slow. In the latter case, effective control of the RED zone will be capable of meeting the immediate risk to the ship and time would be available to exercise control of openings above the RED zone.

9. *Gastight Risk.*—No change is necessary in the present scope and meaning of gastight risk markings.

Watertight and Gastight Control

10. The greatest difficulties, both in organization and teaching, are the fitting of the system for the control of watertight openings into the framework of the A.B.C.D. States of Readiness, and the need to allow as much freedom of movement as possible without endangering the ship. On the other hand, the gastight control markings are the same in number and name as the A.B.C. States and no difficulty is experienced in teaching men that when, say, State B is ordered, all openings so marked are to be shut.

It is not desirable to increase the number of watertight control markings, nor is it possible to decrease the number of states of readiness, since the existing states do not cater for all requirements. Also, it is still considered that gastight control must be kept separate from, and superimposed upon, watertight control since some degree of the latter is essential at all times, in peace and war, whereas the former, although exercised in peace, is a purely war requirement.

Improvements

11. From the foregoing, three possible major improvements to the present system can be deduced—

(*a*) The condition of watertight and gastight openings should be separated completely from all the other measures which go to make up the state of readiness. It then becomes possible to control the openings independently, and a ship can be in, perhaps, the harbour state in war with X and Y openings shut; on going to sea, there need be no change in the watertight condition but the state of readiness would be changed to meet the different circumstances. Further, the markings would then be largely self-explanatory.

(*b*) Openings above the red zone can be allowed to remain open except when it is essential to close them. In this connection, it must be remembered that closures to watertight openings have also other important functions—protection against blast, flash and the spread of fire. Openings above the red zone, therefore, although not required to be immediately closed to secure the safety of the ship against flooding, will in general need to be closed when the risk of the other effects is great, i.e., particularly in action.

(*c*) Definite provision should be made for peace, recognizing that although the control organization in force must be strictly maintained, the risk of damage under normal conditions is not so great as in war.

Changes in the Present System

12. The new orders, shown in the Appendix, are intended to simplify the organization as much as possible and to allow more freedom of movement, especially in peace. It will be seen that the fundamentals of the present system are unchanged. The principal change is that, within the A.B.C.D. organization, the control of watertight and gastight openings will be exercised through a series of WATERTIGHT and GASTIGHT CONDITIONS. All other material measures and personnel requirements will be governed by STATES OF READINESS as at present. The new system should make for easier teaching and learning and allow better control in peace and war.

Method of Marking

13. Consideration is being given to the introduction of adhesive tallies in aluminium for these markings, as Naval Stores, and separate instructions will be promulgated. Meanwhile, any necessary changes in markings are to be made by using Transflex transfers or by painting, and not by permanently affixed metal tallies.

14. Admiralty has advised that B.R. 2170 will be amended.

Introduction of the New System

15. The changes in *organization* covered by the instructions in paragraphs 1 to 3, 5, 6 and 7 of the Appendix, are to be brought into force on receipt of this order. Any changes in actual markings, needed as a result of the instructions in paragraph 4 of the Appendix, should be progressed as quickly as possible after receipt of the requisite drawings, the work being treated as a defect item for ship's staff. Dockyard assistance at a subsequent refit should only be sought for work which is definitely beyond the capacity of the ship's staff.

16. Ship's companies should be fully informed of the changes and the instruction and training backed up by using senior ratings to the full.

Appendix.

1. *Control of Openings.*—The control of openings (including ventilation openings and fans) is to be maintained by using WATERTIGHT and GASTIGHT CONDITIONS. Risk and control markings are required on openings affecting watertight or gastight integrity.

2. *States of Readiness.*—All requirements of personnel and material measures other than control of openings are to be governed by STATES OF READINESS.

Watertight and Gastight Integrity

3. *Risk Markings*

(*a*) *Red.*—The red risk marking will be retained with its present scope and meaning unchanged, i.e., any red opening presents, when open, an *immediate* risk to watertight integrity and the closing of such openings after underwater damage is an emergency measure, the order overriding, while in force, any permission which may have been given for a red opening to be open. The zone of red openings is decided by the Naval Board. (B.R. 2170, Chapter 22.)

(*b*) *Blue.*—The blue risk marking is to be retained but is *not* in future to be regarded as an " emergency " marking in the same way as the red. It will, however, be of value to assist in controlling openings after heavy damage. The zone of blue markings will be decided by the Naval Board.

(*c*) *Orange.*—The orange risk marking, is to be retained with its present scope and meaning unchanged, i.e., on openings in the boundaries of citadels and gas-free spaces which present, if open, an immediate risk to gastight integrity (B.R. 2170, Chapter 22). The boundaries of citadels and gas-free spaces are decided by the Naval Board and openings are to be marked accordingly. The orange marking may be used alone or in conjunction with red or blue.

4. *Control Markings*

(*a*) *Main markings to be used*

X, Y —In black on doors, hatches, drain cocks, valves and ventilation openings (including slide valves) affecting watertight integrity.

Z —In black on similar openings. Primarily required for those openings above the RED zone of watertight risk to give protection against blast, flash or fire.

A, B, C —In orange on ventilation and other openings (not doors and hatches—see note in this Appendix under paragraph (*g*) (iii) affecting only gastight integrity. Gas flaps should bear an orange arrow to indicate direction of operation to put the flap to the specified condition.

M —In orange on openings and fittings where control, in GASTIGHT CONDITIONS ONLY, must be exercised by the USER DEPARTMENT. The marking may be used alone (on openings which do not affect watertight integrity) or *in addition* to any watertight control marking. This is the only exception to the general rule that openings may bear *one main control mark* only. Any watertight control MUST take precedence over the

APPENDIX—*continued.*

" M " marking at all times except when a gastight condition has been set. Openings affected will be ventilation arrangements (and possibly some access openings) to Machinery Spaces, Air Filtration Units and some Radar Offices.

R —In orange on certain fittings necessarily included in recirculation systems during " closed down " conditions. This includes recirculation fans, slide valves in the recirculating system and, in some ships, flaps in bulkheads high in the ship and in fan chambers, which have been specially fitted for recirculation. They will bear no other control mark.

(*b*) " *May be left open* " *Discs.*—The use of these discs is to be extended to include the following—

(i) As at present on certain openings which would normally be closed in a particular condition but which may need to be open for periods without a special sentry. The requirements for these are laid down in B.R. 2170, Chapter 22, paragraph 10. These discs should be kept to a minimum number and they should bear the words " May be left open ", the identification marking of the opening and the Condition(s), for which authorized. They are to be hung on a screw and cover the ordinary control marking. At all other times, and when assuming a higher condition than that for which authorized, the disc is to be withdrawn and the door controlled according to its marking.

(ii) Openings (generally only a few) which would normally be closed but may need to be opened, and possibly remain open, for action purposes should have a disc screwed on, *not* covering the control marking, and bearing the words " May be open in ACTION ". This virtually is a self-explanatory qualifying symbol and the present ACTION symbol is no longer required. The use of a disc is better than painting the instruction on the door since it establishes a common ground with other uses of these discs. At all times other than those authorized by O.O.Qs. in accordance with ship's orders, the opening is to be controlled according to its normal marking.

(iii) Doors or hatches, bearing a watertight control marking which would normally be closed but which *must* be open for efficient recirculation should have a disc screwed on the door, *not* covering the control mark, bearing the words " May be left open for RECIRCULATION ". Examples are probably few and may disappear entirely. Permission is operative in the closed down condition only.

(iv) Series of hatches at present controlled by ROUTINE marking (e.g. gland spaces, plummer block compartments). These hatches should be marked X or Y and a special disc issued bearing the words " May be left open—MAN BELOW ", the disc to be hung on the topmost of the series of hatches and removed when the hatches are closed. At all other times the hatches are to be controlled according to their control markings. The ROUTINE marking is to be abolished.

APPENDIX—*continued.*

(*c*) *Qualifying Symbols.*—The only qualifying symbols now needed are—

2 Clips ..	As at present but its use may be extended to doors selected for routes to Shelter Stations. This marking to be decided by ship's officers (B.R. 2170, Chapter 22, paragraph 9). In emergency, all clips to be used.
Vent 2 Clips .. / Vent no Clips ..	Needed on certain hatches over magazines in some ships for venting purposes, the former on unarmoured hatches in the red zone, the latter on armoured hatches. These markings are decided by the Naval Board (B.R. 2170, Chapter 22, paragraph 9). In emergency, all clips to be used.
Citadel in, Citadel out	On certain selected doors (or hatches) for Citadel access via an airlock when fully closed down in Condition " A ".

In future construction these will be decided by the Naval Board (B.R. 2170, Chapter 22, Paragraphs 20 and 36 (*c*)).

(*d*) *Cleansing Stations.*—Once the ship has entered fallout *all* personnel (whether known to be contaminated or otherwise) should enter the Citadel via a cleansing station, until conditions are reported safe by the Command. Entrance will be gained through an undressing station, the outer door of which should be labelled—CLEANSING STATION.

(*e*) *Shelter Routes.*—Routes to Shelter Stations on and below the weather decks are to be indicated by an arrow and the word " SHELTER ", both in orange. This sign should be used wherever necessary on the routes (e.g., on bulkheads) and selected doors, which should be kept to a minimum should preferably be indicated by signs on either side of the doors and pointing to them. No marking will then be required on the door except its normal control and risk markings and, probably the 2 CLIP symbol. In the case of a hatch, if there are no adjacent bulkheads the sign will have to be placed on the hatch cover.

(*f*) *Rules for Markings*

X —To be opened only by permission of H.Qs. If required to be kept open, a sentry must be posted or other adequate arrangements made for instant closing.

Y —In Condition X, may remain open. When closed, may be opened for passage or use. If required to be kept open, the rules as for X openings apply, except in Condition A (see below).

Z —In Conditions X and Y, may remain open. When closed, the rules for Y openings apply.

A, B, C —When ordered to be closed (i.e., in the respective Conditions), not to be opened without permission from H.Qs.

M —In gastight conditions, under the control of the user department. Departments concerned must ensure that orders are clear and fully understood by their personnel.

R —Fan must run or opening must be open in Condition A for recirculation.

APPENDIX—*continued.*

The order " Close Red (or Blue) openings " overrides, while in force, any permission which has been given for these openings to be left open.

In emergency the order " Close Orange openings " overrides, while in force, any permission which has been given for a RED/BLUE opening, which also bears an orange risk, to be open.

In Condition A, but not otherwise, openings with an orange flash must not be opened without permission excepting " citadel in and out " doors and those selected for shelter routes which will be clearly indicated. Thus, in condition A, the orange risk mark becomes virtually also a control marking.

Note.—" Closed " means fully clipped, excepting openings bearing 2 CLIP or venting symbols, and even those are to be fully clipped in emergency and, on shelter routes, when the last man is through to shelter.

(*g*) *Principles of Application.*—In future, Naval Board guidance on the selection of control markings will be given to new construction (or first of class) and modernized ships. The general principles to be followed are—

(i) *Within the Red zone*, openings which affect watertight integrity should generally be X or Y. Z is only acceptable in the red zone where the need for free access at all times other than in the highest state of readiness is paramount (*see* also (*h*)).

(ii) *Above the Red zone*, openings affecting watertight integrity (Blue zone) and those required to be shut to prevent spread of blast, flash or fire should generally be marked Z. Doors normally kept locked (e.g. stores) should be marked Z since they can then be opened by the responsible person without reference to H.Q.1.

There may be exceptionally in some ships a few doors high up which are in almost continuous use, do not affect watertight or gastight integrity and have little value in prevention of blast, &c. These may be left unmarked. If required to be shut for any reason, e.g., on outbreak of fire, they can be shut by order.

(iii) *Openings in boundaries of citadel sub-divisions and gas-free spaces*—

Doors and hatches.—As in (i) and (ii), i.e. in the red zone, X or Y and above the red zone, Z. In every case an orange flash in addition. *Where needed*, certain openings may bear M in addition as referred to under " M " markings—paragraph 4 (*a*) of this Appendix.

Ventilation.—This must be marked in accordance with the requirements of the compartments served. Guidance on marking ventilation systems is given in the revised edition of B.R. 2170, Chapter 22, paragraphs 32, 34 and 35. Some ventilation openings and valves may have to bear the same watertight risk and control markings as the access to the compartment served. Other systems must continue to run even in high watertight condition and would then normally be controlled by a gastight control marking (A.B.C.M. or R.) but should bear in addition to the ORANGE risk the appropriate watertight risk.

APPENDIX—*continued.*

Note.—*Most* doors and hatches in citadel boundaries need to be shut in action to stop blast, &c. apart from any watertight requirements, and a watertight control mark is appropriate. Controlling them *all* by watertight markings obviates any need for A, B or C on any doors or hatches, thus helping to avoid confusion.

(*h*) *Examples for Guidance in applying Markings.*—The following may be useful for guidance in marking some types of doors and hatches, mainly in the red zone—

Magazines, &c.	X or Y (special " May be open " disc).
Engineer's rounds spaces ..	X or Y (special " May be left open " disc).
Bathrooms in red zone ..	Door Y. Hatch with manhole Y and Z.
*Gangway doors, red zone ..	Y (2 CLIPS if necessary).
Gangway doors, above red zone	Z (2 CLIPS if necessary).
Workshops, hatch access ..	Y if spring loaded or manhole fitted. Z if no manhole or not able to be opened from below.
†Mess spaces and cabin flats, with manhole	Y hatch, Z manhole.
†Mess spaces and cabin flats, with no manhole	Z.
†Messdecks, small ships ..	Z (generally)
†Messdecks, door access ..	Y or Z according to traffic.
†Main Naval Store	Y hatch, Z manhole (Z if no manhole).
Other stores, working spaces, cable passages, &c.	X.
‡Main m/c spaces	Boiler Room Y Engine Room, one Y—one Z.
‡Generator Room	X or Y.
‡Pump Spaces	X or Y.
‡Asdic Compartment (when manned)	Y if openable from below. Y—(special " May be left open " disc if not openable from below).
Hangar access doors	Y or Z (orange risk).
In Aircraft Carrier, door from Compass Platform to bridge wing, door to Ops. Room, &c.	Z (special " May be left open " disc) (orange risk).

Notes.

* In some ships, gangway doors in the red zone are in such continual use that even Y—2 CLIPS is not acceptable. They may have to be Z, or a " May be left open " disc used.

† In war, it may be necessary to post orders at the entrance, to ensure that if the space is left unoccupied (in the red zone) the last man out closes the opening.

‡ These openings may bear M in addition.

APPENDIX—*continued.*

(*j*) *Side Scuttles.*—All scuttles are a risk to gastight integrity and those in the ship's side a great risk also to watertight integrity. All side scuttles below the weather deck (or the corresponding deck in a carrier) and escape scuttles should bear a watertight and gastight risk marking. They should *not* be given a control marking; their opening and closing should be under the direct control of the Command through the A.B.C.D. Officer. In emergency, the order to close RED openings overrides any permission which may have been given to open scuttles so marked.

Side scuttles above the weather deck bear an orange risk marking and should be given a gastight control marking. They would then be closed on assuming the appropriate gastight condition or, in emergency, on the order " Close all Orange openings ".

5. *Watertight and Gastight Conditions.*—These are as follows—

Watertight

In Peace

Harbour and normal cruising ..	Condition X (X openings closed).
Dangerous circumstances (e.g. navigation hazards, mines)	Condition Y (X and Y closed).
Exercises	As required.

In War

Defended harbour, refitting, &c. ..	Condition X (X closed).
Undefended harbour, cruising ..	Condition Y (X and Y closed).
Action or relaxed action	Condition Z (X, Y and Z closed).

Gastight.—Gastight conditions should be superimposed on watertight conditions as required.

In Peace.—Required only for exercises.

In War

Preparedness for A.B.C. attack older big ships (two stages)	Condition C (C closed). Condition B (B and C closed).
Preparedness for A.B.C. attack, modern and small ships	Condition B (B closed).
A.B.C. attack imminent—all ships..	Condition A (A, (B and C) closed).

Notes.

(i) Condition A is the fully closed down condition.

(ii) Condition B is that from which condition A can be attained in 5 *minutes* or less, i.e., fans stopped and external openings closed. Subsequent re-arrangements below and restarting of fans may take considerably longer.

(iii) Condition C in older big ships is that which can be maintained indefinitely, except for short periods by permission, without producing intolerable living conditions or unacceptable detriment to routine work. It is not required in small ships. The need for a C condition is now rare and will eventually disappear. Also, in modern ships, fewer B markings will be needed. They can be reduced by marking some ventilation as suggested in item (*g*) (iii).

(iv) Nothing in these orders precludes a Commanding Officer, or Senior or Flag Officer, from ordering a higher condition when he deems it necessary.

APPENDIX—*continued.*

States of Readiness

6. States of Readiness should consist of—

State 1 ..	Highest state of A.B.C.D. preparedness.
State 1 relaxed	As State 1 except up to 50 per cent. personnel may be relaxed for meals, &c., Galleys, &c., may be used.
State 2 ..	War seagoing state (Watch system). May be used in peace under special circumstances, e.g., in dangerous waters, and on first going to sea as a means of assembling enough personnel to check other measures.
State 3 ..	War—defended harbour, peace—cruising (unless higher state is required).
State 4 ..	Peace—harbour.

Requirements of personnel and other material measures (except openings and fans) to be as shown for guidance in B.R. 2170, Chapter 21 (tables), adding requirements for new State 4. A few personnel and equipment requirements at present tied to A.B.C. States (Table 2) to be fitted into the States of Readiness.

Executive Orders

7. The method of setting the states and conditions should be as at present, i.e. by pipe broadcast. The condition alone may be changed, e.g., Condition X to Y or Y to YB. The state alone may be changed, e.g., in Condition Y change State from 3 to 2. Condition and state may be assumed or changed together, e.g., by piping " Assume State 3, Condition YB ", or " State 1, Condition Z " or " State 1, Condition ZA ".

(D.T.S.R. 1623/1/9.)

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C.N.O.'s 665-679/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
5th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

6354/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

665.—Assessment of Costs and Savings Resulting from Fleet Work Study Investigations.

Navy Order 150 of 1960 is to be amended as follows—

Delete paragraph 10 and *insert* in its stead—

" *Stores Costs.*

10. All stores are to be costed in the following manner—

Rate Book stores at Rate Book price plus 55%.

Non-pattern stores at price supplied by (Superintending) Accountant at Base Offices."

(HFWS 80/1/23.)

(*Navy Order* 150 *of* 1960.)

UNCLASSIFIED.

666.—Fire Precautions and Regulations—Construction of Cinema Projection Rooms, &c., for use with Non-inflammable Film.

(*A.F.O.* 1527/1960.)

With the supersession of inflammable films by safety base stock, the stringent regulations for projector rooms and film storage contained in Sections 3 and 6 of B.R. 1251A—Fire Precautions and Regulations in handling of 35-mm. Inflammable Film—are relaxed for all new construction as detailed below.

2. Except where it is desired to repress the noise and distraction of the projector(s), a projection room is not necessary for use with 16-mm. non-inflammable film used with non-arc projection equipment, but the provisions of Section 7 of B.R. 1251A are to be observed. Projection rooms are to be provided for use with 35-mm. non-inflammable film and are essential when arc-type projection equipment is used with 16-mm. non-inflammable film.

3. Where a projection room is necessary the requirements of Section 3 of B.R. 1251A are modified as follows—

(*a*) A separate rewind room is not required provided adequate space for rewinding is allowed in the projection room.

(*b*) Projection rooms need not be of fire-proof construction but should be reasonably sound and smoke-proof.

(*c*) The elaborate fusible link systems operating the steel shutters over the port holes are not required, but if shutters over the projection ports are however required these are to be of steel.

(*d*) Rewind benches need not be surfaced with fire resisting materials.

(*e*) Two exit doors are to be provided which need not be of fire-proof construction but no door is to communicate with the auditorium.

(*f*) No special locking devices are required to the doors other than those required for normal security.

(*g*) No special floor finish is required other than to give reasonably dust-free conditions.

4. The requirements contained in Section 6 as to provision and use of storage vaults and cupboards no longer apply and these are not to be provided.

5. The requirements of Sections 3 and 6 will continue to apply to the handling and storage of 35-mm. inflammable film.

6. Admiralty has advised that the relevant sections of B.R. 1251A are under revision.

(DNW 1446/1/11.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

667.—Instructional Films and Filmstrips—Declared Obsolete and Obsolescent.

(*A.F.O.* 956/1960.)

The undermentioned films and filmstrips have now been declared obsolescent or obsolete as indicated below—

Obsolescent Films and Filmstrips—

Serial No.	*Title.*
A.57	The Elementary Theory of Asdic.
A.84	Anchor Work—
	Part 1—Introduction.
	Part 2—Coming to Anchor.
	Part 3—Weighing Anchor.
	Part 4—Securing to a Buoy.
A.111	Meet the Ship.
A.147	Ship Safety—A Story of Seven Sailors.
A.157	Sailors of Tomorrow.
A.242	Principles of Asdic Operating.
A.323	Naval Air Reconnaissance.
A.349	Naval Patrols.
A.448	Care Must be Taken—
	Part 1—Confined Spaces.
	Part 2—Precautions in the Engine Room.
A.469	Action Information Organization and Direction—Parts 1 and 2.
A.615	Submarines—
	Part 1—Construction, Capabilities and Limitations.
	Part 2—Operational Aspect.
E.619	Britains Sure Shield.
E.628	Vickers Supermarine.
E.680	Spotlight on Flying Sailors.
SA. 64	Boats and Boatwork—
	Part 1—Introductory.
	Part 2—At Sea.
	Part 3—In Harbour.
	Part 4—Pulling.
	Part 5—Sailing.

2. No further copies of these films will be obtained but all stocks should be used until copies become unserviceable.

3. *Obsolete Films—*

Serial No.	*Title.*
A. 74	Radar—
	LR/A.S.V.
	I.F.F.
	A.S.V. (X)—Part 1— Basic Principles.
	A.S.V. (X)—Part 2.
	A.Y.D. Operational—Radio Altimeters.
A.76	Raising Steam.
A.243	Asdic Attacks with Depth Charges.
BC. 210	The Housefly.
	Combined Operations—
BC. 974	Part 1—Craft and Equipment.
BC. 975	Part 2—Planning, mounting, sailing.
BC. 976	Part 3—The Assault.
BC. 977	Part 4—Beach Organization.
MA. 4718	Preparation of Materials for Overseas Shipment—
	Part A—Cleaning, preservation and wrapping.
	Part B—Packing and boxing.
	Part C—Crating.
MA. 4206	Land and Live in the Jungle.

4. All copies of the obsolete films listed in paragraph 2 are to be withdrawn from service and destroyed.

(DNAS 519/56/94.)

UNCLASSIFIED.

668.—Instructional Films and Filmstrips—Serial No. A.1205, "On Patrol"—Distribution.

(*A.F.O.* 1463/1960.)

Copies of the Admiralty instructional film, Serial No. A.1205, "On Patrol" are being obtained and the initial distribution will be made, without demand, by SNSO, Sydney, on the following scale—

Service.	*No. of copies.*
Flinders Naval Depot	1
H.M.A.S. LEEUWIN	1
R.A.N. Film Library, Sydney	1

2. The film outlines the duties and responsibilities of Naval Patrol Units. In addition it attempts to give guidance to the officers and ratings who are called upon to form "Shore Patrols" landed from H.M.A. ships throughout the world, in the method of dealing with the more common incidents involving libertymen.

3. The film has a running time of 32 minutes and is issued on one spool.

(DNAS 519/56/103.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

669.—Ammunition—Propellent—Landing—Destruction—Report.

(*A.F.O.* 1123/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. Commanding Officers of H.M.A. ships who are unable to comply within three months from the date of this order are to report the fact specially to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 911 ..	SC 061 ..	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.)
RNC 1038XA		
RNC 1043XA		
RNC 1057XA		
RNC 1168XB		
RNC 1182XB		
RNC 1036XA	SC 103 ..	Q.F. 5.25-in.; Q.F. 4-in.
RNC 1167XB		
RNC 1298XC		
RNC 915 ..	SC 109 ..	Q.F. 4.7-in.
RNC 1051XA		
RNC 2663XJ	SC 150 ..	Impulse torpedo.
RNC 6155 ..	ASN/T 190–054..	Q.F. 4.7-in.; Q.F. 4-in. (F.A.).
RNC 6171 ..		
RNC 6184 ..		
RNC 6201 ..		
RNP 1484 ..		
KA 891 ..	FNHP 022 ..	Q.F. 40/60.
KA 892 ..		
KA 894 ..		
KA 897 ..		
KA 899 ..		
KA 901 ..		
KA 902 ..		
KA 903 ..		
KA 904 ..		
SPDN 4929..	FNHP 019–020	Q.F. 40/60.
SPDN 4930..		
SPDN 4931..		
SPDN 4933..		
SPDN 4934..		
SPDN 4935..		
SPDN 4936..		
SPDN 5051..		
SPDN 5052..		
SPDN 5054..		
SPDN 5055..		
SPDN 5056..		
SPDN 5058..		

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
SPDN 5059..	FNHP 019–020	Q.F. 40/60
SPDN 5062..		
SPDN 5064..		
SPDN 5066..		
SPDN 5067..		
SPDN 5068..		
SPDN 5071..		
SPDN 5075..		
SPDN 5076..		

2. Attention is drawn to Article 211 of Naval Magazine and Explosive Regulations, B.R. 862 and paragraphs 6, 7 and 9 of Article 53 of Naval Cordite Regulations, B.R. 862A.

3. R.A.N. Armament Depots—Separate instructions have been issued.

(DW 729/57/40.)

UNCLASSIFIED.

670.—A/S Mortar, Mark 10—Stabilizer A/S 854—Fitting of Wiring Circuit for Stabilizer Running—Indication Lamp Box.

(*A.F.O.* 1295/1960.)

(*a*) *Ships and establishments concerned*	Ships and establishments so fitted, Gunnery Equipment Depots and Dockyards.
(*b*) *Type of equipment* ..	Stabilizer A/S 854.
(*c*) *Part of equipment affected*	Internal wiring and terminal units in terminal box.
(*d*) *Serial Nos. affected* ..	(i) R. B. Pullin. 1–10 inclusive, 12, 14, 16–40 inclusive. (ii) S. G. Brown, Ltd. 1, 3–12 inclusive. (iii) G.E.C. 1–15 inclusive. (iv) M.O. 1–3 inclusive.
(*e*) *Modification No.* ..	To be known as Modification No. 6 to Stabilizer A/S 854. (The "List of Modifications" in Chapter I. of B.R. 1709 (1) will be amended by "P" Series A.F.O.)
(*f*) *Purpose of modification* ..	To provide a suitable connection for the wiring in of a "Stabilizer Running" Indication Lamp Box which will be fitted in the Asdic Control Room.
(*g*) *Nature of modification* ..	A new cable form to be added and terminal units in terminal box to be modified.
(*h*) *How to be done*	(i) *Modify Main Terminal Box, Drawing* 1304/415 as follows— (*a*) Remove existing terminal box tally strips from terminal units 1, 2 and 6. (*b*) Terminal unit No. 2, i.e. the +VE 24-Volt D.C. connection for programme starter; is to be modified by removing existing single block and 1 in number spacer and replacing by a double block.

(c) Fit new tally strips, items 1, 2 and 6 of drawing 1304/415. 10, to terminal units 1, 2 and 6 respectively.

(ii) *Fit new Cable Form No.* 14, *Drawing* 1304/201.2*J* in accordance with the following drawings:—
Wiring Diagram 1304/201.
Wiring Diagram 1304/201.1, sheets 2, 4 and 6.

(*i*) *By whom to be done* ..	Establishments, Gunnery Equipment Depots and Dockyards.
(*j*) *When to be done*	At earliest opportunity.
(*k*) *How to be treated* ..	As a defect.
(*l*) *Disposal of redundant material*	Items removed from equipment, as part of the modification, are to be disposed of locally.
(*m*) *Report on completion of modification*	When this modification has been introduced into the equipment, a report, which is to include the serial number and manufacturer's name of each stabilizer, is to be rendered to— Director of Weapons, Department of the Navy, Victoria Barracks, Melbourne.

(DW 707/51/34.)

UNCLASSIFIED.

671.—Chain Cable—Excessive Straining when Swinging from a Buoy for Compass Adjustment.

(*A.F.O.* 1672/1960.)

Further instances have occurred recently of failure of chain cable when vessels swing from buoys for compass adjustment, particularly in the case of submarines.

2. Stresses brought to bear on chain cable securing a vessel to a buoy during such manoeuvring are more severe than is generally realized, even though weather conditions may be favourable, particularly when a tug helps by securing to the stern.

3. Every care should therefore be taken on these occasions to guard against excessive straining of the chain cable. In particular a tug at the stern should use a broad angle of tow, the ship should secure to the buoy with the special shackle supplied for the purpose and main engines should not run astern with the cable growing straight ahead bar taut.

4. It is considered that the risk of chain cable failure is greater when large tugs are used. It is recommended that the operation of swinging from a buoy for compass adjustment should only be carried out by small tugs.

(DTSR 1211/5/9.)

UNCLASSIFIED.

672.—Fire-Fighting—2-gallon Foam Extinguisher Pattern B8C/4726—Lubrication.

(*A.F.O.* 1551/1960.)

A recent failure of a 2-gallon foam extinguisher pattern B8C/4726 was attributed to corrosion of the valve release mechanism causing the seizure of the " T " handle which could not be turned.

2. When carrying out the six-monthly examination of these extinguishers as laid down in the Ship Fire Fighting Manual B.R. 1257, article 14. 3 (4) a small amount of grease LG 280 pattern E8/9100502 is to be applied to the valve release mechanism to ensure snap action.

3. Admiralty has advised that B.R. 1257 will be amended.

(DNW 505/87/221.)

673.—Naval Stores (Air)—R.A.F. Vocabulary Sub-section 27QA—Introduction.

(*A.F.O.* 1493/1960.)

Dowty seals for aviation purposes will be held, in future, under R.A.F. Vocabulary Sub-section 27QA. Stocks of the Dowty seals detailed below, which are currently used for aviation purposes, should be transferred to the new reference numbers and records amended in accordance with Article 1812 (*b*) of A.B.R. 4 (Naval Storekeeping Manual).

Old Ref. No.	*Part No.*	*New Ref. No.*
Section 26BU		*Section 27 QA*
9677	SP900/39	696
9848	GD1718/G	210
9910	GD1718/F	209
11773	GD1891/27	695
11848	GD1718/5	694
11916	GD1718/2	693
Section 26BV		
2010	GD1453/C13	565
2067	SP915/C25	520
Section 26DB		
4506	GD1309/B19	386
4507	GD1309/B31	388
8076	GD1373/4	544
Section 26DV		
5883	SP910/22	412
11728	GD1259/2	688
11729	GD1259/3	689
Section 26EN		
5952	GD1259/3	689
5953	GD1259/2	688

Old Ref. No.	*Part No.*	*New Ref. No.*
Section 26FY		*Section 27QA* —contd.
11695	GD1456/A33	572
15586	GD1891/B52	580
Section 27A		
4264	GD1373/5	545
Section 27F		
2504	SP901/C9	357
2875	SP900/6	235
3097	SP900/47	265
3098	SP900/B41	298
3099	SP900/C13	305
3128	SP900/31	260
3129	SP900/28	257
3130	SP900/15	244
3131	SP900/11	240
3133	SP900/19	248
3136	SP900/30	259
3895	GD2009	227
3938	SP910/47	422
3939	SP910/B41	442
3940	SP910/13	403

Old Ref. No. Section 27F —contd.	Part No.	New Ref. No. Section 27QA —contd.
3941	SP910/31	420
3942	SP910/28	418
3943	SP910/15	405
3944	SP910/11	401
3945	SP910/19	409
3946	SP910/30	419
4089	SP911/29	460
4108	SP911/30	461
4111	GD1456/20	570
4112	GD1456/8	568
4113	SP911/9	453
4114	SP911/10	454
4118	GD1456/15	569
4167	SP911/4	448
4240	SP910/B16	440
4241	SP911/B31	486
4242	SP911/B10	482
4243	SP911/B17	485
Section 27G		
2624	GD1687	575
6247	GD1718/9	199
6319	GD1801/A19	577
Section 27KC		
974	GD1530	685
1088	GD1523	684
1089	GD1522	683
1090	GD1521	682
2053	GD1718/A	202
2054	GD1718/B	203
2079	GD1713/A	222
2080	GD1713/B	223
2143	GD1804/36	578
2160	GD1713/C	224
2251	GD1713/CC	225
2522	GD1453/23	558
2541	GD1766	687
2930	GD1849	54
Section 27Q		
9218	SP597/25	14
9417	SP597/41	17
9841	SP597/49	23
9923	SP597/24	13
10005	SP597/73	32
10084	SP597/48	22
10122	SP597/14	8
10412	SP597/100	42
10466	SP597/55	25
10547	SP597/43	19
10930	SP597/23	12

Old Ref. No. Section 27Q —contd.	Part No.	New Ref. No. Section 27QA —contd.
11201	SP597/112	44
11520	SP901/10	320
11527	SP818/5	59
11530	SP901/12	322
11533	SP900/27	256
11535	SP818/9	63
11578	SP900/3	232
11706	SP818/7	61
11770	SP818/3	57
11795	SP900/10	239
11796	SP900/11	240
11797	SP900/14	243
11809	SP900/12	241
11884	SP900/9	238
11885	SP900/1	230
11922	SP900/18	247
11937	SP901/14	324
11947	SP901/3	313
11965	SP900/21	250
11966	SP901/8	318
11990	SP818/1	55
12006	SP900/19	248
12018	SP901/4	314
12019	SP901/7	317
12037	SP900/22	251
12040	SP597/87	36
12041	SP597/88	37
12068	SP900/5	234
12069	SP901/9	319
12072	SP818/17	69
12090	SP900/20	249
12091	SP900/23	252
12113	SP900/6	235
12137	SP818/8	62
12247	SP818/4	58
12432	SP900/7	236
12499	SP901/5	315
12595	SP900/15	244
12684	SP900/13	242
12685	SP900/16	245
12731	SP900/½	228
12999	SP900/2	231
13000	SP900/8	237
13002	SP900/B19	285
13033	SP901/1	311
13055	SP900/B1	267
13056	SP900/B8	274
13121	SP818/33	79
13622	SP900/17	246
13682	SP900/B3	269
13953	SP900/24	253

Old Ref. No. Section 27Q —contd.	Part No.	New Ref. No. Section 27QA —contd.
14001	SP900/B7	273
14002	SP900/B10	276
14003	SP900/B13	279
14004	SP900/B20	286
14136	SP900/B33	296
14183	SP900/B11	277
14202	SP900/B29	293
14203	SP901/B2	344
14365	SP900/B6	272
14646	SP900/54	266
14650	SP901/B20	352
15017	SP901/B29	354
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144	GD1895/C22	661
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149	GD1894/C16	634
150	GD1891/C10	592
151	GD1891/C4	586
152	GD1895/C12	654
153	GD1894/C13	632
154	GD1895/C28	666
155	GD1895/C14	655
156	GD1894/C7	627
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(DNAS 603/77/263.)

UNCLASSIFIED.

674.—Naval Stores (General) (Class B, Group 11, Part D)—Addition of Mirror, Inspection, Pattern B11D/9429, to Tool Kit, Type 0.1.

(*A.F.O.* 809/1960.)

The following item has been added to tool kit type 0.1 for Ordnance Artificers—

Pattern.	*Description.*	*Quantity.*
B11D/9429	Mirror Inspection	1

2. Demands to complete tool kits held by serving ratings should be forwarded to the appropriate (S)NSO.

3. Appendix 7 to A.B.R. 4 will be amended and Admiralty has advised that B.R. 292 will also be amended.

(DNAS 506/71/65.)

UNCLASSIFIED.

675.—Naval Stores (General) (Class K)—Hose, Furnace Fuel Oil, Pattern 6001—Type 12 Frigates—Allowances.

(*A.F.O.* 1169/1960.)

The allowances to Type 12 Frigates of hose, F.F.O., buoyant rubber, 6-in. x 15-ft. pattern K/6001 and the appropriate cap and plug, are now as follows—

Pattern 6001, hose, F.F.O., buoyant rubber 6-in. x 15-ft.	3 No.
Pattern 6007, cap protecting, galvanized steel	3 No.
Pattern 6008, plug, protecting, galvanized steel	3 No.

2. Supply will be arranged by the respective storing yard in the normal manner.

3. Attention is drawn to the necessity for rigidly securing the breakable spool coupling to the deck when additional hose lengths are used at the amidships position for fuelling from aircraft carriers, in order to facilitate smashing the breakable spool in an emergency.

(DNAS 523/51/106.)

UNCLASSIFIED.

676.—Presentations, Relics and Trophies—Disposal of Items Unserviceable or No Longer Required.

It has been reported that a number of ships and establishments are holding items of presentations, &c., which are of no further use, thus creating unnecessary work in recording, accounting and storage. It is desired that where this situation applies, action be taken as outlined hereunder with a view to disposal of the unserviceable and redundant articles.

2. The different categories of presentations and instructions concerning disposal are set out fully in the Naval Storekeeping Manual A.B.R. 4 article 2207. Briefly the situation is as follows—

(*a*) Disposal of items in which the Naval Board has a definite interest, as detailed in A.B.R. 4 article 2207 (*a*), (*b*), (*c*) and (*g*) requires prior Naval Board approval.

(*b*) Items detailed in A.B.R. 4 article 2207 (*d*)–(*e*) inclusive are regarded as non-public property, and disposal may be effected on the authority of the Captain.

3. Arrangements should be made for items held under category (*b*) above to be critically examined and items which are no longer required, worn out or otherwise rendered useless, to be disposed of as appropriate on the authority of the Captain, details of items so dealt with being reported to Navy Office in accordance with A.B.R. 4 article 2204 to enable the records maintained at Navy Office to be suitably noted.

4. Any items in category (*a*) above which are either not required or unfit for further use should be reported to Navy Office with proposals in regard to disposal giving full reasons for the recommendation.

5. In the course of the surveys, any items in either category (*a*) or (*b*) which are no longer required in the particular ship or establishment but which are considered suitable because of historic or other considerations (e.g., war relics, captured enemy equipment) for display in a Naval Museum or the Australian War Memorial should be so indicated and disposal action held in abeyance pending Navy Office instructions.

(DNAS 138/51/6.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

677.—Books—Manual of Seamanship, Volumes I., II., III. (1951)—Revision and Scales of Issue.

The three volumes of the Seamanship Manual were completely re-written after the Second World War and published between 1951 and 1954. Since publication, there has been a world-wide demand for these books which are on sale to the public, and a considerable amount of amending and reprinting has been necessary. The books have attained prestige as authoritative text books for naval and merchant navy use amongst many nations. All three books are now getting to the stage where they cannot be kept up to date by amendment, and it is advised that work will commence on a complete revision.

2. It is considered that Volume III. of the Seamanship Manual should be the sole authority on principles of ship handling and that another book on this subject is both unnecessary and undesirable. After Volume III. of the Seamanship Manual is revised, B.R. 2092, " Handling Ships " will be withdrawn and disposed of in accordance with A.B.R. 4, paragraph 2513B. However, some Restricted information from this latter book will be transferred to a new Confidential Book which will also contain certain additional classified material on navigation, ship handling, fleet work, &c. Apart from this change, the three volumes will cover substantially the same ground, when revised, as to-day.

3. Any authority who has any suggestions of a general nature to make about the contents, style, illustration, &c., of any or all of the three volumes should forward them to the Naval Board as soon as possible.

4. Until the publication of the revised manuals, issues of the current volumes will continue to be made on demand to ships and establishments in accordance with the present scales of issue which are shown hereunder:—

5. *Distribution for R.A.N. Personnel.*

Personnel.	Vol. I.	Vol. II.	Vol. III.
All Cadets on Entry	Yes	Yes	—
All Cadets O/C, Phase 1	—	—	Yes
Non-Seaman Upper Yardmen on Promotion	Yes	Yes	Yes
All Short-Service Seamen Officers on Promotion to Sub-Lieut.	—	Yes	Yes
All Seamen appropriated to Upper Yardmen Course ..	—	Yes	Yes
All ratings of Seamen Branch appropriated for Sub-Lieut. S.D. Course	—	—	Yes
All Seamen passing professionally for Leading Seaman ..	—	Yes	—
All Recruits (Seaman) on entry	Yes	—	—
All Ships and Establishments on scale of 10 per cent. of numbers of Able Seamen and Ordinary Seamen for issue on loan	—	Yes	—
C.S.T. F.N.D. for issue on loan in the Recruit School ..	—	Yes 30 copies	—

6. *Distribution for R.A.N.R. Personnel.*

Personnel.	Vol. I.	Vol. II.	Vol. III.
All Seaman ratings on advancement to Ordinary Seaman ..	Yes	—	—
All Seamen on passing professionally for Leading Seaman ..	—	Yes	—
All Subordinate Seaman Branch Officers on first appointment	Yes*	Yes	—
All Seamen Officers on Confirmation as Sub-Lieutenants ..	—	—	Yes
Seaman Branch Sub-Lieutenants (SD) on first appointment	—	—	Yes

* If not already issued (Subordinate Seaman Branch Officers may not have been ratings in the Seaman Branch).

7. All three volumes are available for issue on repayment.

8. Application for copies, free or on repayment, should be made by officers and ratings serving—

(*a*) *Afloat*—to the Supply Officer.

(*b*) *Ashore*—to the Supply Officer of the establishment.

9. One copy of each Volume is to be included in each Officer's Reference Library.

10. Distribution for Libraries of R.A.N.R. training establishments.

Established.	Vol. I.	Vol. II.	Vol. III.
H.M.A.S. LONSDALE	20	10	10
H.M.A.S. RUSHCUTTER	20	10	10
H.M.A.S. MORETON	20	10	10
H.M.A.S. LEEUWIN	20	10	10
H.M.A.S. TORRENS	20	10	10
H.M.A.S. HUON	10	5	5

11. The distribution for Navy Office is—

Volume I. .. .. 23 copies.
Volume II. .. .. 20 copies.
Volume III. .. .. 18 copies.

(DNAS 465/52/203.)

UNCLASSIFIED.

678.—Form A.S. 3101Z—Dental Rating's History Sheet—Introduction. Form A.M. 311Z—Application for, and Report of Result of Examination for the Rating of Dental Assistant, Leading Dental Assistant and Petty Officer Dental Assistant—Abolition.

Form A.S. 3101Z—Dental Rating's History Sheet is shortly to be introduced and will be available on demand from the Superintending Naval and Air Stores Officer, Sydney. Advice that stocks are available will be issued by Navy Order.

2. On receipt of stocks a copy of form A.S. 3101Z is to be placed in the Certificate of Service of all members of the Dental Branch. Forms are to be demanded on the basis of one copy for each Dental rating borne plus 25 per cent. of wastage. Thereafter the form is to be enclosed in the Certificates of Service of all new entry Dental ratings at Flinders Naval Depot.

3. As provision is made on the History Sheet to record details of all professional examinations undergone by Dental ratings, in future, on completion of the oral and practical section of the examination for Leading Dental Assistant or Petty Officer Dental Assistant, the marks obtained are to be entered in the appropriate section of the History Sheet which is to be signed by the Senior Examining Officer. The History Sheet is then to be forwarded with the worked papers of the written examination to the Deputy Director-General (Dental) who will record the written examination marks and record whether the candidate has passed or failed the examination as a whole. The History Sheet will then be returned to the candidates ship or establishment. Examination results are to be reported on form A.S. 161a.

4. A.B.R. 10, chapter 21, will be amended in due course.

(HPB 464/54/215.)

Section 7.

CANCELLED LIST.

UNCLASSIFIED.

679.—Cancellation of Navy Order.

Navy Order 395 of 1960 is hereby cancelled.

(DNAS 512/87/58.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 680-681/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
6th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

6355/60.

CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED.

680.—Life Saving in the Royal Australian Navy—Procedure and Methods.

(*A.F.O.* 3062/1959.)

Before presenting a detailed description of the salient features of life saving (Appendixes A to D), it is emphasized that the necessity for its application and the unavoidable dangers involved may, in many cases, be obviated by reducing the number of poor and non-swimmers borne. The importance of encouraging the use of breast and side strokes amongst the younger ratings cannot be over-stressed.

2. It is usually only when coming into contact with life saving that those who have ignored these strokes realize their relative handicap, and remedying this becomes increasingly difficult in later life. If the breast stroke has been learned at the start, then the return to it, even if it has been protractedly ignored, is infinitely easier than starting from scratch.

Lives Lost by Drowning.

3. Although as a result of pure accident many lives are lost by drowning, too often one hears of lives lost through sheer inability to swim, and whereas the former is sometimes adjudged an act of God, the latter is inexcusable. When, as a result of an unsuccessful attempt to assist a drowning person, the rescuer also drowns, it amounts to tragedy, with the fault almost entirely at the door of the non-swimmer. **It is every man's duty to himself and his shipmates to learn to swim** and, having done so, to become reasonably proficient in assisting others in difficulty. It is to this end that the following information is promulgated.

Drowning.

4. When a person finds himself in difficulty in the water he invariably throws up his arms and shouts for help. By throwing up his arms instead of using them to keep afloat, he decreases his buoyancy, loses his ability to scull, and promptly sinks below the surface. Once below the surface and unable to breathe, he usually struggles more violently, pushing himself even deeper and swallowing water in the process. The struggles may be prolonged and then cease for a time, allowing him to rise again, If still conscious, he may renew his struggles again, though perhaps more feebly, with the same result. When insensibility does occur, the body sinks altogether assisted perhaps by the loss of air from the lungs, saturation of clothing and the probable filling of some body cavities with water. The belief that the body must rise three times before sinking is a fallacy; the question of rising or sinking at all, depends entirely upon the circumstances.

Speed of Action.

5. Once a person is seen struggling in the water in apparent danger of drowning, no time should be lost. As already stated, the drowning person may sink and not rise again, making the rescue more difficult and exhausting, with a strong chance of losing the body altogether. In view of this the rescuer must, knowing his own capabilities as a swimmer, quickly assess the situation with regard to weather conditions and distances involved, and accordingly only spend time discarding such clothing as is necessary to effect a successful rescue. Footwear and similar heavy clothing should invariably be removed, for although in theory, air pockets captured in the clothing assist buoyancy, unless the distance is short, or the rescuer a strong swimmer, wet clothing must be considered a handicap; nevertheless, speed is the thing, and the situation will undoubtedly dictate the decision.

Entering the Water.

6. With a few exceptional circumstances, it is usually wiser to jump into the water rather than dive, and if under-water obstacles are likely to be encountered the body should be as relaxed as possible. When jumping from a considerable height, although relaxed, the body should be held in a compact position, for an ungainly attitude of limbs is conducive to dislocation, on impact with the water.

The Approach.

7. The swim-up to the subject will depend upon the distance and urgency, the main point being the expenditure of energy. There is not much point in effecting a speedy swim-up and " control ", only to find that the rescuer is too exhausted to complete the tow back. Approach from the rear is most convenient, but as a drowning person will endeavour to turn and face the rescuer, no time should be lost insisting upon this. The advantage of shouting encouragement, advice or directions to the subject during the last stages of approach should not be ignored.

Reaching the Subject.

8. Assuming that just before reaching the subject he sinks from sight, the rescuer should proceed to the point at which he disappeared and make a surface dive. The whole point of a surface dive, is that it is vertical from the surface and not a diagonal swim down to the bottom. It is done by " piking " or " jack-knifing " the body on the spot, and raising the legs vertically in the air; then, employing the initial sweep of the arms, pulling cleanly and swiftly to the bottom. If the bottom is muddy, disturbing it or pushing off from it, should be avoided, even if it means assessing the situation and returning to the surface for air before diving again. The rescuer should keep well clear of obstructions.

The Drowning Clutch.

9. If a drowning person is allowed to seize his rescuer, he may not let go unless absolutely forced to. The practice of vigorous release methods may then end in the subject inhaling water into his lungs. If he does this he is likely to die, even though brought to safety within a minute or two. If, therefore, on approach the subject appears particularly hysterical and strong, the rescuer should not be too keen to get to grips. It will often be better to lie just out of reach and try to calm him with the voice, keeping a sharp watch for him sinking. It enormously improves the chances of safety for both if the co-operation of the subject can be obtained. If, however, it can not, the rescuer must be able to preserve his own freedom of action. Release techniques are described below.

The Tow Back.

10. The type of tow used will again depend upon the cirsumstances, and various methods will be discussed later on; the following points, however, generally apply—

(*a*) The subject's head must always be kept above water even though the rescuer's may, at times, be submerged.

(*b*) The rescuer must avoid giving the impression that the tow is difficult; it should be as smooth and continuous as possible; the subject will gain confidence and relax, making the rescuer's job more easy.

(*c*) The rescuer should keep his own and his subject's legs as near the surface as possible to avoid retardation effect; if the subject's legs tend to sink, the rescuer should lift them ocassionally with his own, endeavouring not to break the rhythm of the tow.

(*d*) Return to safety should be made the easiest way, with the tide or stream, diagonally across it, or even merely keeping the subject afloat and awaiting further assistance.

11. Finally, many knowledgeable and efficient life savers have got into difficulty or even failed in their attempts to save life, through being out of practice. Do not get caught this way; less than five minutes of your half-hour swim spent in practice, will be sufficient to keep you up-to-date; make it a habit.

Appendix A.

METHODS OF RELEASE.

If the rescuer finds himself gripped he should at all times keep uppermost and try to free himself by one of the methods here described. If he is unable to disengage himself, he must be prepared to sink with the subject, who, finding himself unable to breathe, will usually let go to reach the surface. Before sinking, the rescuer should aim to breathe in as the subject breathes out, and going down should be swift and decisive. Because of the danger of causing the subject to inhale water, the rescuer should regard sinking with him as a last resort. Having executed any of the following methods of release, the object is to maintain contact and take the subject immediately into the towing position (there is a momentary loss of contact in the first method). Further methods of release for more expert swimmers may be found in future publications of the Royal Life Saving Society.

Appendix A—*continued.*

(1) *Held by the Wrists.*—Straighten and raise both arms above the head, bringing them down and together in front of the body. At hip level sweep them out against the thumbs of the subject to a right angle with the body. The rescuer's arms must be kept straight throughout.

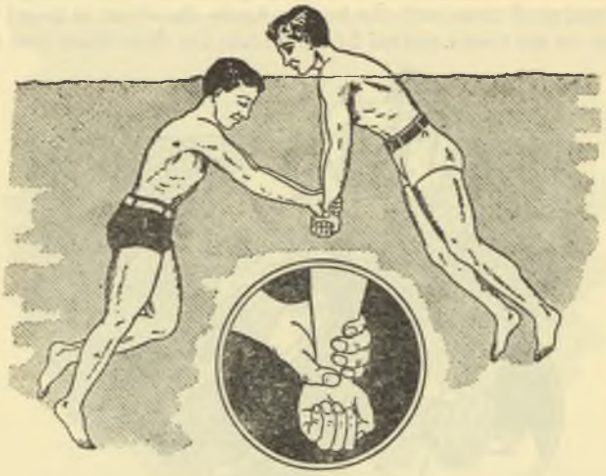

Fig. 1.

(2) *Held by the Neck.*—Take a deep breath and get well over the subject. Place one hand in the small of his back, and the other hand on his chin, fingers clamping the nostrils. Pull hard towards with one hand, at the same time pushing downwards with the hand on his face.

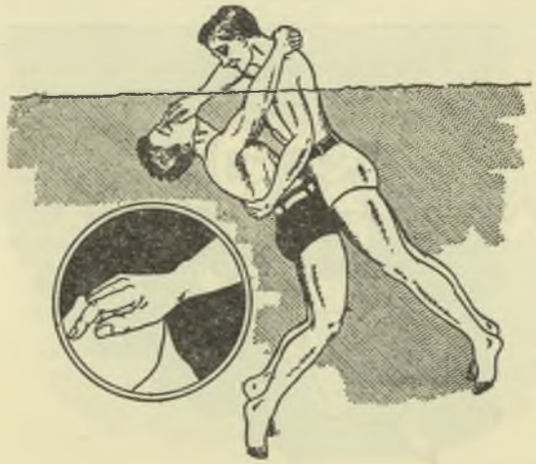

Fig. 2.

APPENDIX A—*continued.*

(3) *Clutched Round the Body.*—If clutched round the body pinioning the arms, place the left hand from behind on to the right shoulder and, whilst pulling down hard with the hand, force up hard with the upper part of the other arm. Bring the right knee into the lower part of his abdomen and place the palm of the right hand over his chin. With a sudden movement straighten the right arm, pull down hard with the left and push down with the knee. Again, the object is to get well over the subject so that all the forces exerted by the rescuer are downwards and away.

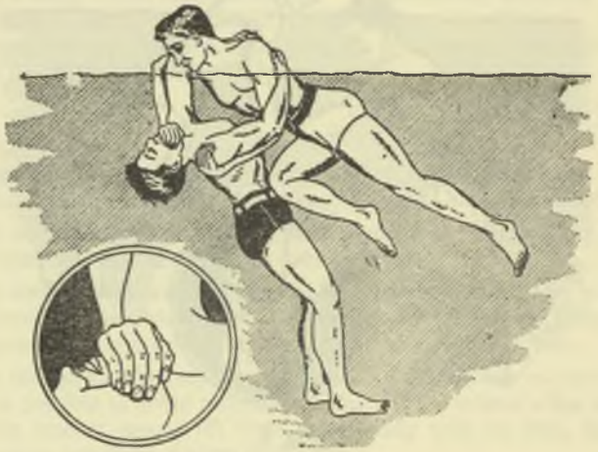

Fig. 3.

(4) *Clutched Round the Body from Behind.*—When clutched from behind it is invariably round the neck. To protect the throat, quickly bring the chin down on the neck. Grip the subject's lower wrist and twist it down and inwards, at the same time pushing up hard on the elbow with the other hand. Retain the grip, continue to apply pressure and, by turning, bring his arm up behind him and force it upwards close to his body.

Fig. 4.

Fig. 5.

Fig. 6.

Appendix B.

METHODS OF RESCUE.

(1) *When not Struggling.*—Turn the subject on his back and place the palms of the hands over his ears. The rescuer must keep his upper arms close to his body and fingers in line with the forearms. Keep the subject's head close up to the chin and against the chest. Propel with the life saving leg kick.

Fig. 7.

(2) *When Struggling.*—When the subject is inclined to turn and grapple, the hold should be as follows—

Grip the arms firmly just above the elbow, rescuer's thumbs uppermost, fingers under the arms, elbows kept in the side (as in 1). Draw the subject's arms out at right angles to the body; this will prevent him from turning.

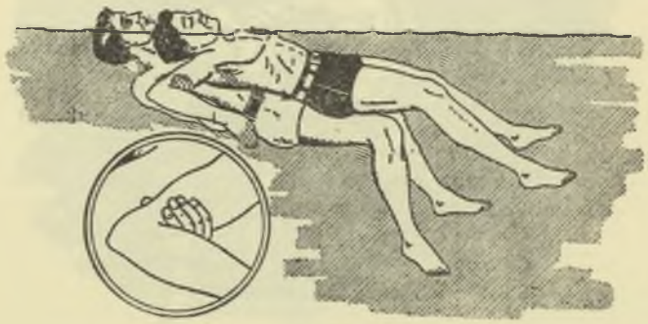

Fig. 8.

Appendix B—*continued.*

(3) *Arms Difficult to Hold.*—If the subject is struggling violently or if for any other reason the arms are difficult to hold, pass the hands under the subject's armpits, fingers apart, and place them on his chest, thumbs on the collar bone. Raise the arms sideways, pushing the subject's at right angles to his body. Keep the subject's head up to the chin.

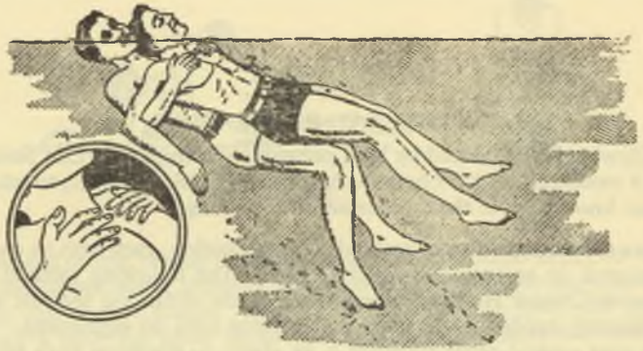

Fig. 9.

(4) *Help when Passive.*—When the person in difficulties is amenable and obviously prepared to assist you, approach with breast stroke and call out clearly " Place your hands on my shoulders and lie back ". When he has done this tell him to keep his arms straight, whilst you continue to swim breast stroke. This is by far the easiest way to rescue, and great distances at comparative ease can be accomplished.

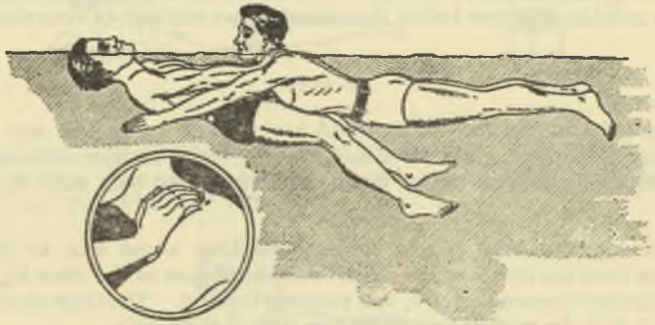

Fig. 10.

(5) *Unigrip Method.*—This method, recommended by the R.L.S.S., is the best standard method to encourage amongst life-savers in the Service. It is simple to master, its execution employing the use of the side-stroke leg action and allowing the use of the disengaged right arm to assist propulsion.

(*a*) Approach from the rear, pass the arm over the subject's shoulder and cup his chin in the hand, using the elbow to press his shoulder into chest. If the subject starts struggling, the opposite hand may be brought under the corresponding shoulder, clamping that also to the chest.

APPENDIX B—*continued.*

(*b*) If this is of no avail, the cupped hand should be brought on to his nostrils and mouth, shutting off his air supply. The subject will invariably seize the rescuer's wrist and pull it down on to his own chest whereupon the tow may continue.

(*c*) During any of the restraint the rescuer will swim on the back.

APPENDIX C.

ARTIFICIAL RESPIRATION.

The following is reproduced by kind permission of the Royal Life Saving Society. Some small modifications have been made to the R.L.S.S. teachings, to take advantage of the latest knowledge of the mechanism of drowning.

2. There are several different methods of resuscitation, each with its own particular advantages and, in some cases, disadvantages. The following method, introduced by Lieutenant-Colonel Holgar Nielsen in 1932, has withstood the test of time, and can be efficiently applied by an unaided operator with no equipment. Further, its advantage over several other methods is its ability to stimulate both expiration and inspiration necessary to effect the most rapid recovery. Other methods, such as the hip-lift and hip-roll, may be needed in special cases. Information on these methods is contained in B.R. 25, First Aid in the Royal Navy. Before illustrating the Holgar Neilsen method in detail, several most important points must be observed.

3. **On recovering the body of an apparently drowned person the immediate start of artificial respiration is essential.** No time should be spent in attempting to " drain the lungs ", loosen clothing, or other preliminaries. At the same time, operators should not be discouraged by the apparent lack of response from the subject. It may well be a considerable time before the patient shows any sign of returning consciousness.

Procedures.

4. Place the subject face down (head lowest if on an incline) and arrange the hands, palms downwards, on top of each other in such a manner as to be able to rest the subject's forehead on top of them. **The mouth and nose must be clear of the ground.**

5. Kneel at the head of the subject, one knee about 6-in. to the side and 6-in. away from the crown of the subject's head, the foot of the other leg, heel in line with the subject's opposite elbow, toes pointing forward. The thigh should be almost horizontal find the midline corresponding with the subject's.

6. Place the hands on the subject's back, thumbs on the spine, fingers towards the feet, heel of the hands on the upper edge of his shoulder blades. The arms should be straight and sloping obliquely forward.

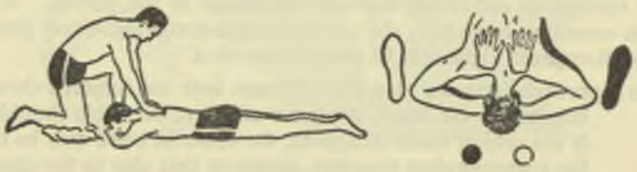

Fig. 11.

APPENDIX C—*continued.*

7. The action is a gentle rocking movement forward, until the arms are vertical, exerting a smooth increasing pressure from above, using the weight of the trunk. The arms must be kept straight throughout. A pressure of 33–34 lb. is sufficient for an adult, and should be decreased down to 2–4 lb. for infants. This movement takes two seconds (count " one-two-three "). (*See* Figures 11 and 12.)

Fig. 12.

8. At the end of this, release the pressure and slide the hands back over the subject's shoulders and upper arms, grasping them just above the elbows. This movement takes about one second (count " change "). Quietly raise and pull on the arms, rocking back a little but never to sit on the heel. This takes two seconds (count " four-five-six "). The trunk must not be raised, neither should the position of the hands or head be disturbed. (*See* Figure 13.)

Fig. 13.

9. Lower the arms gently to the ground and slide the hands back to the original starting position. This takes another second (again repeat " change "). (*See* Figure 14, and then Figure 11 repeated.)

Fig. 14.

10. At all times a steady rhythm and even pace must be maintained, and the operator should listen keenly for the clear passage of air through the respiratory channels.

To Change Knees.

11. Whilst applying pressure (" one-two-three ") bring the raised knee to the ground. Whilst raising the arms (" four-five-six ") raise the opposite knee from the ground. Under no circumstances interrupt the rhythm at any time during the change.

APPENDIX C—*continued.*

To Change Operators.

12. The relief operator should stand behind the operator, the foot of the intended " raised " leg in position. Both operators should count together for a while to ensure continuous rhythm, then at a signal from the operator, the relief takes over with the pressure movement on the back. Again, no interruption of the rhythm is acceptable.

How Long to Continue.

13. Assuming that no medical aid arrives to accept the responsibility, persist with the resuscitation drill to the absolute capacity of your physical capability. If the patient makes no effort at spontaneous respiration in a few minutes it is probable that his case is hopeless. It is nevertheless worthwhile preserving. The return of consciousness may be long delayed, and it can be very difficult to be certain of the presence of very shallow repiration in an unconscious person.

Signs of Life.

14. The first signs of life may be when the subject makes some slight movement, gasps, or the skin assumes a normal colour. The breathing at this stage will begin to strengthen, and every care must be taken to co-ordinate the timing of the drill to match the breathing.

Important.

15. Do not attempt to promote circulation, turn the patient on to his back or provide stimulation until he is breathing quite normally.

On Recovery.

16. When the patient has effected a definite recovery, he should be kept warm, covered, and at rest until satisfactory arrangements can be made for his removal.

To Turn the Body Over.

17. Kneel at right angles to the body facing it, extend the subject's nearest arm above his head, turning his head on its side so that he faces away from you. Grasp his right shoulder with your left hand and right hip (and hand) with your right hand draw him up on to his side—as his head is about to fall down towards you, slide the left hand under his left shoulder and behind his head—complete drawing him onto his back, checking his head from flopping on to the ground. Promote circulation as before.

Finally.

18. If the resuscitation is successful, the subject will at this stage recover movement and invariably try to sit up. Discourage violent movement, provide covering or any other means of promoting warmth and encourage him to lie still and relax. Test the ability to swallow (warm, sweet tea is the best medium). Do not administer alcohol or any form of drugs or drinks which are too hot.

Subject's Arm Injured.

19. Place the subject's arms by his side and substitute a rolled garment under the forehead. Lift under the shoulders instead of by the arms.

Subject's Ribs Injured.

20. In this case omit the pressure movement, effecting the lifting only.

APPENDIX D.

RESUSCITATION BY MOUTH TO MOUTH OR MOUTH TO NOSE ARTIFICIAL RESPIRATION.

This method of emergency manual artificial respiration has been proved scientifically effective for producing the greatest tidal volume of air for use in efforts to revive unconscious and non-breathing victims of drowning, smoke or gas inhalations, electric shock, cardiac arrest, convulsions, injuries causing shocked cessation of breathing and other causes. An open air passageway is essential to prevent asphyxia in victims who may be unconscious but still breathing.

2. Efforts to revive patients manually in this way should be continued until the arrival of medical assistance with mechanical resuscitation apparatus capable of delivering pure oxygen.

3. The essential feature in treatment is the ventilation of the lungs with an oxygen-containing mixture **quickly.** Speed of commencing operation is essential, as seconds lost could be important in an emergency, i.e. either manual methods, or some form of intermittent positive pressure.

Training.

4. Training is not desirable using living persons as models; their conscious reactions preclude satisfactory air exchange, and the method is not hygienic. Where training is required and has not been given during periods spent in H.M.A.S. CERBERUS or H.M.A.S. PENGUIN, arrangements are to be made with those establishments, where training manikins are installed.

Procedure for Resuscitation.

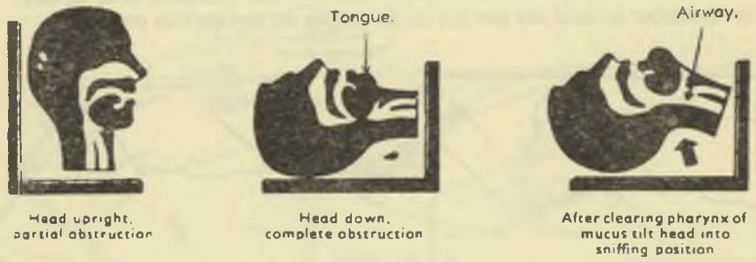

Fig. 15.

5. The victim is placed on his back. If foreign matter is visible in his mouth, turn head to one side, open the mouth and quickly wipe out froth, vomitus, seaweed, &c., with your fingers or a piece of cloth, remove false teeth. The rescuer fully extends (tilts backward) the victim's head, using one hand on top of head and one hand beneath the back of the neck to help the tilt. Now place fingers under the angles of the jaw and push jaw upwards—(this gives a clear airway). Close nostrils by pressure with the thumbs, or by pressing your cheek against his nostrils whilst blowing. Take

a deep breath and place your mouth tightly over the victim's mouth—keeping his mouth open. Blow forcefully enough to make his chest rise. When the chest rises, take your mouth off in order to let him exhale of his own accord by recoil of the muscles. The rescuer turns his head away and inhales deeply again and the inflation cycles are continued, leaving an interval of 3 to 4 seconds between each inflation. During inflation and whilst victim exhales the backward tilt of the head and upward lift of the jaw should be maintained.

6. If the belly is seen to bulge during inflations, a slight steady pressure should be exerted with one hand on the belly below the left ribs, but maintain the tilt of the head with the other hand.

7. Reluctance of the rescuer to contact the face of the victim may be reduced by placing a handkerchief over the victim's face.

8. An alternative method is to inflate the lungs through the victim's nose—maintaining the backward head tilt and upthrust jaw to keep a clear airway. In this case as the airway is through the nose and windpipe, his mouth must be kept closed during inflations to stop leakage of air.

9. Both methods are simple, easy to teach and easy to remember; they both give greater quantities of tidal air movements than any others except the mechanical positive pressure methods.

10. As soon as the victim endeavours to breathe himself, help by timing your assistance to coincide with his efforts, watch his chest for timing, but do not stop until he has completely recovered consciousness.

11. Laymen often fail to obtain and maintain the necessary free airway. They do not remember to hold the jaw forward, or they do not do this properly.

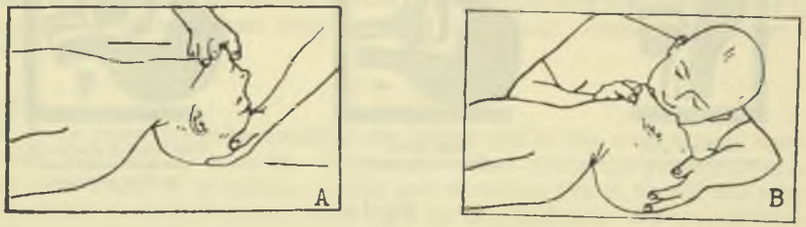

Fig. 16.

Apparently Drowned Victims.

12. It is important to get air into the lungs of the victim without delay. There may or may not be water in the lungs, but this water cannot be removed easily or satisfactorily. Do **not** waste valuable time trying to drain the victim or emptying the stomach. Clear his mouth and throat of fluid and foreign matter (not forgetting to remove dentures) then proceed **immediately** with resuscitation.

Fig. 17.

13. Rescue breathing in water chest high. This is the easiest position of all, even easier than on land. In still water any relative position of heads suffices so long as the patient's head is fully extended. In rough water, the patient's head should be higher out of the water, higher relative to the rescuer's shoulder, and rotated towards the rescuer's, not looking vertically upwards. But in such a position, mouth and nose are invisible from the side.

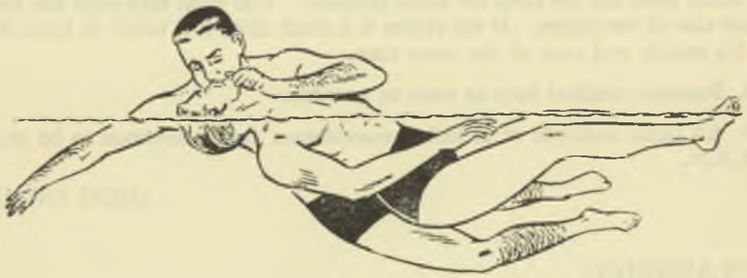

Fig. 18.

14. This sketch shows only the preparatory positions in the water. The head of the patient should be higher up on the shoulder, so that the head can be tilted backwards above the shoulder. Then in rescue breathing the faces are inclined towards each other, with the rescuer's head only slightly higher than the patient's. The rescuer does not attempt to swim fast or make a full stroke whilst doing rescue breathing, because this tends to depress the patient's head and face, and waves are apt to wash over the patient's face. In rough water rescue breathing cannot be regular, but rather as opportunity offers. The actual positions during rescue breathing are very difficult to sketch, as the mouth and nose are not in view from the side. This

APPENDIX D—*continued.*

sketch shows both of the rescuer's shoulders too high in relation to the patient. At the moment the rescue breathing commences the lower supporting arm is 90° or less from the body, and the rescuer's mouth points to the tip of his own shoulder. The patient's face is somewhat rotated towards the rescuer, not facing upwards.

15. In Australia, perhaps more than in most countries, many deaths occur in lagoons and in pools with wide shelving edges. In the rivers and creeks the foothold near the bank is often muddy and slippery. In many cases the banks of the creeks and rivers are high and steep, and often recurved and of loose soil. For long stretches, the bank may be hard to climb, even alone. The whole of the eastern coast has a series of shallow lagoons, which may take hundreds of yards to shelve down to deep water. An adult may be able to wade a quarter of a mile where a child would drown. The vital time saved by rescuing in shallow (waist or chest-high) water is obvious. Once practised, the ease of this type of rescue is remarkable. The mouth-to-nose method, once the idea of full head-tilt is mastered, is so easy that children can perform it, instead of running or wading for help. It is actually in such pools and lagoons that the majority of deaths occur.

16. *The Seven Steps of Mouth-to-Mouth Respiration—*

(1) Clear victim's mouth and throat of water, mucus, food, teeth.

(2) Tilt head well back to open the airway passage and keep it there.

(3) Hold jaw in jutting out position and keep it there.

(4) Pinch nostrils to prevent air leakage unless victim is a child.

(5) Blow into mouth (and nose, if victim is a child) until you see the chest lift.

(6) Remove your mouth; listen for air return from victim's lungs.

(7) Repeat about 12 times a minute for an adult, about 20 times a minute by means of rapid small puffs for a child.

17. Remember when treating a child that the lungs are more easily damaged than of those of adults. Therefore if you are a husky lifesaver, do not use your full force; rapid small puffs are the ideal for small children. You must take your cue from the age and size of the victim. If the victim is a small child it is better to blow through both his mouth and nose at the same time.

18. Summon medical help as soon as possible.

19. All other methods of artificial resuscitation are to continue to be taught in the R.A.N.

(MDG 156/51/27.)

UNCLASSIFIED.

681.—Life Saving in the Royal Australian Navy.

(*A.F.O.* 3079/1959.)

It is desirable that the practice of encouraging the art of life saving within the Service should be more fully exploited than at present although the Naval Board are well aware of the difficulties to be overcome due to lack of adequate facilities. With the present number of poor or non-swimmers at sea there is already too much potential loss of life by drowning. Whilst the obvious remedy is to encourage to the full the ability of each officer and rating to take care of himself in the water, further loss of life can be prevented by avoiding inadequate, though valiant, attempts at rescue, ending in double drownings.

2. Commanding Officers should take all possible practical steps to encourage life saving in their ships and establishments, and the organizing of life saving classes within ships and establishments is undoubtedly the best method of achieving this objective.

Life Saving Methods.

3. The attention of Commanding Officers is drawn to Navy Order 680 of 1960 in which several methods of rescue are described. It is recommended that the Unigrip method (Method 5, Navy Order 680 of 1960) be used as the standard method of teaching when pupils are not necessarily taking a R.L.S.S. award and instruction is not being given with a civilian qualification in view.

4. The organization for the teaching and qualification in R.L.S.S. awards is clearly described in the R.L.S.S. Australia Handbook, obtainable, price 5s. each, from the R.L.S.S. State headquarters in capital cities.

(DTSR 311/3/5.)

(*Navy Order* 680 *of* 1960.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

6355/60.—2

Registrar.

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C.N.O.'s 682-697/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
30th August, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

6356/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

682.—Nomenclature of Nuclear Weapons.

(*A.F.O.* 1637/1960.)

With the development of nuclear weapons ranging in yield from less than a kiloton to several megatons, there has grown up a vocabulary of loose expressions such as "weapons of mass destruction", "tactical nuclear weapon", "fractional yield weapons", and so on.

2. A standard nomenclature has been agreed among the British Armed Services. This is based on defining weapons by their yield, and not by any possible use to which they may be put. These terms are to be brought into general use, and the other undefined expressions discarded.

Megaton—i.e., producing a yield of 500 kilotons or more.
Kiloton—i.e., producing a yield of one kiloton to 500 kilotons.
Sub-Kiloton—i.e., producing a yield below one kiloton.
Nominal—i.e., producing a yield of approximately 20 kilotons.

(DSS 740/52/4.)

UNCLASSIFIED.

683.—Quarantine Regulations—Granting of Pratique to Naval Vessels.

Quarantine procedure in relation to vessels of the R.A.N. R.N.Z.N. and R.N. carrying medical officers, arriving in Australian ports, has been revised, and the new procedure is detailed hereunder.

2. Radio-pratique will be granted to these vessels provided that a satisfactory wireless message is received approximately 24 hours but not less than eighteen hours, prior to the estimated time of arrival of the vessel or vessels stating that—

(*a*) all persons on board have been satisfactorily vaccinated against smallpox not less than eight days or more than three years prior to arrival;

(*b*) there is on board no case of quarantinable or suspected quarantinable disease and no case has occurred during the voyage;

(*c*) there is on board no case of chickenpox nor has one occurred during the voyage.

3. The message is to be forwarded to the Commonwealth Director of Health of the State concerned or to the Quarantine Officer of an outport where the vessels concerned are entering a port other than that of a capital city. The message may be forwarded through the Naval Officer-in-Charge or the local naval representative in the case of an outport.

4. When radio-pratique is granted it will be limited to the first port of entry.

5. A vessel or vessels granted radio-pratique may proceed to berth without displaying the "Q" flag. After berthing, form Q17, in duplicate, signed by the Commanding Officer and the Medical Officer or Senior Medical Officer (if more than one medical officer is borne) is to be delivered immediately to the Commonwealth Director of Health at that port in the case of capital city ports, and the Quarantine Officer at that port in the case of outports, who, if he is satisfied will grant pratique

for all the Australian ports and will return one copy of the form Q17 together with the pratique form to the vessel or vessels. On each occasion that inter-departmental arrangements are made for Jervis Bay to be used as a first port of entry, radio-pratique is to be requested for Jervis Bay/Sydney and the forms are to be completed on arrival at Sydney and delivered immediately to the Commonwealth Director of Health, Sydney.

6. When no satisfactory message has been received or when the message indicates that the requirements for radio-pratique have not been met, pratique will not be granted and the vessel or vessels will fly the " Q " flag and await inspection by a Quarantine Officer outside the Quarantine Line as at present.

7. The above procedure will not apply to vessels based on the New Zealand Station and entering an Australian port direct from New Zealand. Under these circumstances quarantine inspection or report is not required.

(MDG 156/1/2.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

684.—Transport of Civilians in H.M.A. Ships or Aircraft.

It has come to notice that the form of agreement or indemnity in part II. of the appendix to Navy Order 486 of 1959 is being applied to parties of schoolboys who have been embarked in H.M.A. ships for short cruises. This agreement is intended to apply only in cases where civilians are carried in H.M.A. ships or aircraft for personal benefit (e.g., indulgence passages).

2. When ships take organized groups of schoolboys, sea cadets, families of ship's company or official guests to sea, the occasion is to be considered as a special case in accordance with paragraph 3 of Navy Order 486 of 1959.

3. Whilst it is appreciated that the Navy stands to gain some publicity by such cruises, it is emphasized that the risk of injury with consequent damages claims cannot be discounted. The prior permission of the Naval Board is therefore to be obtained in all such special cases.

(HNB 187/1/36.)

(*Navy Order* 486 *of* 1959.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

685.—Radar Type 275M/P—Minor Modification No. 47.

(*A.F.O.* 1662/1960.)

Transformer 5950–99–972–9269 has proved unsatisfactory for use in Minor Modification No. 47, B.R. 1917, for Radar Type 275M/P.

2. Ships and establishments are not to embody Minor Modification No. 47 until further notice.

3. Admiralty has advised that B.R. 1917(1) and (2) will be amended.

(DEE 518/51/295.)

RESTRICTED.

686.—Wireless—Types 692/693—Duty Cycle.

(*A.F.O.* 1663/1960.)

Transmitters, type 692, are liable to overheating if the duty cycle, as laid down in B.R. 1492A, Part I., Section 2, Chapter 1, paragraph 5, of five minutes at " transmit " and ten minutes at " standby " is exceeded. This is particularly liable to occur when transmitting RATT broadcasts. When transmitting intermittently for periods shorter than five minutes, as a guide, the transmitter should not be at " transmit " for more than a total of five minutes in any fifteen minutes.

2. Ships and establishments are to take care that the duty cycle is not exceeded.

3. Transmitters, type 693, are not to be used for broadcast purposes as severe damage would result if the duty cycle of the power amplifier was inadvertently exceeded even by a small amount.

(DEE 518/51/296.)

UNCLASSIFIED.

687.—Thrustmeters and Resonance Changers—Possibility of Damage.

(*A.F.O.* 2724/1959.)

H.M.A.S. MELBOURNE AND DARING CLASS DESTROYERS.

In one ship fitted with thrustmeters the limit valve was incorrectly set, and when the thrustmeter was subsequently operated, severe damage occurred to the thrust collar and main thrust block, necessitating extensive repairs and replacement of the main gearing.

2. Ships fitted with thrustmeters which are used as resonance changers (e.g., H.M.A.S. MELBOURNE) must, at every occasion of refit or maintenance on the thrust block, carry out the instructions in Appendix A.

3. All ships fitted with thrustmeters which are not used as resonance changers (e.g., Daring Class Destroyers) must—

(*a*) After every occasion of refit or maintenance on the thrust block, carry out the instructions in Appendix A.

(*b*) On each occasion of use, observe the drill which is set out in the revised operating instructions.

Copies of these instructions together with a master graph showing maximum permissible thrust against R.P.M. have been issued to each ship for permanent mounting at each thrustmeter.

APPENDIX A.

Instructions for Checking Thrustmeters.

1. *For Ahead Thrustmeters.*—(*a*) With the shaft at rest, jack the shaft against the ahead pads. Then, with the release valve fully open, carefully check that the setting of the limit valve is in accordance with the drawings and maker's instructions and that the correct clearance exists between the spring loaded limit valve flange and the adjustable valve guide, and NOT, (R) NOT, between the valve guide flange and the valve body.

APPENDIX "A"—*continued.*

(*b*) While the shaft is still jacked forward, mount a dial gauge against the shaft coupling flange, nearest to the thrust block and note the reading. Remove the jack and with the release valve closed, and the damping valve open, operate the thrustmeter by hand pump. A small thrust will be recorded as the shaft is pushed aft. When oil flows through the sight glass on the control panel again, note the reading on the dial gauge. The difference between the two readings should compare with the setting of the limit valve.

2. (*a*) Whilst under way the setting of the ahead thrustmeter may be checked while at an ahead shaft speed of 100 r.p.m. or above, again with the release valve open.

(*b*) While still under way, operate the thrustmeter by hand pump, at a shaft speed of 10–30 r.p.m. ahead, with the damping valve open. No thrust should be recorded on the ahead meter as the thrust collar will still be bearing against the astern pads due to shaft rake, but oil should flow in the sight glass on the control panel. This will signify that the limit valve spindle is moving with the ahead thrust pads, and is allowing oil to escape.

3. Provided the checks in either paragraph 1 or 2 above are satisfactory, operate the thrustmeter at a shaft speed of 100 r.p.m. ahead by hand pump. A small ahead thrust will be obtained. Check that oil flows through the sight glass.

4. If the above tests prove satisfactory, the thrustmeters may safely be operated, either by hand pump or by motor driven pump if fitted.

5. If unsatisfactory results are obtained for any of the above tests, the thrustmeter should not be used until a thorough examination can be made. To ensure this, the instructions in Appendix B should be carried out, and in addition where motor driven pumps are fitted, the switch for the motor should be disconnected.

APPENDIX B.

To immobilize Thrustmeters—

1. Remove the pump handle.
2. Drain the oil tank.
3. Attach the following notice to the thrustmeter control panel—

"THIS METER IS NOT (R) NOT, TO BE USED.

Note:—(1) Pump handle has been removed and is stored . . . . .
(2) Oil Tank has been drained."

(DME 1211/51/164.)

UNCLASSIFIED.

688.—Naval Stores (General) (Class F, Group 30)—Loaders Firing Push, Pattern 205665, for Gun-Mountings, 4-in. Mark 19—Introduction.

(*A.F.O.* 534/1960.)

A new type loader's firing push detailed below has been introduced into service to replace pattern F.2B/19147 loader's firing push which has been made obsolete.

Class/ Group.	*N.A.T.O. Supply Classification Group.*	*Pattern.*	*Description.*	*Ships Accounting Classification.*
F.30	5930	205665	Loader's Firing Push ..	Portable Fittings.

2. Ships and authorities concerned with 4-in. mark 19 mountings should demand the requisite number of pushes (2-No. per mounting) on S.N.S.O. Sydney, quoting this order as authority.

3. The pushes should then be fitted and wired, by Dockyards and/or ships' staffs, in accordance with D.E.E. drawing 26207, latest revision (Mod. No. 107 refers) and thereafter independent gun alternate fire, using loader's firing pushes, should be carried out in anti-aircraft fire as detailed in the relevant drill book. This book is at present in the process of being rewritten and will shortly be issued as an A.B.R.

4. Reports on the behaviour of the pushes should be forwarded to the Director of Weapons, Department of the Navy, Victoria Barracks, Melbourne, after the first three months use. Any breakages, either internally or externally, should be reported immediately.

5. Spare pushes should be demanded in the ratio of 1 spare to 4, or part of 4, pushes fitted, and these should be accounted for as "permanent" sea stores.

(DW 519/80/7.)

UNCLASSIFIED.

689.—A/S Mortar Mark 10 Loading Equipment for A/S Frigates, Type 12 Power Units.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	Loading equipment for Type 12 Frigates.
(*c*) *Part of equipment affected*	Slipping clutch for power units.
(*d*) *Purpose of modification* ..	To improve the operation of the clutch and facilitate adjustment of torque output.
(*e*) *Nature of modification* ..	Fit new springs and washers. Counterbore the stud holes in brake drum and increase the thread length of the studs. Fit a modified splined sleeve to accept the new item, Tool, Torque Testing.
(*f*) *Drawings*	U.C.W. 20448/35, C.U.W.E. 20448/45, U.C.W. 20448/39, U.C.W. 20448/17.
(*g*) *By whom to be done* ..	Dockyard. As a defect.
(*h*) *When to be done*	At earliest opportunity.
(*i*) *How to be recorded* ..	As Mod. ~~A.B.R. 5 to Section 14.14~~ 3 to Type 12 FRIGATES Sect'n" " Loading Equipment and Associated Ships Fittings. Amended by 340/61.

Items 3a and 4 on U.C.W. 20448/39 and items 88 and 89 on C.U.W.E. 20448/45 are to be demanded from Gunnery Equipment Depot.

(DW 707/251/6.)

UNCLASSIFIED.

690.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 38. *Classification* " *A* ".

Item: To fit sumps and drains to furnace floors and side casings of Foster-Wheeler boilers as shown on Drawing No. D.1609. Revision No. 1.

References:

(*a*) Navy Office letter No. 0221 of 14th January, 1960.

(*b*) F.O.C.A.F. memorandum AF.1916/17 (4859A) of 4th February, 1960.

(*c*) F.O.I.C.E.A. memorandum N20/1/28 of 22nd February, 1960.

(DCNTS 1215/251/37.)

UNCLASSIFIED. → Cancelled CNO 255/62

691.—Damage to Steel Plate Surfaces by the Use of Chipping Hammers, &c.

(*A.F.O.* 1489/1960.)

Steel plate surfaces on ships' structures have been badly damaged by the use of chipping hammers for the removal of rust and old paint, &c., the surface being covered with deep cuts. In the majority of these cases it is considered that the damage was the result of using the wrong tool for the work. The correct tools to use are—

(*a*) for the removal of rust and paint—pneumatic valveless, or hand, *scaling* hammers,

(*b*) for heavy accumulations of old paint—pneumatic, or hand, *scrapers*.

2. The use of pneumatic chipping hammers (such as used by caulkers) for the removal of rust and old paint, &c., from steel surfaces is prohibited.

3. Scaling hammers (e.g., pattern No. 12644), can also cut into the surface of a plate to a serious extent if not used intelligently, especially when new or freshly sharpened. This danger is less when scrapers are used, but, again, it is possible to damage the surface if the tool is not held at a fairly flat angle to the plate.

4. With modern pneumatic scaling hammers the danger of cutting into the surface of plates is lessened by the use of tungsten carbide inserts, the cutting edge of which has been specially designed for the purpose of scaling off rust and old paint, &c. These tungsten carbide inserts must be dressed after three weeks continuous use, using a " Greenstone ", to an inclusive angle of 120° for the sharpened edge.

5. On no account should any scaling tool be sharpened to an inclusive angle of less than 120°, and the extremities of the cutting edges should always be " relieved " (rounded off).

6. *Nomenclature.*—Some confusion exists with the names given to these tools under review. Tools normally used by Caulkers for chipping (cutting) and caulking of plates should be referred to as " Chipping Hammers ", whereas those tools used for the removal of rust and old paint, &c., should be referred to as " Scaling Hammers ". This is the nomenclature given in the Rate Book of Naval Stores.

(DNC 1211/51/146.)

Cancelled vide 614/62

UNCLASSIFIED.

692.—Furnace Fuel Oil Tanks—Cleaning.

Special detergents have been introduced into naval service for use in cleaning and desludging F.F.O. tanks prior to examination and survey. These detergents are also suitable for cleaning diesel tanks, machinery space bilges, or any other compartments where oily residue is to be removed.

2. The detergents now available are Magnus Automatic Tank Wash and Turco TA-30 Emulsion cleaner. Either of these detergents is suitable for oily sludge removal. Stocks are held in 4-gallon drums and quantities required are to be demanded from the appropriate (S)N.S.O.

3. F.F.O. tanks should normally be cleaned at sea in accordance with the following instructions. (Care is to be taken that regulations prohibiting the discharge of oily wastes in coastal waters are strictly observed.)

(*a*) Strip the tank using the lowest available suction to remove all remaining fuel.

(*b*) Rinse tank by part-filling the tank with sea water, applying steam to the heating coils, and leaving at a temperature of about 100° F. for 10–15 hours before discharging overboard. (*Note.*—The temperature of tanks adjoining magazines should not exceed 90° F.)

(*c*) Introduce to the tank, by way of the sounding tube, 1 gallon of detergent for every 2 tons tank capacity. The proportion of detergent should be increased slightly for heavily sludged tanks or diminished for tanks that are moderately clean.

(*d*) Fill the tank with seawater until about three-quarters full; less water is required in rough seas. Heat the solution and allow the tank to wash for at least two days.

(*e*) Pump out the tank adding seawater through the sounding tube for the last hour of pumping.

(*f*) Examine the tank, and if necessary repeat the wash, using 1 gallon of detergent for every 4 tons tank capacity.

(*g*) For a final rinse fill the tank with seawater and pump overboard.

(*h*) Ventilate and inspect the tank. It should normally be found that the tank is completely clean and gas free without manual cleaning.

4. When it is not practicable to clean tanks at sea, and cleaning must be carried out in harbour, dockyards will normally provide advice on the most appropriate method of cleaning and lend specialized equipment to assist in carrying it out. Methods that may be used are—

(*a*) Steaming out tanks in conjunction with detergent solution.

(*b*) Filling tank with sea water and detergent and agitating for three or four days by pump, steam, or compressed air.

(*c*) Spraying tank walls with a detergent solution followed by water jetting.

5. Owing to the limited facilities available in port for dealing with large quantities of oily water, cleaning should be carried out at sea whenever possible.

(DNC 1211/51/97.)

UNCLASSIFIED.

693.—H.S.9 Wrist Chronographs—Return.

The number of H.S.9 wrist chronographs supplied in the R.A.N. for aircrew or aircrew training is sufficient to meet requirements for current authorized purposes plus a reserve backing for replacements, &c.

2. In view of the large number of watches returned for periodical overhaul, adjustment or repair, and the time necessary in effecting such repairs, it is essential that H.S.9 wrist chronographs on loan are returned without delay to the Hydrographer, R.A.N., through the Supply Officer, when the holders cease flying duties and are not in receipt of flying pay.

3. Responsibility for the withdrawal of watches from personnel concerned is that of the Head of the Air Department in the ship or station—see also A.B.R. 4 Article 2612.

(DNAS 452/51/20.)

UNCLASSIFIED.

694.—Naval Stores (General) (Class B, Group 11, Part A)—Patterns B11A/6948 Wrench and B11A/6942 Wrench—Deletion.

(*A.F.O.* 395/1960.)

The following items are being deleted from the Rate Book and Authorized List of Naval Stores—

B11A Pattern 6948 Wrench, Single Handled.
B11A Pattern 6942 Wrench, Double Handled.

2. Existing stocks will continue to be issued until exhausted.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 506/71/52.)

UNCLASSIFIED.

695.—Naval Stores (General) (Class E, Group 10)—Allocation of New Pattern Numbers.

(*A.F.O.* 1599/1960.)

To eliminate duplicated pattern numbers, and thus facilitate accounting, new pattern numbers have been assigned to the different sizes of tape under class E, group 10 of the Rate Book and Authorized List of Naval Stores, as follows—

Old Pattern No.	*Description.*	*New Pattern No.*
	Tape, woven, cotton, fine quality, for insulating purposes (to B.S.S. 633):—	
359	½-in. wide	8927
359	¾-in. wide	8928
359	1-in. wide	8929

2. Records should be amended accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*g*) of A.B.R. 4 (Naval Storekeeping Manual).

3. The relevant publications will be amended.

(DNAS 514/51/27.)

UNCLASSIFIED.

696.—Naval Stores (General) (Class F2A, and F24)—Batteries—Revised Rate Book Classification.

(*A.F.O.* 480/1960.)

As from the date of this order, the undermentioned batteries, hitherto dealt with under class F, group 2A, part 1, are to be transferred to class F, group 24 (A.B.C. Supply Classification Group 6140) and dealt with under the seven-digit Joint Service Catalogue numbers now allocated to them and indicated in column 3.

2. Naval Store accounts in ships and commissioned establishments should be adjusted in accordance with A.B.R. 4, Article 1812 (*b*) and paragraph 11 of Navy Order 607 of 1959.

3. Admiralty has advised that the relevant publications will be amended.

Old Pattern No. under F2A/1	*Description.*	*New Pattern No. under F.24*
	Battery, Secondary (lead acid):	
5503	2V., 62 a. h.	910–1507
14068	6V., 150 a. h.	910–1523
14061	12V., 25 a. h.	910–1532
	Battery, Secondary (nickel-cadmium):	
14149	1.2V., 10 a. h.	910–1802
14163	1.2V., 25 a. h.	910–1803
14162	1.2V., 65 a. h.	910–1805
1040	2.4V., 3 a. h.	910–1808
8117	2.4V., 10 a. h.	910–1810
14059	2.4V., 10 a. h.	910–1811
8856A	2.4V., 20 a. h.	910–1812
14186	3.6V., 65 a. h.	910–1814
14194	1.2V., 75 a. h.	910–1815
14188	10.8V., 25 a. h.	910–1817
14187	10.8V., 65 a. h.	910–1818

(DNAS 519/74/6.)

(*Navy Order* 607 *of* 1959.)

UNCLASSIFIED.

697.—Naval Stores (Technical) FIC3 M.C. Handset A.P. 12941—Modification to Switching.

(*A.F.O.* 1555/1960.)

Reports from sea in the R.N. have indicated that the switching provided in handset A.P. 12941, i.e., press to speak/listen, causes hardship in continuously manned position.

2. It has, therefore, been decided that where necessary, ships can convert to "press-to-speak" by modifying the switch connections as shown in Navy Order Diagram Issue 15/60 (D.E.E.A. 37348).

3. This modification will allow continuous listening in the normal position, but when " pressed to speak ", the receiver is short circuited. The 100 ohm resistor is added to protect the matching transformer when the switch is operated.

(DEE 518/55/68.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar.

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C.N.O.'s 698-728/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
8th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos P Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

67187/60.

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CONTENTS—*continued.*

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

698.—Her Majesty the Queen—Date of Observance of Official Birthday, 1961.

In 1961 the birthday of Her Majesty the Queen will be officially observed on Saturday, 10th June.

2. In Australian waters a royal salute is also to be fired at noon from all Her Majesty's Australian ships which are authorized to salute, unless otherwise ordered by local Naval authorities.

3. Navy Order 895 of 1959 is hereby cancelled.

(DSD 75/2/7.)

(*Navy Order* 895 *of* 1959.)

UNCLASSIFIED.

699.—Message of Congratulation to Lord Slim on being Created a Viscount.

The following is an extract from a letter of congratulations which the Chief of Naval Staff wrote to Lord Slim on his elevation to the peerage—

> " May I, on behalf of the Royal Australian Navy, express our very great pleasure at the announcement that Her Majesty has so greatly honoured our former Governor-General and Commander-in-Chief and his Lady."

2. The following reply has been received—

> " Will you please convey to all ranks and ratings of the Royal Australian Navy my warm thanks for their congratulations which I greatly appreciate and many happy remembrances of the occasions when I was with them."

3. This order will be reprinted for posting on notice boards.

(HNB 18/5/12.)

RESTRICTED.

700.—Secrecy and Security—Misuse of Security Classifications.

Attention is drawn to the need for care in the use of security classifications and in particular to the need to avoid over-grading. Much official information needs no security classification and over-grading causes unnecessary work and imposes needless restrictions. It also lessens the respect with which the security classifications are treated, with a consequent lessening of the protection afforded to matters properly classified. The dangers of under-grading are self-evident. The originators of documents requiring security protection must be conversant with the relevant instructions and must grade papers strictly in accordance with the following definitions—

TOP SECRET.—Information and material, the unauthorized disclosure of which would cause exceptionally grave damage to the nation's closest secrets.

SECRET.—Information and material, the unauthorized disclosure of which would endanger national security, cause serious injury to the interests or prestige of the nation, or would be of great advantage to a foreign nation.

CONFIDENTIAL.—Information and material, the unauthorized disclosure of which would be prejudicial to the interests or prestige of the nation, or would cause administrative embarrassment, or difficulty or be of advantage to a foreign nation.

RESTRICTED.—Information and material which requires security protection other than that determined to be **TOP SECRET, SECRET** or **CONFIDENTIAL.**

Classification of Documents.

2. Before allotting one of the higher classifications, the originator should always consider whether compromise of the document would cause the damage envisaged in the definition of the classification proposed. Each document is to be classified strictly according to its own contents and not on the classification of any former documents on which it may have been drafted, or which are referred to or quoted in the text, provided the quotation is limited to the reference number and the date, or in itself does not justify a classification as high as the original document.

3. The overall classification of a file of documents should be the same as that of the highest classified document in the file. The classification of a paper with appendixes or enclosures should be that of the highest classified portion, e.g. a brief note or a covering letter which has a **TOP SECRET** appendix should be marked **TOP SECRET** although a **TOP SECRET** document may have a **RESTRICTED** or even an **UNCLASSIFIED** appendix.

Downgrading of Classified Documents.

4. The classification appropriate to any document may alter with the passage of time and should be reviewed by the originator periodically with a view to downgrading whenever possible. When it is desired to downgrade a classified document the old security marking should be deleted **in ink** and the new security marking (if any) substituted for it. The alteration should be signed and dated by the officer responsible and a note made of any documentary authority for it. In some cases it may be possible for an originator to indicate at the time of issue that a document may be downgraded after a given date. Documents received from another government department or from a foreign or Commonwealth Government are not to be downgraded without the approval of the originator.

Classification of Signals.

5. The abovementioned instructions do not apply to signals where, in the interests of cryptographic security, it is forbidden to refer to any classified document or signal in an unclassified signal. Detailed instructions about the classification of signals are contained in current Confidential Navy Orders.

(DNI 1617/206/29.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

701.—Communication Branch—Employment and Training of Junior Ratings on Joining the Fleet.

Communication ratings on completion of Recruit and Professional training at H.M.A. Signal School may be drafted to any ship of the Fleet.

2. The primary aim of H.M.A. Signal School is to turn out, under classroom conditions, a reasonable practical operator, who will develop into a sound operator

of the watch with further experience. The effect of the transition from shore training to sea conditions will vary with the individual, but encouragement to consolidate knowledge and develop practical ability is vital during this critical period.

3. To this end, the following measures are to be taken—

(*a*) They must read weekly the appropriate number and type of exercises laid down in A.B.R. 5009.

(*b*) In order to gain confidence as an operator, they should also normally do at least four hours watchkeeping per day, double banking an experienced operator whenever possible.

(*c*) As an introduction to the full scope of the work of the branch, frequent changes of employment, visits to other ships and shore stations should be arranged.

4. On completion of the settling-in period, maximum instruction must be arranged to bring ratings up to standards required for the able rate part 2 examination. The importance of guidance and encouragement in these studies is again stressed.

5. Captains are to ensure that continuation training of young communication ratings is exploited to the full in their ships. In small ships, it is important that the senior rating of the appropriate category should be afforded the maximum opportunity to supervise this training.

(DSD 303/24/5.)

UNCLASSIFIED.

702.—Courses for C.B. Officers.

Courses on the care, custody and accounting of books held on C.B. register charge will be conducted at the C.B. Distributing Centre, Victoria Barracks, Melbourne, as required over a period of two days for C.B. officers or officers who are about to take up C.B. duties.

2. Attendance is not obligatory but every effort should be made for these officers to visit the C.B. Distributing Centre, for the course.

3. The name of an officer reporting for a course and the date on which it is desired a course should commence is to be advised to Navy Office by memorandum.

(HNB 312/251/3.)

cancelled vide CNO 562/62

UNCLASSIFIED.

703.—Films—Educational—Borrowing from Civil Film Libraries.

Some civil film libraries, such as the National Film Library, Canberra, and the State Film Centre, Melbourne, are prepared to lend, without charge, documentary and technical films to ships and establishments for screening to ships' companies.

2. Arrangements for free loans are to be made direct with the civil film library by an officer delegated by the Captain. The film is to be examined on receipt by the delegated officer or, on his behalf, by a qualified cinema operator. Any defect or damage is to be reported immediately to the library from which the film was obtained. Similarly, any damage which occurs while the film is held on loan should be reported.

3. Any film obtained from a film library operated or sponsored by a foreign government or governmental agency is to be viewed by an officer before being screened for the ship's company. If the film is found to contain objectionable political or other matter it is to be returned to the library without further screening.

4. The film should be despatched for return to the library within one day of screening. It should be packed securely and consigned, carriage paid, by the quickest available route. The cost is to be met from public funds.

5. The conditions under which civil libraries make their films available without charge are, generally, as follows—

(*a*) The borrower is held responsible for damage to the film whilst in his possession or during return to the library.

(*b*) The borrower undertakes to return the film, without delay, adequately packed and carriage paid.

(DNES 451/51/14.)

UNCLASSIFIED.

704.—Geneva Conventions—Protection of Medical, &c., Personnel in War—Armlets and Certificates.

Navy Order 155 of 1960 is to be amended as follows—

Cancel paragraph 8 and insert the following in lieu—

"8. As a measure of preparedness, ships and establishments are to calculate their minimum emergency requirements of Red Cross Armlets and Certificates, and arrange to hold them on board in peacetime. Both are available on demand from the Medical and Dental Store Officer, Sydney. The certificates and armlets are to be kept locked up, and mustered periodically in the same way as confidential books. The certificates are to be verified against a register kept in accordance with paragraph 6.

(MDG 43/1/3.)

(*Navy Order* 155 *of* 1960.)

UNCLASSIFIED.

705.—Move of Navy Office to Canberra—Removals to Private Homes.

Where, consequent upon the transfer of Navy Office to Canberra, a member is granted a removal and occupies a house or flat under a tenancy agreement with the Commonwealth, he may be granted a second removal, if within two years he builds or purchases a house or flat in Canberra.

2. The removal will be limited to reasonable costs of removal of household furniture and effects.

3. Depreciation Allowance will not be payable.

(HPB 252/8/25.)

UNCLASSIFIED.

706. Ratings—Fleet Air Arm—Transfer to Other Branches.

It is intended that H.M.A.S. MELBOURNE and the Royal Australian Naval Air Station, Nowra, will remain in full commission until mid 1963 and that the Fleet Air Arm will remain fully operational until that date.

2. As the transfer of Fleet Air Arm ratings to other branches could jeopardize the manning of the Fleet Air Arm during the next three years, it has been decided that the provisions of A.B.R. 10, Article 0703 and 0706 are to be suspended so far as Fleet Air Arm ratings are concerned.

3. When the Fleet Air Arm ceases to operate fixed wing aircraft ratings no longer required in their existing rates will be offered the following alternatives, further details of which will be promulgated in due course—

(*a*) Volunteers for transfer to other branches as shown in sub-paragraph (i) below will be required to transfer in accordance with A.B.R. 10, Article 0705. Transfers will be subject to the requirements of the service and suitability; ratings having less than three years to serve will be required to re-engage.

(i) Normal transfers—

Naval Airman Branch—Naval Airman 1st Class and above to Able Seaman. Naval Airman 2nd Class to Ordinary Seaman.

Naval Airman Mechanic Branch—Naval Airman Mechanic 1st Class and above to Engineering Mechanic 1st Class. Naval Airman Mechanic 2nd Class to Engineering Mechanic 2nd Class.

Aircraft Artificers 4th Class and above to Engine Room Artificers 4th Class.

Aircraft Mechanicians to Mechanicians 2nd Class.

(ii) Exceptional transfers—

Any rating may volunteer for the Supply and Secretariat, Communications and Miscellaneous branches.

4. Volunteers may be called for transfer to the Royal Australian Air Force. However this depends on R.A.A.F. requirements. Further information on this subject including conditions of possible transfer will be promulgated at a later date.

5. Ratings who are not volunteers to transfer to another branch or who are considered unsuitable for transfer and who cannot be employed in their existing rating may have to be discharged.

6. Electrical Branch AL and AR categories may be required to convert to General Service in order to meet the needs of the Service. However, there may be a surplus and some senior AL ratings may not be required.

7. A limited number of ratings may be required to continue to serve in their existing rate (e.g., Photographers).

8. It is emphasized that the provisions of the above paragraphs apply only when the F.A.A. ceases to operate fixed wing aircraft in 1963. For the present applications for re-engagement in all F.A.A. categories are still required. Re-engagements will be effected in accordance with the normal rules, as laid down in Navy Order 500 of 1959, amended by Navy Order 169 of 1960.

(HPB 302/2/10.)

(*Navy Order* 500 *of* 1959 *and* 169 *of* 1960.)

UNCLASSIFIED.

707.—Royal Navy Exchange Personnel—Leave Travel.

Admiralty have stated that, in future, Royal Navy Exchange Personnel stationed at Woomera and Maralinga will be eligible for two free local leave journeys each year to Adelaide. This concession does not apply to families of personnel concerned.

2. Royal Navy Exchange Personnel stationed at other locations in Australia may still be granted free local leave travel once a year up to a distance of 150 miles from the duty station and return or alternatively they may take three free journeys of 50 miles radius.

3. Interim Pay Instructions will be amended.

(HPB 187/1/47.)

UNCLASSIFIED.

708.—Transfer to Canberra—Removals and Allowances.

This order will apply to the transfer to Navy Office, Canberra, during October, 1960, of members of the R.A.N. serving at Department of the Navy, Victoria Barracks or Albert Park, Melbourne.

2. As the following approvals have been granted on the basis of the transfer of an establishment, this order is not to be regarded as a precedent for the extension of approvals in relation to normal removals.

3. In the following paragraphs the word " permanent " in relation to appointments and drafts means for twelve months or more.

4. Members already serving at Navy Office on a permanent basis—

(*a*) *Where the period in Canberra will be three months or less*—Transfer to Canberra will be limited to the member's fare and his personal effects. If the member is in receipt of Temporary Rental Allowance in Melbourne, payment may be continued but the overall limit of two years will not be exceeded. The requirement to search for unfurnished premises will be waived in respect of the period in Canberra. Living Out Away From Home Allowance will be payable to a married member. Removal entitlement of family and furniture at the expense of the Department will arise, subject to the normal rules, when the member is appointed or drafted away from Canberra.

(*b*) *Where the period in Canberra will be more than three months*—Removal of family and furniture to Canberra will be provided when the position concerned is transferred to Canberra. If the member is in receipt of Temporary Rental Allowance, payment may be continued in the meantime but the overall limit of two years will not be exceeded. The requirement to continue to search for unfurnished premises may be waived. Where the member's family proceeds to Canberra to occupy a house allocated by the Department of the Interior, Living Out Away From Home Allowance may be paid for a maximum period of three months.

5. Members who are to commence duty in Melbourne on a permanent basis and who are subsequently transferred to Canberra—

(*a*) *Where the period in Melbourne will be three months or less*—Transfer to Melbourne will be limited to the member's fare and his personal effects. If the member was in receipt of Temporary Rental Allowance

at the old location, payment may be continued but the overall limit of two years will not be exceeded. The requirement to continue to search for unfurnished premises may be waived. If the member is living out in Melbourne, Living Out Away From Home Allowance may be paid to a married member.

(*b*) *Where the period in Melbourne will be more than three months*—

(i) Removal may be granted but furniture will not be moved to Melbourne. Storage at the expense of the Department will be undertaken at the old location. The member may be paid Temporary Rental Allowance in respect of the period in Melbourne. The requirement to search for unfurnished premises will be waived but otherwise the normal provisions will apply.

(ii) Removal of family and furniture will be granted when the transfer eventuates.

(iii) If Temporary Rental Allowance is not payable at the old location and the member elects not to move his family to Melbourne, removal of the family and furniture to Canberra will be granted when the transfer eventuates. Under these circumstances Living Out Away From Home Allowance may be paid while the member is in Melbourne.

6. If a member does not apply for a removal when eligible under this order, Living Out Away From Home Allowance will not be payable except in cases covered by paragraph 2 (*b*) of instruction 65/2 of I.P.I.

7. Education Allowance will be payable subject to the normal rules.

8. *Members not normally entitled to removals.*—Emergency list officers and reserve officers, who, because of the terms of their appointments are not normally entitled to removals, may be granted removals to Canberra if it is expected that they will serve there for at least twelve months. On termination of service after not less than twelve months in Canberra, removal will be granted at the expense of the Department to any required destination but the liability of the Department will not exceed the cost of a removal from Canberra to Melbourne.

9. Navy Order 539 of 1959 is hereby cancelled.

(HPB 252/8/23.)

(*Navy Order* 539 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

709.—Boilers—Shut-off Cocks for Gauge Glasses—Emergency Operating Gear.

(*A.F.O.* 3089/1959.)

An accident has recently occurred to a cylindrical boiler in one of H.M. ships resulting in the collapse of a furnace; the failure was attributed to low water level in the boiler. An indirect cause of this accident was the unorthodox arrangement of the boiler water gauge glass cock operating arrangements which were incorrectly fitted in three respects as follows—

(*a*) The cock handles had been reversed.

(*b*) The extension rods and cock handles were so fitted that the arm of the cock handle was nearly in a straight line with the extension rod, and hence the cocks could not easily be operated from the lower plates.

(*c*) Emergency wires to enable the cocks to be operated from a remote position should the normal position be untenable due to escaping steam or water, were not fitted.

2. Gauge glass cocks are to be examined in all ships and auxiliary vessels to ensure that when the gauge glass is in the operating condition (i.e., with steam and water valve open and drain valve shut), all three handles are in the DOWN position.

3. The arrangement of extension rods to enable the gauge glass cocks to be operated from the lower plates is also to be examined to ensure that there is a sufficient angle between the centre-line of the extension rod and that of the links operating the cock. If this angle is less than 30° or more than 60° an item is to be included in the next defect list to modify the links operating the cock so that the angle is approximately 45°, in both the shut and open position.

4. Emergency operating gear is to be examined regularly and kept in efficient working condition.

(DME 1101/51/11.)

UNCLASSIFIED.

710.—Ammunition—Cartridges, 50 Grain, Ballistite for 2-in. Mortar Bombs—Withdrawal of Defective Lots.

(*A.F.O.* 1424/60.)

Consequent on failures to function, it has been decided to withdraw from service all OA 058 Cartridges, 50-grain, Ballistite, Lots 408 and 409 filled I.C.I. 6/57. These cartridges are classified ff (i.e., not dangerous, but may have a percentage of failures to function).

2. Any cartridges of these lots held in H.M.A. ships or establishments are to be returned to the nearest R.A.N. Armament Depot for disposal.

(DW 728/54/16.)

UNCLASSIFIED. Cancelled vide CNO. 587/62

711.—Ceremonial Rifles, Bayonets and Scabbards—Allowances.

Allowances of ceremonial rifles, bayonets and scabbards have been approved as follows—

Flagship	50 sets.
Ships in Strategic Reserve	12 sets each.
H.M.A.S. CERBERUS	300 sets.
H.M.A.S. ALBATROSS	106 sets.
H.M.A.S. NIRIMBA	54 sets.
H.M.A.S. WATSON	106 sets.

2. These sets are to be held in addition to normal allowances of rifles, &c., and H.M.A. ships and establishments are to adjust holdings accordingly.

3. Additional equipment will be held at Spectacle Island and Byford Armament Depots and will be supplied for occasional use on demand. Alternatively, subject to the concurrence of the administrative authority, demands by ships and establishments, other than those mentioned in paragraph 1, may be made from the nearest holder. Equipment is to be returned immediately the requirement ceases.

4. Warrants of Naval Armament Stores will be amended.

5. Navy Orders 922 of 1958 and 60 of 1959 are hereby cancelled.

(DW 710/51/52.)

(*Navy Orders* 922 *of* 1958 *and* 60 *of* 1959.)

UNCLASSIFIED.

712.—4.5-in. Twin R.P. 41 Mountings, Marks 6 and 6*—Access Door at Rear of Gun House—Modification Number A.N. 96.

It is possible that rear doors already fitted in accordance with modification A.N.96 may become unlocked due to the angled faces of the handle catch being shaped incorrectly.

2. The existing door handles are to have the tubular section further offset and the catch end modified in accordance with drawing DOUW A/51197-15 dated 8th June, 1960.

3. A handgrip, door stops and spring clips are to be fitted as shown on drawings DOUW A/51197-32, A/51197-33 and A/51197-34 dated 13th July, 1960, A/51197 dated 16th June, 1960, and A/51197-1 dated 17th June, 1960. Future doors will be made to the amended drawings; Gunnery Equipment Depots are to modify parts before issue, and ships already fitted are to have the parts modified by defect action quoting this Navy Order as the authority.

4. Navy Order 406 of 1960 is relevant.

(DW 736/259/14.)

(*Navy Order* 406 *of* 1960.)

UNCLASSIFIED.

713.—Fire Control—F.E.P. Systems, Marks 2 and 3—Angle Solvers, Part 2, Mark 1, Models 0-3.

The following is an approved list of modifications to Angle Solvers, Part 2, Mark 1—

Description.	*Drawings.*	*Serial Nos. where Reported Complete.*
MODEL 0 TO MODEL 1.		
Fitting of modified vector deflection buffer ring	D.N.O. 8119A, E and F D.N.O. 8166B	103, 118, 120, 121, 123 and 124

Description.	*Drawings.*	*Serial Nos. where Reported Complete.*
MODEL 1 TO MODEL 2.		
Removal of pick up limit switches and the fitting of additional safety relay to deck deflection	D.N.O. 10416 (B.R. 1121 Plate 57A)	102, 103, 118, 120, 121, 123 and 124
Addition of balance weight to gun elevation bow	D.N.O. 8119A, E and F	118
Fitting of modified brush assembly	D.N.O. 8118, J and H .. D.N.O. 8153 D.N.O. 8154	102, 103, 104, 118, 120, 123 and 124
MODEL 2 TO MODEL 3.		
Fitting of modified gear boxes to director elevation drive and resetter and fine gun transmission	D.N.O. 9853 Series ..	103, 118, 121 and 124

2. Ships and establishments are to raise Defect List Items to have outstanding modifications carried out quoting this order as the authority. In this connexion it is not intended to convert angle solvers fitted in establishments to Model 3, i.e., Flinders Naval Depot and West Head.

3. Spare angle solvers are to be modified by Gunnery Equipment Depots.

4. Navy Order 680 of 1959 is hereby cancelled.

(DW 737/53/11.)

(*Navy Order* 680 *of* 1959.)

UNCLASSIFIED.

714.—A/S Mortar, Mark 10—Mounting Cradle Modification.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	A/S Mark 10 Mortars.
(*c*) *Part of equipment affected*	Cradle.
(*d*) *Purpose of modification*	To prevent the accumulation of water in pockets formed by stiffening plates.
(*e*) *Nature of modification* ..	Drill a ½-in. diameter drain hole in both stiffening plates item 11, adjacent to stiffeners item 19 and side plate item 1.
(*f*) *Drawings*	AME.4002/91. AME.4002/93.
(*g*) *By whom to be done* ..	Ships' staff.
(*h*) *When to be done* ..	At earliest opportunity.
(*i*) *How to be recorded* ..	As modification number A.N. 5 to mountings, Section " A ".

2. Navy Order 1033 of 1959 is relevant.

(DW 707/251/10.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

715.—Diving—Testing of S.S.B.A. Air Hoses.

Failure in service has occurred of some of the older issue S.S.B.A. air hoses from both deterioration and maltreatment.

2. As the safe working life of an air hose is generally determined by factors other than age, the following routines are to be carried out on all S.S.B.A. air hoses prior to diving.

3. *Where the air hose is being used from a compressor—*

(*a*) The required length of hose is made up, coupled to the compressor and blown out with a short burst of air.

(*b*) Blank off the open end of the hose with either a blanking piece or the demand valve, and run up the compressor to the full pressure with the air supply open to the hose under test.

(*c*) When the gauge registers approximately 100 P.S.I. the compressor is then stopped and the steady gauge reading noted. Any fall off in the gauge reading will indicate a leak.

(*d*) If a leak is indicated, before examining the hose, check aurally or with a soap and water solution, that the leak is not occurring at the compressor non-return valve or around the air receiver connections.

(*e*) Whilst under pressure the hose must also be visually examined for any bulging or damage indicating a fabric weakness.

4. *Where the air hose is being used from a cylinder or pressurized reel—*

(*a*) Proceed generally as in paragraph 3, but as the high pressure gauge will not accurately indicate small leaks the hose must be carefully examined both aurally and visually.

5. Suspect hoses are not to be used for diving but returned to store, suitably tagged denoting the position and nature of the defect.

Note.—The best method of marking is to apply a few turns of light cordage at the defect.

6. Separate instructions will be issued for S.S.B.A. hoses in Store Depots.

(DW 512/74/36.)

UNCLASSIFIED.

716.—Alteration and Addition Item—Aircraft Carrier H.M.A.S. MELBOURNE.

Navy Order 351 of 1960 is to be amended as follows—

Item—

Delete the word " in " in the second line.

Sub-paragraph (*a*)—

Delete the word " of " and *insert* the word " to " in lieu.

(DCNTS 1213/52/45.)

(*Navy Order* 351 *of* 1960.)

UNCLASSIFIED.

717.—Naval Stores (Air)—Transfer of Clip, Crocodile, 50 Amp., Large, from R.A.F. Vocabulary Section 5J to Section 5K.

(*A.F.O.* 1680/1960.)

Clips, crocodile, 50-amp., large, Ref. 5J/3124, have been re-referenced 5K/9400859.

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*b*) of A.B.R. 4 (Naval Storekeeping Manual).

3. Amendments to the relevant Air Stores Establishments will be issued in due course.

(DNAS 603/55/274.)

UNCLASSIFIED.

718.—Naval Stores (General) (Class E, Group 2C)—Resilient Mountings for Electrical Indicating Instruments, Pattern 2145—Introduction.

(*A.F.O.* 894/1960.)

Where electrical indicating instruments are accommodated in equipment which is not resiliently mounted, the instruments themselves should be mounted. For this purpose, rubber bushes with naval brass inserts to Drawing D.E.E. 13770 have been introduced as pattern 2145 under class E, group 2C and added to the Rate Book and Authorized List of Naval Stores, B.R. 810.

2. Commanding Officers of H.M.A. ships in commission should forward demands to S.N.S.O. Sydney. Stocks are not yet available and demands should not be hastened. Requirements for H.M.A. ships under construction, modernization or conversion should be obtained in the normal manner. As the replacement of these mountings will not be required during normal service, it will not be necessary for " on board " spares to be carried.

3. Ships' officers are to include an indication of this patterned item on the appropriate ship's drawings for future reference.

4. Admiralty has advised that the relevant publications will be amended.

(DNAS 512/56/52.)

UNCLASSIFIED.

719.—Naval Stores (General) (Class E, Group 4)—Notice Board, Pattern 701—Withdrawal of Allowance.

(*A.F.O.* 1362/1960.)

The allowance of notice boards, pattern E.4/701, to H.M.A. ships has been withdrawn. Where these notice boards are already fitted in H.M.A. ships they should be retained but future requirements are to be met by dockyard or shipbuilders' manufacture in sizes as required. The non-pattern notice boards should be accounted for as portable fittings.

2. Allowance Lists of Naval Stores and Sea Store Establishments should be amended accordingly.

(DNAS 512/69/97.)

UNCLASSIFIED.

720.—Naval Stores (General) (Class F, Group 3)—Valve Holders, Patterns 2992 and 2993—Replacement by Patterns F31/056-0031 and F31/056-0013.

(*A.F.O.* 1603/1960.)

Owing to variations in the external dimensions of the valves used on pattern F3/987 amplifier panel, it has been found necessary to provide alternative retaining arrangements. Valve holders, patterns F3/2992 and 2993 have been replaced on this panel by valve holders, patterns F31/056–0031 and 056–0013, respectively.

2. Valve holders, patterns F3/2992 and 2993, have been made obsolete and all stocks should be disposed of to the best advantage.

(DNAS 519/53/98.)

Section 4.

DENTAL STORES, MEDICAL STORES AND VICTUALLING STORES.

UNCLASSIFIED.

721.—Officer's Shoulder Straps—Availability from Victualling Yards.

Subject to the conditions of Navy Order 186 of 1960, shoulder straps for Sub-Lieutenants are available from Royal Edward Victualling Yard, Sydney and H.M.A. Victualling Yard, Port Melbourne, for issue on repayment.

2. Until the next promulgation of the price list the price for shoulder straps for Sub-Lieutenants will be £2 5s. 6d. per pair.

(DV 917/87/1.)

(*Navy Order* 186 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

722.—Books—B.R. 125—Lloyds Register of Shipping, Volumes I., II. and IV. (1959-1960 Editions), Volumes I., II. and III. (Superseded Editions).

The following will be added to the approved revised establishment for B.R. 125 Lloyds Register of Shipping detailed in Navy Order 204 of 1960—

Volume I. (1959–1960 Edition)—Captain of the Port, Sydney.
Volume II. (1959–1960 Edition)—Captain of the Port, Sydney.
Volume IV. (1959–1960 Edition)—H.M.A.S. CERBERUS.
Volume I. (Superseded Edition)—H.M.A.S. CERBERUS.
Volume II. (Superseded Edition)—H.M.A.S. CERBERUS.
Volume III. (Superseded Edition)—H.M.A.S. CERBERUS.

(DNAS 465/57/16.)

(*Navy Order* 204 *of* 1960.)

UNCLASSIFIED.

723.—Committal Orders (A.S. 245)—Completion.

Navy Order 502 of 1960 is to be amended as follows—

(*a*) *Paragraph* 2—second last line.

Delete—" 6 " and insert " 18 " in its stead.

(*b*) *Paragraph* 4—second last sentence.

Delete—" in the remarks column of the ledger " and insert in its stead " on form A.S. 161 ".

(CNJA 26/51/3.)

(*Navy Order* 502 *of* 1960.)

RESTRICTED.

724.—Hull Letters—S.A.R. 6301 (Air Sprite).

Navy Order 1111 of 1959 is to be amended as follows—

Appendix—

Delete " Y256–Y260 Spare."
Insert " Y256 .. .. S.A.R. 6301 (Air Sprite) ".
Insert " Y257–Y260 Spare ".

(DSD 465/256/36.)

(*Navy Order* 1111 *of* 1959.)

UNCLASSIFIED.

725.—Form A.S. 1246Z—Trade Certificate for Sick Berth Staff—Introduction.

Form A.S. 1246Z—Trade Certificate for Sick Berth Staff has been introduced and is available on demand from the Superintending Naval and Air Stores Officer, Sydney.

2. Initially a copy of form A.S. 1246Z is to be enclosed in Certificates of Service of all members of the Sick Berth Branch. For this purpose the form is to be demanded on the basis of one copy for each Sick Berth rating borne plus 25 per cent. of that number for spares. Thereafter the form will be enclosed in the Certificates of Service of all new entry Sick Berth ratings at Flinders Naval Depot.

3. Preparation of the new form is to be in accordance with Q.R. & A.I. Appendix 10, Part 2.

4. Navy Order 1120 of 1958 is relevant.

(HPB 464/54/56.)

(*Navy Order* 1120 *of* 1958.)

UNCLASSIFIED.

726.—Revision and Abolition of Forms.

The following forms have been revised. When stocks of the present forms are exhausted, supply of the revised forms will be effected on demand—

A.S. 6 ..	Poster—Officers Authorized to make Payments or to receive Unpaid Money.
A.S. 9a ..	Miscellaneous Credit Voucher.
A.S. 54 ..	Allotment Stoppages.
A.S. 127 ..	Memorandum for and Certificate of Conversion.
A.S. 155Z ..	Record of Serial or Registered Numbers of Important Items.
A.S. 257 ..	Officers and Ratings Joining Sheet.
A.S. 440 ..	Passing Certificate.
A.S. 466 ..	Boiler Tube Burst Drill.
A.S. 1303Y ..	Recommendations for Courses.
A.S. 1303Z ..	Return of Sick Berth Ratings recommended for Specialist Qualification.
A.S. 1613 ..	Torpedo Performance Report.
A.S. 3070Z ..	Cathodic Protection Record.
A.A. 25 (Sheet 2)	Report on Aircraft Accident.
A.701A ..	Aircraft Component Log Card.
A.D. 237A/ A.S. 339A	Report of Completion of Defects, Alterations and Additions of H.M.A. Ships.
A.D. 326 ..	Accommodation in H.M.A. Ships.
A.V. 66 ..	Invoice for Victualling Stores.

2. The following form has been abolished—

A.S. 1121 .. Report of the Death of an Officer, Man or Boy.

(DNAS 464/51/3.)

UNCLASSIFIED.

727.—Revision and Abolition of Forms.

Form A.S. 1246L—Sick Berth Rating's History Sheet—Revision.

Form A.S. 536M—Qualification Sheet for the rating of Sick Berth Attendant—Abolition.

Form A.S. 1236—Application for and report of examination for the rating of Sick Berth Chief Petty Officer—Abolition.

Form A.S. 1237—Application for and result of the Part 1 (Professional) examination for the rating of Sick Berth Petty Officer, Leading Sick Berth Attendant, Sick Berth Attendant—Abolition.

Form A.S. 1246L—Sick Berth Rating's History Sheet has been revised and is available on demand from the Superintending Naval and Air Store Officer, Sydney. Stocks of existing forms A.S. 1246L are to be destroyed. Initially a copy of revised form A.S. 1246L is to be placed in the Certificate of Service of all Sick Berth ratings borne with the exception of Petty Officers passed professionally for Chief Petty Officer and Chief Petty Officers. For this purpose the form is to be demanded on the basis of one copy for each Sick Berth rating borne requiring the revised form plus 25 per cent. of that number for spares. Thereafter the form is to be placed in a rating's Certificate of Service on entry at H.M.A.S. CERBERUS.

2. Page 1 of forms A.S. 536M, A.S. 1236 and A.S. 1237 has been incorporated in the Sick Berth Rating's History Sheet. In view of this, forms A.S. 536M, A.S. 1236 and A.S. 1237 are hereby cancelled. Existing stocks of these forms are to be destroyed.

3. Provision has been made in the revised History Sheet to record details of Professional examinations for Higher rate. In future, on completion of the oral and practical section of the examination for Leading Sick Berth Attendant or above, the marks attained are to be entered in the appropriate section of the History Sheet which is to be signed by the Senior Examining Officer. The History Sheet is then to be forwarded with the worked papers of the written examination to the Medical Director-General who will record the written examination marks and note thereon whether the candidate has passed or failed the examination as a whole. The History Sheet will then be returned to the candidate's ship or establishment. Examination results are to be reported on form A.S. 161a.

4. A.B.R. 10 of 1958, Chapter 20 will be amended in due course.

(HPB 464/54/56.)

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

728.—Accounting for Items of Furniture and Movable Equipment Supplied by Department of Works.

A number of Reports of Stocktaking rendered by Establishments have included discrepancies in furniture and other items of movable equipment supplied by Department of Works with the explanation that the discrepancies are due to covering vouchers not being raised at the time of receipt of the articles.

2. The procedure for accounting for such items is detailed in the Naval Storekeeping Manual, A.B.R. 4, Article 3202, and action should be taken to ensure that these instructions are strictly complied with in all instances.

(DNAS 501/51/20.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

REGISTRAR

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O's 729-752/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
13th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

6788/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

729.—Reports of Occurrences Liable to Parliamentary or Press Comment.

Navy Order 433 of 1959 is to be amended as follows—

(*a*) *Renumber* paragraph 7 to read " 8 ".

(*b*) *Add* new paragraph 7—

" 7. Operational and administrative authorities and Captains should bear in mind, and do what they can to allay the natural anxiety of wives and other next-of-kin and the curiosity of the press. For example, if a ship is unexpectedly despatched or kept at sea, operative authorities, administrative authorities or Captains should, if the press or relatives enquire, give some simple explanation of what has happened and, when possible, the expected time of return to harbour ensuring that no security information is divulged. Similar action is to be taken in the event of accidents or incidents, in ships or shore establishments. Care should be taken in the event of death or injuries that names are not revealed until the next-of-kin has been informed."

(DCNS 165/1/16.)

(*Navy Order* 433 *of* 1959.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

730.—Absentees on Sailing—Accounting Procedure.

Navy Order 468 of 1960 which details the accounting procedure that is to be followed when ratings are checked to desertion, is to be amended as follows—

Paragraph 1 (*c*) (ii)—*Delete* " and Certificate of Service ".

(DNA 201/53/6.)

(*Navy Order* 468 *of* 1960.)

UNCLASSIFIED.

731.—Baggage—Storage of Clothing and Private Effects in R.A.N. Baggage Stores.

Baggage Stores are situated at the following establishments—

H.M.A.S. ALBATROSS.
H.M.A.S. CERBERUS.
H.M.A.S. HARMAN.
H.M.A.S. HUON.
H.M.A.S. KUTTABUL.
H.M.A.S. LEEUWIN.
H.M.A.S. LONSDALE.
H.M.A.S. MELVILLE.
H.M.A.S. MORETON.
H.M.A.S. PENGUIN.
H.M.A.S. TORRENS.
H.M.A.S. WATSON.

Eligibility.

2. Serving members of the R.A.N. are eligible to deposit their kits and subject to availability of space, private effects in the Baggage Stores of the foregoing establishments when their absence or movement is occasioned by or associated with their service.

Recording.

3. A register on form A.S. 2113Z—Baggage Store Card is to be maintained at each Baggage Store to record the following details of all baggage received or withdrawn, whether accompanied or unaccompanied.

(*a*) Date received;
(*b*) From whence received;
(*c*) Name of owner;
(*d*) Rank or rating;
(*e*) Official Number;
(*f*) Description of item and condition including whether locked or unlocked;
(*g*) The reason for stowage;
(*h*) Rack in which stowed;
(*i*) Date of withdrawal;
(*j*) Signature of person to whom delivery is made or despatch particulars if transmitted to a ship or establishment.

4. A note is to be made in the Baggage Register (and on consignment notes where applicable) as to whether the package is locked or unlocked at the time of withdrawal.

5. A separate register arranged alphabetically according to the surnames of individuals concerned is to be maintained to record particulars of kits or baggage enquired for by any ship or other shore establishment but of which there is no trace at the time of enquiry. Such record is to be kept under review in order that the enquiring ship or shore establishment may be informed immediately should the missing kit or baggage of the person concerned subsequently come to hand.

Responsibility for safe keeping.

6. Responsibility will be accepted only for those items and quantities of kit stored which are included in the compulsory or optional scales.

7. Items and quantities in excess of such scales and private effects, if accepted, will be stored at the depositor's risk and under no circumstances will compensation be paid for their loss or damage. Depositors are to be advised that it is in their own interest to insure such items.

8. A waiver of Commonwealth liability in the following form is to be signed by each person depositing personal effects or kit in excess of the authorized scales in baggage stores—

"I, Number Rank Name

having been authorized to store private property in an R.A.N. Baggage Store, understand that I do so at my own risk and that the Commonwealth is not responsible for any loss or damage of any description whether caused by negligence or otherwise and that under no circumstances will compensation be paid in respect thereof.

.....Witness .....Signature.

.....Date."

Note.—Initial supplies of gummed labels embodying the above waiver are being distributed to the establishments concerned without demand, any further requirements are to be demanded from the Suptg. Naval Store Officer, Sydney. After being signed by depositors they are to be attached to the form A.S. 2113Z.

Packing and Marking.

9. Only clean articles are to be accepted for storage. Items are to be securely packed, locked where practicable and clearly marked by the depositor. Depositors are to be advised that unless all items are locked, responsibility may not be accepted by the Department for any damage or loss by theft that may occur during the storage.

10. Baggage of personnel is not to be finally stowed in a baggage store at a shore establishment unless ownership is clearly indicated by outward markings on the containers or labels attached thereto and it is definitely known that the stowage of such baggage in the baggage store concerned has been previously authorized. In cases where particulars as to ownership are not clearly indicated on the outside of the containers or on a label attached thereto, they are to be opened up in the presence of a responsible officer and the contents examined for any information which might lead to ownership being determined. A list of the contents disclosed on opening up the container is to be prepared on the appropriate form A.S. 79 series and signed by the officer in whose presence it was opened who is also to certify as to the contents and reason for the examination. This list is to be replaced in the container which should then be securely fastened and a label attached thereto setting out the available information as to ownership.

Duration of Storage.

11. There is no restriction on the duration of storage. However, Commanding Officers are to review baggage held periodically to ensure that the facilities provided are not abused.

Return of Baggage Held.

12. With a view to reducing the quantity of baggage of personnel held in baggage stores to a minimum, a muster is to be carried out at each shore establishment at the end of each quarter and full particulars of those items held which cannot be identified as belonging to personnel attached to the establishment or to personnel known to be serving in ships or areas where they are not required to be in possession of full kits are to be forwarded to the Secretary, Department of the Navy, on 1st January, 1st April, 1st July, and 1st October in each year to permit of instructions being issued as to their disposal. Identified kits of absentees and deserters are also to be included in these returns *vide* I.P.I. 178/2 (2). Nil returns are required.

13. The above instructions supersede those contained in C.O.R. Article 407 paragraph 4.

(DV 906/51/1.)

UNCLASSIFIED.

732.—Gunnery History Sheets.

Insufficient use is being made of the Gunnery History Sheet to record the ability of Seaman ratings in their gunnery specialist qualification.

2. In addition to course results, a notation as to any particular aptitude or undesirable characteristic should be made to enable ships to station men to the best advantage.

3. Similarly, ships should pay more regard to indicating any special aptitude or failing when completing Gunnery History Sheets.

(DTSR 26/1/13.)

UNCLASSIFIED → Cancelled. C NO. 548/62

733.—Outfit Gratuities and Uniform Grants Payable to Royal Navy Officers Serving in H.M.A. Ships and Establishments.

Outfit gratuities and uniform grants generally payable to Royal Navy officers should not be credited to Royal Navy officers serving in H.M.A. ships and establishments until such payments have been approved by the Admiralty.

2. Applications for outfit gratuities should therefore be forwarded to Navy Office for onward transmission to the Admiralty. Authority to effect payment will be issued from Navy Office on receipt of Admiralty approval.

(DNA 930/53/16.)

UNCLASSIFIED.

734.—Ratings—Electrical Branch—Employment of R.A.F.R. Ratings at Belconnen and Coonawarra.

As the acute shortage of senior Electrical ratings in certain categories persists, it has been decided to continue to offer extended service in the R.A.F.R. for a period of one or two years at Belconnen and Coonawarra W/T Stations to selected ratings of the Electrical Branch whose engagements expire before 30th June, 1962, and who do not intend to re-engage. The main requirement is for Electrical Artificers and ratings of the Radio sub-specialization.

2. As a temporary measure approval has been given for special conditions relating to pay, allowances and removals to apply to those ratings volunteering for this extended service.

3. Approval has also been given for the same conditions to apply to ex Electrical ratings who are members of the R.A.F.R. and who volunteer for service at Belconnen and Coonawarra within twelve months of discharge from the R.A.N.

4. The conditions of service are as follows—

(*a*) Service will be for an initial period of 12 or 24 months with the possibility of an extension.

(*b*) In lieu of " on promotion rates " of pay, active pay for rating last held in the R.A.N. including incremental pay will apply. In addition Badge Pay in respect of Badges held on discharge from P.N.F. will be payable.

(*c*) Removals to Belconnen and Coonawarra will be approved as follows—

(i) Where service is continuous with P.N.F. service—removal from present place of duty or place last removed to as applicable.

(ii) Where a break in service is involved—removal from present place of residence.

(*d*) Final removals from Belconnen and Coonawarra which will in each case be subject to completion of 12 or 24 months service as appropriate will be approved as follows—

(i) Ratings under (*c*) (i)—as for normal P.N.F. final removal.

(ii) Ratings under (*c*) (ii)—to place from which removed or equivalent.

(*e*) It is expected that furnished married quarters will be available for all married ratings volunteering and removals will only be granted to personnel who occupy a married quarter.

5. Deferred pay or gratuity is not payable for R.A.F.R. service and personnel do not contribute to the D.F.R.B. Fund.

6. Serving personnel should be informed that the full amount of any deferred pay or gratuity entitlement paid on termination of P.N.F. service will be assessable income for taxation purposes. They may defer payment until final discharge when only 5 per cent. of the amount will be taxable.

7. They should also be informed that the above service is admissible for furlough purposes under the normal rules and that payment in lieu of furlough entitlement will only be made on final discharge.

8. Captains are to ensure that the contents of this order are made known to all Electrical ratings whose engagements expire prior to 1st July, 1962.

9. Authorities concerned should ensure that the requirement and special conditions of service are widely publicized in Reserve Depots and Recruiting Offices.

10. Ships and establishments are to report names of serving ratings who are volunteers for extended service as in paragraph 1 and should indicate periods for which ratings are prepared to serve.

(DMT 307/4/4.)

UNCLASSIFIED.

735.—Uniform—Naval Officers—Review of Dresses.

The table of Dresses for Naval Officers shown in the Uniform Regulations (Appendix to the Navy List) has been reviewed and the revised Table of Dresses shown in the appendix to this order is to be brought into use forthwith.

2. Pre-war forms of dress which are no longer worn but have hitherto been shown as being in abeyance (old dresses Nos. 1, 2, 2A and 9) have been omitted from the revised table. Other dresses have been re-numbered and/or re-named and minor amendments have been made to the descriptions and/or occasions for wear. Pending reprint of the Naval Uniform Regulations (Officers), references to the following dresses in the text thereof, in the Table of Orders, Decorations, &c. (page 61) and in the Joint Services Ceremonial Dress Table (page 68) should be amended as indicated—

Old Dress No. No.	*New Dress No.* No.
2B Modified Ball Dress ..	Amend to 2 Ball Dress.
3 Blue Ceremonial Dress ..	Amend to 1 Full Dress.
4 Blue Dress	Amend to 3 Blue Ceremonial Dress.
4A Blue Dress (alternative)	Amend to 4 Blue Dress.
5A Working Dress ..	Amend to 8 Working Dress.
5B Working Dress for Aircrew	
6 Mess Dress	Amend to 6 Mess Dress.
6A Modified Mess Dress ..	

Old Dress No. No.	*New Dress No.* No.
8 White Ceremonial Dress ..	Amend to 1W White Full Dress.
9A Modified White Dress ..	Amend to 3W White Ceremonial Dress.
9B Modified White Dress (alternative)	Amend to 4W White Dress.
10 White Undress	Amend to 5W White Undress.
11B Modified White Ball Dress ..	Amend to 2W White Ball Dress.
11 White Mess Dress	Amend to 6W White Mess Dress.
11A Modified White Mess Dress ..	
12 White Mess Undress	Amend to 7W White Mess Undress.
12A Tropical Mess Undress ..	Amend to 10W Tropical Mess Undress.
13 Tropical Dress	Amend to 9W Tropical Dress.
13A Tropical Working Dress ..	Amend to 8W Tropical Working Dress.
14 Action Dress	Amend to 11 Action Dress.

3. Attention is invited particularly to the provision made in the revised table for the wearing of—

(*a*) Gold-laced Trousers by Officers of Flag Rank with Dress No. 1 and by Officers of Captain's Rank and above with Dresses Nos. 2, 6, 2W and 6W.

(*b*) The Ceremonial Day Coat by Officers of Flag Rank with Dresses Nos. 1 and 3.

(*c*) Full Dress Sword Belts by Officers of Flag Rank with Dresses Nos. 1, 3, 1W and 3W (*see also* paragraph 5 below).

(*d*) Up to two Stars of Orders and one Neck Decoration with Dresses Nos. 4 and 4W.

4. The Dress for Officers of Flag Rank exchanging visits of ceremony with Foreign Officers and Officials will normally be No. 1, No. 3, No. 1W or No. 3W as indicated in the revised table. However, when the Foreign Officer or Official is expected to be less formally dressed, Officers of Flag Rank may, at their own discretion, wear Dress No. 4 or No. 4W.

5. Full Dress Sword Belts worn by Officers of Flag Rank (*see* para. 3 (c)) should, in future, be of the pattern worn pre-war by Commodores, Captains and Commanders. (Officers in possession of pre-war pattern belts for Officers of Flag Rank may continue to wear them). Arrangements are being made to obtain supplies of full dress sword belts of the pattern referred to above for loan issue to Officers of Flag Rank who do not possess or wish to provide a personal belt. A further Commonwealth Navy Order will be issued when these belts are available.

6. Sword Scabbards of the pattern worn pre-war by Officers of Flag Rank may continue to be worn by Officers of Flag Rank who possess them. Otherwise, Officers of Flag Rank should wear scabbards of the pattern normally worn by Officers below Flag Rank.

7. Separate instructions will be issued concerning any consequential adjustments to the Dress Regulations for W.R.A.N.S. Officers.

APPENDIX.

UNIFORM REGULATIONS FOR NAVAL OFFICERS.

Dresses and Occasions in which they are to be worn.

Dress.	*Description.*	*Occasions for Wear.*
No. 1—Full Dress	§Ceremonial Day Coat for Officers of Flag Rank; Undress Coat for other Officers *Gold-laced Trousers with Ceremonial Day Coat, otherwise— Plain Blue Trousers Cap *Sword *Full Dress Sword Belt with Ceremonial Day Coat, otherwise— *Undress Sword Belt Black Shoes or Boots Broad Riband Up to 4 Stars of Orders Up to 2 Neck Decorations Decorations and Medals on breast	(*a*) State occasions (*b*) When receiving Her Majesty the Queen or other Crowned Heads, or Heads of State unless specially ordered to the contrary (*c*) When receiving other Royalty, masthead flags being hoisted(†) (*d*) Ceremonies and entertainments when the Senior Officer present considers it desirable to do special honour to the occasion (*e*) Occasions of duty and ceremony when No. 3 Dress is not sufficient (†)*Note.*—On informal visits by members of the British or Foreign Royal Families (masthead flags not being hoisted) No. 5 (5W) Dress should be worn unless No. 4 (4W) Dress is more appropriate to the occasion
No. 2—Ball Dress	Mess Jacket (or for officers of Captain's rank and above at their option—Undress Tail Coat) White Waistcoat *Gold-laced Trousers for officers of Captain's rank and above, otherwise— Plain Blue Trousers Black Shoes Broad Riband Up to 4 Stars of Orders One Neck Decoration Miniature Badges, Decorations and Medals on lapel	Official or public balls, dinners and evening receptions of a formal nature
No. 3—Blue Ceremonial Dress	§Ceremonial Day Coat for Officers of Flag Rank; Undress Coat for other officers Plain Blue Trousers Cap *Sword *Full Dress Sword Belt with Ceremonial Day Coat, otherwise—	(*a*) Exchanging visits of ceremony with Governors-General, Governors, High Commissioners and Lieutenant Governors, with Resident Commissioners and Administrators entitled to a gun salute of 13 guns or more, with Officers of H.M. Foreign Service, and with

APPENDIX—*continued.*

Dress.	*Description.*	*Occasions for Wear.*
No. 3—*contd.*	*Undress Sword Belt Black Shoes or Boots Up to 2 Stars of Orders One Neck Decoration Decorations and Medals on breast	Foreign Functionaries of high rank. (No. 1 Dress should be worn when the Senior Officer present considers it desirable to do special honour) (*b*) Courts-Martial (*c*) Funerals (*d*) Inspections by Commanders-in-Chief or Senior Officers, when specially ordered (*e*) Occasions of duty and ceremony when No. 4 Dress is not sufficient
No. 4—Blue Dress	Undress Coat Plain Blue Trousers Cap *Sword *Undress Sword Belt Black Shoes or Boots Up to 2 Stars of Orders One Neck Decoration Decorations and Medals on Breast	(*a*) Inspections by Commanders-in-Chief or Senior Officers (*b*) Sunday Divisions and other occasions when it is appropriate for ratings to wear medals (*c*) By the Officer of the Guard when boarding foreign ships of war (*d*) Exchanging visits of ceremony with Foreign Functionaries, as an alternative to No. 3 Dress (*e*) Other occasions when ordered as an alternative to No. 3 Dress
No. 5—Undress ..	Undress Coat Morning Waistcoat (optional) Plain Blue Trousers Cap Black Boots or Shoes ‡Ribbons of Orders, Decorations and Medals ‖Star of Orders (One Star may be worn with this Dress)	Ordinary occasions of duty and ceremony afloat and on shore, and in the evening with wing collar and bow tie by Officers not in possession of Mess Undress *Note.*—*Swords will be worn in this Dress on the following occasions:— (i) Visits to Commander-in-Chief or Senior Officer (ii) By the Officer of the Guard when boarding ships other than foreign war ships (iii) When directed by the Senior Officer The Dress will be known on these occasions as "Undress with Sword," short title "No. 5 with Sword"

APPENDIX—*continued.*

Dress.	*Description.*	*Occasions to Wear.*
No. 6—Mess Dress	Mess Jacket (or for Officers of Captain's Rank and above, at their option—Undress Tail Coat) White Waistcoat *Gold-laced Trousers for Officers of Captain's Rank and above, otherwise— Plain Blue Trousers Black Shoes Miniature Badges, Decorations and Medals on lapel	(*a*) Dinner in harbour at the tables of Flag Officers, Commodores and Officers of corresponding rank, unless No. 2 Dress is ordered (*b*) Dinner when officers of Flag Rank or Military or Air Force Officers of corresponding rank (wearing uniform) are guests (*c*) Evening dances and entertainments on shore or afloat, unless No. 2 Dress is ordered
No. 7—Mess Undress	Mess Jacket (or for Officers of Captain's Rank and above, at their option—Undress Tail Coat) Evening Waistcoat (blue) Plain Blue Trousers Black Shoes Miniature Ribbons of Orders, Decorations and Medals	Ordinary evening wear
No. 8—Working Dress	Navy Serge Blouse Shoulder Straps Navy Serge Trousers Cap Black Boots or Black Shoes For Aircrew, Blouse and Trousers of Aircrew Pattern and Beret are to be worn	Optional dress for working in other than hot climates— (*a*) At sea and in aircraft at all times, and when on passage by air (*b*) In ships in harbour, Naval and Dockyard establishments, Naval Air Stations and Naval Air Sections during working hours or non-ceremonial occasions, but not by Duty Officers (*c*) By armed landing parties or during active operations, if khaki is not worn (*d*) When doing arduous or dirty work (e.g., coaling or re-fitting) when other clothing might be spoiled

APPENDIX—*continued.*

Dress.	*Description.*	*Occasions for Wear.*
No. 8—*contd.*		(*e*) Subject to the above general instructions detailed orders for the occasions on which Working Dress may be worn are to be issued by Commanders-in-Chief and Flag Officers, who have discretion to vary the general rules in exceptional circumstances.

Notes.—1. Working Dress is not to be worn on shore outside Naval Establishments except when travelling by rail or road directly to or from a flight or duty connected with aircraft; nor is it to be worn on long or short leave, or by Officers proceeding to or from their residences. Officers not required to provide Undress are, however, to be permitted to wear Working Dress on all occasions when blue uniform is ordered to be worn.

2. The light blue shirt as worn with No. 11 Dress may be worn with this dress instead of a white shirt and collar, at sea and as ordered by the Senior Officer. The blue shirt is to be worn with a tie.

No. 9 .. .. } Blank
No. 10 .. .. }

No. 11—Action Dress	Light Blue Shirt Shoulder Straps Dark Blue Trousers Black Boots or Black Shoes or Sandals Cap	At action stations, or ashore or afloat, on duty or leave, when ordered by the Senior Officer

In Hot Climates.

No. 1W—White Full Dress	White Tunic Shoulder Straps White Trousers Cap *Sword *Full Dress Sword Belt for Officers of Flag Rank, otherwise— *Undress Sword Belt White Shoes (Black Boots or Shoes may be worn on shore in bad weather)	(*a*) State occasions (*b*) When receiving Her Majesty the Queen or other Crowned Heads, or Heads of States unless specially ordered to the contrary (*c*) When receiving other Royalty, masthead flags being hoisted(†) (*d*) At ceremonies and entertainments when the Senior Officer present considers it desirable to do special honour to the occasion

APPENDIX—*continued.*

Dress.	*Description.*	*Occasions for Wear.*
No. 1W—*contd.*	Broad Riband Up to 4 Stars of Orders Up to 3 Neck Decorations Decorations and Medals on breast	(†)*Note.*—On informal visits by members of the British or Foreign Royal Families (masthead flags not being hoisted) No. 5 (5W) Dress should be worn unless No. 4 (4W) Dress is more appropriate to the occasion (*e*) Occasions of duty and ceremony when No. 3W Dress is not sufficient
No. 2W—White Ball Dress	White Mess Jacket Shoulder Straps White Waistcoat *Gold-laced trousers for Officers of Captain's Rank and above, otherwise— Plain Blue Trousers Black Shoes Broad Riband Up to 4 Stars of Orders One Neck Decoration Miniature Badges, Decorations and Medals on lapel	Official or public balls, dinners and evening receptions of a formal nature
No. 3W—White Ceremonial Dress	White Tunic Shoulder Straps White Trousers Cap *Sword *Full Dress Sword Belt for Officers of Flag Rank, otherwise— *Undress Sword Belt White Shoes (Black Boots or Shoes may be worn on shore in bad weather) Up to 2 Stars of Orders One Neck Decoration Decorations and Medals on breast	(*a*) Exchanging visits of ceremony with Governors-General, Governors, High Commissioners and Lieutenant-Governors, with Resident Commissioners and Administrators entitled to a gun salute of 13 guns or more; with Officers of Her Majesty's Foreign Service and with Foreign Functionaries of high rank. (No. 1W Dress should be worn when the Senior Officer present considers it desirable to do special honour) (*b*) Courts-Martial. (*c*) Funerals (*d*) Inspections by Commanders-in-Chief or Senior Officers, when specially ordered (*e*) For occasions of duty and ceremony when No. 4W Dress is not sufficient

APPENDIX—*continued.*

Dress.	*Description.*	*Occasion for Wear.*
No. 4W—White Dress	White Tunic Shoulder Straps White Trousers Cap *Sword *Undress Sword Belt White Shoes (Black Boots or Shoes may be worn on shore in bad weather) Up to 2 Stars of Orders One Neck Decoration Decorations and Medals on breast	(*a*) Inspections by Commanders-in-Chief or Senior Officers (*b*) Sunday Divisions and other occasions, when it is appropriate for ratings to wear medals (*c*) By the Officer of the Guard when boarding foreign ships of war (*d*) Exchanging visits of ceremony with Foreign Functionaries, as an alternative to No. 3W Dress (*e*) Other occasions when ordered as an alternative to No. 3W Dress
No. 5W—White Undress	†White Tunic Shoulder Straps White Trousers Cap White Shoes on board and weather permitting on shore: on shore in bad weather Black Boots or Shoes §Ribbons of Orders, Decorations and Medals ‖Star of Orders (One Star may be worn with this Dress)	Ordinary occasions of duty and ceremony afloat and on shore in hot climates *Note.* *Swords will be worn in this dress on the occasions laid down for Undress: the Dress will be known on these occasions as " White Undress with Sword ", short title " No. 5W with Sword "
No. 6W—White Mess Dress	White Mess Jacket Shoulder Straps White Waistcoat *Gold-laced Trousers for Officers of Captain's Rank and above, otherwise— Plain Blue Trousers Black Shoes Miniature Badges, Decorations and Medals on lapel	(*a*) Dinner in harbour at the tables of Flag Officers, Commodores and Officers of corresponding rank unless No. 2W Dress is ordered (*b*) Dinner when officers of Flag Rank or Military or Air Force Officers of corresponding rank (wearing uniform) are guests (*c*) Evening dances and entertainments on shore or afloat, unless No. 2W Dress is ordered

APPENDIX—*continued.*

Dress.	*Description.*	*Occasions for Wear.*
No. 7W—White Mess Undress	White Mess Jacket Shoulder Straps Evening Waistcoat (blue) or Black Kamarband Plain Blue Trousers Black Shoes Miniature Ribbons of Orders Decorations and Medals	Ordinary Evening Wear in hot climates
No. 8W—Tropical Working Dress	Light Blue Shirt Shoulder Straps Dark Blue Shorts Blue Stockings } or Sandals Black Shoes . . } Cap	As a working dress on tropical stations at the discretion of the Senior Officer
No. 9W—Tropical Dress	†White Tropical Shirt Shoulder Straps White Shorts White Stockings and White Shoes; or Blue Stockings and Black Shoes or Boots (for landing parties Black Boots); or Sandals. Black Shoes may be worn with White Stockings in bad weather Cap	On tropical stations on non-ceremonial occasions, at the discretion of the Senior Naval Officer
No. 10W—Tropical Mess Undress	White Tropical Shirt worn with neck open Shoulder Straps Plain Blue Trousers Black Kamarband Black Shoes	For informal evening wear in hot climates at the discretion of the Senior Officer

Notes.

§ The ceremonial day coat may be worn by officers of Flag Rank optionally from 1st January, 1960, but will be compulsory for officers of Flag Rank serving on 1st July, 1960.

* Swords, sword belts and gold-laced trousers are not supplied at public expense and are not therefore compulsory articles, but when possessed should invariably be worn as indicated.

† The White Bush Jacket may be worn by officers of Commander's rank and above as an alternative to the White Tunic or White Tropical Shirt when appropriate.

‡ *See* Note (i) to Joint Services Ceremonial Dress Table.

§ *See* Note (ii) to Joint Services Ceremonial Dress Table.

‖ Not to be worn at Court or Joint Service functions.

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

736.—Navigation Lights—NUC Lights—Control of, from Compass Platform.

(*A.F.O.* 1353/1960.)

A recent collision has re-emphasized the need for promptness in the display of Not Under Command lights by any ship which, especially in close company with others, is unable to manoeuvre. It has been decided accordingly to place the switch controlling these lights on the compass platform in a position immediately accessible to the Officer of the Watch, where this is not already the case.

2. In ships, where the 8-way navigation switch fuse panel is *not* immediately available to the O.O.W., an additional switch is to be inserted in the supplies between the switch fuse panel and the NUC light sockets, the " NUC Lights " switch on the switch fuse panel placed in the " ON " position, and then rendered inoperative by the removal of the switch handle.

3. The new switch is to be sited on the compass platform adjacent to the master switch for the navigation lights.

4. Captains of ships concerned are to include a defect item in the next Main Defect List worded as follows—

> " To fit an additional switch pattern 4089B in the supplies between the switch fuse panel and the NUC light sockets. Switch to be positioned on the compass platform adjacent to the marker switch for the navigation lights ".

(DEE 1211/51/155.)

737.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 1665/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing them are to be returned to the nearest N.A. Depot as early as practicable. Captains of H.M.A. ships who are unable to comply within three months from the date of this order are to report the fact specially to Navy Office for instructions.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 1085XA RNC 1089XA RNC 1098XA	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.);
RNC 947 .. RNC 948 ..	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 946 .. RNC 1094XA RNC 1221XB	SC 109	Q.F. 4.7-in.
RNC 1078XA	SC 122	Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 945 .. RNC 1220XB	SC 150	Impulse torpedo.

Propellant lot or sub-lot No.	*Propellant nature and size.*	*Nature of gun ammunition, &c., which may be involved.*
RNC 6244 .. RNC 6249 .. RNC 6266 .. RNC 6267 .. RNP 1507 .. RNP 1509 ..	ASN/T 190–054..	Q.F. 4.7-in.; Q.F. 4-in.
KA 912 .. KA 967 .. KA 969 .. KA 970 .. KA 971 .. KA 973 .. KA 974 .. KA 978 .. KA 981 .. KA 982 ..	FNHP 022 ..	Q.F. 40/60.
SPDN 5459.. SPDN 5465.. SPDN 5470.. SPDN 5471.. SPDB 5551.. SPDB 5552.. SPDB 5554.. SPDB 5555.. SPDB 5558..	FNHP 020 ..	Q.F. 40/60.

2. Attention is drawn to Article 211 of Naval Magazine and Explosive Regulations B.R. 862, and paragraphs 6, 7 and 9 of Article 53 of Naval Cordite Regulations, B.R. 862A.

3. R.A.N. Armament Depots—Separate instructions have been issued.

(DW 729/57/51.)

RESTRICTED.

738.—Magazine Logs—H.M.A. Ships.

A new system of recording information at present contained in magazine logs, having been approved by the Naval Board, will be brought into force at a later date by General Message. The date of introduction is expected to be late in 1960; it will however depend upon printing and distribution of new forms and an Australian amendment to B.R. 862 (N.M. & E.R.).

2. The new system is fully explained in the amendment to B.R. 862. A brief summary follows—

Form A.S. 285 (*i*)—*Magazine Log.*

(*a*) Now contains—

List of locked approaches.
List of adjacent compartments.
List of ready-use stowages.
Monthly certificate of compliances with orders.
Record of flood and spray tests.

Record of examination of explosives.
Turning over certificate.
Remarks and reports.

(*b*) The magazine log will cover a period of approximately two years. New logs are to be raised as necessary.

Form A.S. 285 (*ii*)—*Magazine Key Log.*

(*a*) A separate book containing all the information on armament keys that was previously contained in the magazine log.

(*b*) Pages are provided for the issue and return of keys on a daily basis. Space is also provided for recording—
Weekly signature of Commanding Officer.
Daily signature of OOD/OOW or officer carrying out evening rounds.
Keyboard sentries signature each watch.

(*c*) The present system of recording magazine, ready-use and No. 2 key compartment headings daily, has been reduced to one entry for the whole book.

(*d*) Normally the daily entry will be made on a half page. However a full page may be used if necessary.

(*e*) The log is designed for approximately two year's usage.

Form A.S. 285 (*iii*)—*Magazine Record.*

(*a*) A card kept in each compartment containing explosives.

(*b*) The record covers a period of one month. Space is provided for the daily recording of the following—
Temperature of stowage.
Inspection of compartments.
Flood and spray tests.

Form A.S. 285 (*iv*)—*Daily Record of Inspection.*

(*a*) A small tear-off pad kept by the OOD/OOW.

(*b*) Provision is made to record the following—
Gunnery, T.A.S. and Executive Officer's signatures that all inspections of all compartments containing explosives have been carried out in accordance with N.M. & E.R. and whether temperatures are normal or not.
Inspection of adjacent compartments and locked approaches.
Inspection on completion of routine work.
Rounds between 2200 and 0600.
Commanding Officer's signature.

(*c*) When the Daily Record is completed the OOD/OOW is to make an entry in the Deck Log along the following lines—
" Magazines, adjacent compartments and locked approaches inspections correct. Temperatures normal (or not) ".
The OOD/OOW will then hand the record to the Commanding Officer reporting any omissions.

3. The forms and records are not forwarded to the Administrative Authority or the Naval Board. When completed they are to remain in the ship for a period of two years after which they may be destroyed.

4. No regulations affecting the safe custody of explosives have been changed. The new system outlined above is entirely concerned with the recording of information regarding explosives. It is designed to simplify recording procedures and to provide a method of enforcing the proper observance of the regulations.

5. Logs are to be made available at Admiral's Inspection or at any other time that the administrative authority may desire.

6. This opportunity is taken to point out that the entire onus of ensuring that the regulations affecting explosives are observed and that the safety of the ship is in no way jeopardized, lies with the Commanding Officer of that ship.

(DW 700/54/2.)

UNCLASSIFIED.

739.—Asdics—Type 170 Series—Fitting of Capacitors Z.145513—(B.R. 1653—Mod. S.97).

(*A.F.O.* 1850/1960.)

Experience in fitting capacitors Z.145513 in accordance with B.R. 1653 (S.97) has shown that doubts may exist as to which is the positive capacitor terminal. Should the capacitor be connected with reverse polarity other components are endangered and the amplifier will not function effectively.

2. There are a variety of pattern Z.145513 capacitors of which the markings vary. In general the polarity of electrolytic capacitors is clearly marked positive and negative. In some cases the insulation on which the connecting tags are mounted is coloured, red for positive and black for negative. In other cases capacitors are made with the container blanked off at one end and a tag riveted to that end, this is always the negative terminal; the insulation on which the positive terminal is mounted may be any colour and is usually black.

3. Where any doubts still exist the polarity of a new electrolytic capacitor may always be checked using a Model 8 Avo, remembering that the positive of the internal Avo battery is connected to the Avo negative terminal. A good capacitor will present a higher resistance to current flowing from capacitor positive to negative than vice versa, i.e., using Avo on ohms × 100 range a reading of the order of 1 Megohm should be obtained when connected Avo positive capacitor negative, capacitor positive Avo negative. This reading will build up in approximately 30 seconds. When the connections to the capacitor are reversed a low reading, approximately 5 to 10 K ohm will be obtained. Care should be taken to discharge the capacitor before each test and after checking.

4. Ships and services which have carried out S.97 of B.R. 1653 are to examine the pattern Z.145513 capacitors to ensure that they are correctly connected (positive to cathode). Any capacitors which have been wrongly connected, i.e., with negative to cathode and have not yet had current passed through them are to be reconnected correctly. Those wrongly connected which have been switched on are to be considered defective and replaced.

5. Admiralty has advised that an amendment to B.R. 1653 will be issued. In the meanwhile the instructions therein under S.97 are to be amended in paragraphs 1 and 2 by changing " red " to read " positive ". A temporary reference to this order should also be clearly added.

(DEE 518/52/65.)

UNCLASSIFIED.

740.—Alteration and Addition Item—Aircraft Carrier H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for Aircraft Carrier, H.M.A.S. MELBOURNE.

Class List Item No. 130. *Classification* " *A* ".

Item: " To fit Radar type AI Mk. 17 in lieu of Radar type 964, in accordance with paragraph 14 of H.M.A.S. MELBOURNE'S memorandum No. 046/21 dated 16th November, 1959, and remove Radar type 964 together with power supply arrangements and ancillary equipment.

Note: Reduction in weight is to be reported.

References : (*a*) H.M.A.S. MELBOURNE'S memorandum 046/21 dated 16th November, 1959.

(*b*) F.O.C.A.F.'s memorandum A.F. 1821/37 (4463) dated 18th November, 1959.

(*c*) F.O.I.C.E.A.'s memorandum N55/7/34 dated 4th February, 1960.

(DCNTS 1213/52/135.)

UNCLASSIFIED.

741.—Alteration and Addition Item—A/S Frigates (Modified River).

The following alteration and addition item is approved for H.M.A.S. BARCOO.

Class List Item No. 603. *Classification* " *A* ".

Item: " To fit Lambda Radio Navigational and Survey Equipment ".

References: (*a*) Navy Office letter 1224/69/28 No. 8937, dated 11th April, 1960.

(*b*) F.O.I.C.E.A. memorandum N20/3/40 dated 20th May, 1960.

Remarks: As the item is applicable only to H.M.A.S. BARCOO it is to be recorded in the records of other ships of the Class with appropriate notation.

(DCNTS 1224/69/28.)

UNCLASSIFIED.

742.—Cold and Cool Rooms—Insulation Tests.

(*A.F.O.* 1854/1960.)

The insulation of the cold and cool rooms in H.M.A. ships must be within a certain standard of efficiency, to ensure that the refrigerating machinery can maintain rooms at the correct temperature under tropical conditions.

2. Insulation trials, in accordance with the instructions printed on the back of form D.741A, are to be carried out at intervals not exceeding four years on all cold and cool rooms, at the commencement of refits.

3. Similar trials are to be carried out for R.U. cool cupboards in excess of 150 cubic feet capacity.

4. Where adjacent refrigerated spaces are separated by a bulkhead of less thickness than the standard fitted for walls, &c., it is preferable that the trials be carried out simultaneously in the spaces, the temperatures in each being as far as practicable equal, in order that the efficiency of the spaces may be assessed as a block.

5. In cases where the refrigerated spaces (as a block), or R.U. cool cupboards are less than 150 cubic feet capacity the " Natural Cooling Test " only is to be carried out, in accordance with form D.741A.

6. On completion of these trials, the " K " value for the compartment(s) under test is to be calculated and the following action, dependent on the " K " value obtained, is to be taken by the authority responsible for the trials—

(*a*) When the " K " value is below 1.0 the insulation may be regarded as satisfactory and the test records forwarded to the Naval Board in the normal manner.

(*b*) Should the value of " K " fall between 1.0 and 1.2 the result should be reported by signal and the test records forwarded immediately to the Naval Board. The signal should state any difficulties which are anticipated as regards time, labour or materials, should re-insulation be requested.

(*c*) When the " K " value exceeds 1.2 the work of re-insulation is to be put in hand immediately without prior Naval Board approval and the effect, if any, on the completion date and the ship concerned reported immediately to the Naval Board.

7. The coefficient " K " referred to above is an average figure representing the number of B.Th.U's. passing through 1-in. thickness of insulation of the room under test, per hour, per square foot of internal surface area, per degree Fahrenheit difference of temperature across the insulation

$$\text{i.e. } K = \frac{H.t}{A.\theta}$$

where—

H = Constant electrical input in Watts/hour, measured during the 6 hours " Constant Heat Input Test ", multiplied by a constant 3.415 to convert to British Thermal Units per hour.

t = The overall mean thickness of insulation, in inches, through which the heat leakage is taking place.

A = The total internal surface area, in square feet, of the room under test through which the heat leakage is taking place.

θ = The following temperature differences in degrees Fahrenheit—

(*a*) Mean temperature difference between the inside and outside of the room, the temperature of the latter being obtained from surrounding space thermometers.

(*b*) Mean temperature difference between the inside and outside of the room, the temperature of the latter being obtained from the surrounding contact thermometers.

8. Where re-insulation is carried out, the room is to be retested on completion of the work, and records forwarded to the Naval Board.

9. From the records of the " Natural Cooling Test " (immediately following the " Constant Heat Input Test ") a coefficient " R " is obtained, being the mean drop in temperature in degrees Fahrenheit, per hour on a basis of 30° difference in temperature across the insulation during the 6 hours " Natural Cooling Test ".

$$\text{i.e. } R = \frac{T \times 30}{6 \times \theta}$$

where—

T = The mean drop in room temperature in ° F. over the 6 hours " Natural Cooling Test ".

θ = The mean temperature difference between inside and outside of the room during the " Natural Cooling Test ", the latter being obtained from surrounding space and contact thermometers.

The value of " R " should not exceed 2.0.

10. The insulation trials and any re-insulation found necessary are to be carried out by the refitting Authority. An item to cover these trials is to be inserted in the Defect List.

(DNC 1211/51/163.)

UNCLASSIFIED.

743.—H.M.A. Ships—Removal of 20-inch Search Lights.

Navy Order 38 of 1960 is to be amended as follows—

Delete—" Aircraft Carriers H.M.A.S. MELBOURNE
H.M.A.S. SYDNEY
Class List Item No. 106—Classification " A "."

Add—" *Aircraft Carrier* H.M.A.S. MELBOURNE.
Class List Item No. 106—Classification " A ".
Aircraft Carrier H.M.A.S. SYDNEY
Class List Item No. 309—Classification " A "."

(DCNTS 1211/251/27.)

(*Navy Order* 38 *of* 1960.)

UNCLASSIFIED.

744.—Mustering of Rating's Tool Kits.

Recent reports of losses from ratings' tool kits indicate that the regular musters prescribed by A.B.R. 4, Article 2710 are not being carried out in all cases.

2. These instructions require that tool kits be mustered by divisional officers every six months and on each occasion of a rating joining a ship or establishment Arrangements are to be made to ensure that such musters are properly carried out in future.

(DNAS 506/83/20.)

UNCLASSIFIED.

745.—Naval Stores (Air)—Ardrox Developer 996, Reference No. 4A/2319—Precautions During Stowage.

(*A.F.O.* 1738/60.)

To ensure disposal of the chalk content of Developer Ardrox 996, Ref. 4A/2319, which is used for crack detection, all containers held in store should be inverted at regular weekly intervals.

2. A.B.R. 4 (Naval Storekeeping Manual) and B.R. 1692 (The Storehouse Manual) will be amended in due course.

(DNAS 603/54/45.)

UNCLASSIFIED.

746.—Naval Stores (General)—Binoculars, Telescopes and Microscopes—Transfer from Class F, Group 1C.

(*A.F.O.* 1742/1960.)

Binoculars, telescopes and microscopes which have hitherto been dealt with under class F, group 1C will in future be dealt with under class F, group 3 (N.A.T.O. Group 6650). The patterns concerned are listed in the appendix.

2. Resistances, pattern F1C/25509 for microscopes, pattern F3/25507 will be dealt with under class F, group 16 (N.A.T.O. Group 5905). Dessicators, pattern F1C/12128 and dessicator unions, pattern F1C/12119 will be dealt with under class B, group 8B. The pattern numbers will remain unchanged.

3. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*a*) of A.B.R. 4—Naval Storekeeping Manual.

APPENDIX.

BINOCULARS, ETC., TO BE DEALT WITH UNDER CLASS F, GROUP 3 (N.A.T.O. SUPPLY CLASSIFICATION GROUP 6650).

Pattern No.	*Description.*
1900A	Binoculars, Barr & Stroud, type C.F.41 fitted with internal light filters, complete with leather case.
1900C	Binoculars, type C.F. 30, for submarine use; similar to pattern 1900A, and fitted with rubber protecting jacket, complete with leather case.
1900D	Binoculars, type C.F.30, for submarine use; similar to pattern 1900C, but fitted with a vertical hairline graticule in right eyepiece, complete with leather case.
12464	Binoculars, 5 × 40, fixed focus, for air observers; Air Ministry Ref. 6E/383.
333A	Telescopes, long distance, modified type, with 50° apparent field.
373A	Telescopes, small, later type (with modified focusing device).
373B	Telescopes, small, new light type (with modified focusing device).
373C	Telescopes, small (Canadian version of pattern 373B).
12100	Telescopes, long distance, large.
1132	Telescopes, for signalling projectors.
25507	Microscope, research monocular objective and dark ground illumination, for medical purposes, complete with accessories, and stowage box.

(DNAS 518/56/27.)

UNCLASSIFIED.

747.—Naval Stores (General) (Class B, Group 11, Part E)—Reamers, Expanding, Hand, H.S.S.—Introduction of New Patterns.

(*A.F.O.* 668/1960.)

The range of reamers shown in B.R. 810 the Rate Book and Authorized List of Naval Stores, has been amended as follows—

To be marked " O "—

Pattern No.	*Description.*
	Reamer, expanding, hand, H.S.S.—
9406	$\frac{13}{32}$-in.–$\frac{15}{32}$-in.
9412	$\frac{9}{16}$-in.–$\frac{5}{8}$-in.
9414	$\frac{5}{8}$-in.–$\frac{11}{16}$-in.
9416	$\frac{21}{32}$-in.–$\frac{3}{4}$-in.
9418	$\frac{3}{4}$-in.–$\frac{27}{32}$-in.
9420	$\frac{13}{16}$-in.–$\frac{7}{8}$-in.
9422	$\frac{27}{32}$-in.–$\frac{31}{32}$-in.
9424	$\frac{31}{32}$-in.–$1\frac{1}{8}$-in.

To be introduced in lieu—

Pattern No.	*Description.*	*Ships' Accounting Classification.*
	Reamer, expanding, hand, H.S.S.—	
16392	$\frac{13}{32}$-in.–$\frac{7}{16}$-in.	Consumable.
16393	$\frac{7}{16}$-in.–$\frac{19}{32}$-in.	Consumable.
16394	$\frac{19}{32}$-in.–$\frac{21}{32}$-in.	Consumable.
16395	$\frac{21}{32}$-in.–$\frac{23}{32}$-in.	Consumable.
16396	$\frac{23}{32}$-in.–$\frac{25}{32}$-in.	Consumable.
16397	$\frac{25}{32}$-in.–$\frac{27}{32}$-in.	Consumable.
16398	$\frac{27}{32}$-in.–$\frac{15}{16}$-in.	Consumable.
16399	$\frac{15}{16}$-in.–$1\frac{1}{16}$-in.	Consumable.
16400	$1\frac{1}{16}$-in.–$1\frac{3}{16}$-in.	Consumable.

2. Stocks of non-pattern items already held conforming to the sizes of the new items are to be accounted for in future under the appropriate pattern number. Naval Store Ledgers in H.M.A. ships and commissioned establishments are to be adjusted as indicated in Naval Storekeeping Manual A.B.R. 4, Article 1812 (G).

3. Admiralty have advised that the relevant publications will be amended.

(DNAS 506/71/61.)

UNCLASSIFIED.

748.—Naval Stores (General) (Class E, Group 5)—Diving Equipment—Compressed Air Breathing Apparatus (CABA) and Surface Supply Demand Breathing Apparatus—(SSBA)—Revised Allowances.

Allowances of Compressed Air Breathing Apparatus (CABA) and Surface Supply Demand Breathing Apparatus (SSBA) adopted in the R.A.N. for all forms of diving except clearance diving and some special operations, have been revised to include additional ships and are detailed in Appendix A to this order.

2. First outfit quantities of items required for the maintenance of the above equipment are as detailed in Appendix B. Supply of these items will be effected on the basis of one set of spares for every five or less units allowed *vide* Appendix A. These spares should be accounted for as separate items and demands for replacement, &c., should indicate the major unit for which the items are required.

3. Demands to complete to these revised allowances of major units and spares should be forwarded to the appropriate (S)NSO.

4. Allowances of underwater swimming equipment for use with surface supply and compressed air breathing apparatus are as indicated in column 4 of Appendix C to this order. First outfit quantities of spares for underwater swimming equipment are detailed in column 5 of Appendix C. Demands for items required to complete to the scale of allowances for underwater swimming equipment should be lodged with the appropriate (Suptg.) Naval or Victualling Store Officer.

5. Sea store establishments held by H.M.A. ships and services should be appropriately endorsed to indicate that allowances shown in the appendixes to this order supersede Admiralty allowances of diving equipment.

APPENDIX A.

ALLOWANCES OF COMPRESSED AIR BREATHING APPARATUS, SURFACE SUPPLY DEMAND BREATHING APPARATUS AND ASSOCIATED SPARE PARTS OUTFITS.

H.M.A. Ships or Services.	*Diving Compressor "60" Complete.*	*Diving Compressor "120" Complete.*	*Surface Supply Breathing Apparatus Complete with 2 No. 60-ft. Hoses and Stowage Box.*	*Surface Supply Breathing Apparatus (Mod. 1) Complete with 4 No. 60-ft. Hoses and Stowage Box.*	*Pressure Hose Reel for SSBA Complete with Emergency Cylinders.*	*Self-contained Compressed Air Breathing Apparatus (CABA) Complete with Stowage Box.*
Carriers	2	2	4	4	4	3
Destroyers (All Classes)	1	—	2	—	1	2
Frigates (All Classes)	1	—	2	—	1	2
H.M.A.S. SWAN	1	—	2	—	1	2
H.M.A.S. WARREGO	1	—	2	—	1	2
H.M.A.S. KIMBLA	1	—	2	—	1	1
H.M.A.S. PALUMA	1	—	2	—	1	2
H.M.A.S. WATSON	2	2	4	4	4	10
M.C.D.T.	1	—	—	2	1	2
M.C.D.U.	1	—	—	2	1	2
H.M.A.S. TARANGAU	1	1	2	2	2	3
H.M.A.S. LEEUWIN	1	—	2	—	1	2
G.M.W.D.	1	—	2	—	1	2
H.M.A.S. CERBERUS	1	—	2	—	1	2
H.M.A.S. ALBATROSS	1	—	2	—	1	2
H.M.A.S. LONSDALE. (For R.A.N.R. Diving Training) ..	1	—	2	—	1	2

APPENDIX A—*continued.*

2. Surface Supply Demand Breathing Apparatus Mod. 1 allowed for use with Diving Compressor " 120 " is identical with Surface Supply Demand Breathing Apparatus allowed for use with Diving Compressor " 60 ", except that the Mod. 1 SSBA will be supplied with two extra 60-ft. lengths of hose. Accordingly, demands for replacement of SSBA required for use with Compressor " 120 " should be clearly endorsed " Mod. 1 " to ensure that correct number of hoses are supplied.

3. Stowage boxes supplied with SSBA provide for stowage of complete unit, 2 No. 60-ft. air hoses plus 1 No. swimsuit, 1 pr. swim fins, 2 No. lead weight belts and 4 No. nose clips.

4. Stowage boxes supplied with CABA provide for stowage of complete unit plus 1 No. swimsuit, 1 pr. swim fins and 1 No. face mask.

APPENDIX B.

	Spares for Diving Compressor " 60 "—				
2	Starter cords	SC–T2	No.	2	C
3	Spark plugs	SP–T2	No.	2	C
4/13	Check valve plates	CVP–C	No.	2	C
5	Vee belts	CT–B	No.	2	C
6	Air filter element	AF–H	No.	1	C
7	Pressure gauge..	PG–MH	No.	1	P
8	Box stowage	—	No.	1	P
	Spares for Diving Compressor " 120 "—				
10	Starter gears small	SG–N12–S	No.	1	C
11	Starter gears large	SG–N12–L	No.	1	C
12	Spark plugs	SP–N12	No.	1	C
4/13	Check valve plates	CVP–C	No.	4	C
14	Vee belts	A.38	No.	4	C
15	Air filter element	P.16	No.	1	C
16	Pressure gauge	PG–N12	No.	1	P
17	Filter connection hose	FH–N12	No.	1	C
18	Box stowage	—	No.	1	P
	Spares for Surface Supply Demand Breathing Apparatus—				
21	Mask complete with demand valve	H4–M1	No.	1	P
23	Mask glass	H4–M1–G	No.	3	C
24/37	Couplings	H4–200	No.	4	P
25	Hose couplings	H4–P135	No.	4	C
20/26	Air hose	H4–SL	No.	2	C
27/44	Diaphragms	D16–5	No.	4	C
28/45	Valve seats	D11	No.	4	C
29/46	Valve springs	D12	No.	4	C
30/47	Clamp rings	CA–BD4	No.	4	C
31/48	Rubber exhausts	D20	No.	2	C
32/50	Mouthpiece with hose	D17	No.	2	C
33	Box stowage	—	No.	1	P
	Spares for Pressurized Hose Reel for SSBA—				
35/54	Reducing valve	CA–BR	No.	1	P
36/61	Pressure gauge..	CC–2A	No.	1	P
24/37	Couplings snap-on	H4–200	No.	1	P
38	Air hose to reel	PR–SL	No.	1	C
39	Ring pressure seals	OR–PR	No.	6	C
40	Box stowage	—	No.	1	P

APPENDIX B—*continued.*

Spares for Self-contained Breathing Apparatus (CABA)—

43	Demand valve with connecting hose	CA2–D	No.	1	P
27/44	Diaphragms	D16–5	No.	2	C
28/45	Valve seats	D11	No.	2	C
29/46	Valve springs	D12	No.	2	C
30/47	Clamp rings	CA–BD4	No.	2	C
31/48	Rubber exhausts	D20	No.	2	C
49	Safety straps	D18	No.	2	C
32/50	Mouthpiece	D17	No.	1	C
51	Neck bands	D19	No.	2	C
52	Nylon gasket washer	B–15A	No.	2	C
53	Nylon gasket washer	B–15B	No.	2	C
35/54	Reducing valve	CA–BR	No.	1	P
55	HP seat housing with nylon seat ..	CA–BR3	No.	1	P
56	HP seat housing gasket washer ..	CA–BR4	No.	2	C
57	Coupling spindle nose seal ..	CA–BR13	No.	1	C
58	Coupling spindle filter gauge ..	CA–BR14	No.	2	C
59	Coupling spindle gasket washer ..	CA–BR15	No.	2	C
60	Tube lock nut sealing gland ..	CA–BR24	No.	2	C
36/61	Pressure gauge..	CC–2A	No.	1	P
62	Box stowage	—	No.	1	P

APPENDIX C.

UNDERWATER SWIMSUIT AND ANCILLARY EQUIPMENT—ALLOWANCES FOR USE WITH CABA AND SSBA.

Pattern.	*Description.*	*Den.*	*Allowances per Unit.*	*Spares per Unit.*	*Remarks.*
	Permanent Items.				
3380 or like	Swim suit, underwater, Mk. 1 ..	No.	1	—	
3382	Hood, type " C "	"	1	—	
3417	Ring, neck, non-magnetic ..	"	1	—	
3418	Band locking, screw type ..	"	1	1	
3386	Fins, medium	"	2	2	
—	Face mask, black, service model	"	1	—	
*	Undersuit, one piece	—	2	—	Sizes are required
				—	
*	Shoes, gym. loan	Prs.	2	—	
*	Socks, divers	Prs.	2	—	
3419	Boots, type 3 with 5-lb. lead sole and knife pocket in left leg	Pr.	1	—	
—	Weight belts, quick-release ..	No.	1	—	
—	Weights, lead	No.	10	—	
110	Knife, improved	No.	1	—	

APPENDIX C—*continued.*

Pattern.	*Description.*	*Den.*	*Allowances per Unit.*	*Spares per Unit.*	*Remarks.*
	Permanent Items—continued.				
111	Belts, leather for knife ..	No.	1	—	
112	Case, brass for knife	No.	1	—	
3393	Lead, 5-lb. for boots	Pr.	—	1	
3398	Outfits, repair for—				
	U.W.	No.	1	—	Quantity per ship or establishment
	S.S.				
3813	Mandril for testing	No.	1	—	
	Consumable Items.				
25A	Rings, wrist..	No.	2	2	
3595	Strap, waist, complete with buckle	No.	1	—	
3596	Neck, rubber	No.	—	1	
3597	Cuffs	No.	—	1	
3394	Valve, tongue	No.	—	1	
1466	Clips, nose	No.	2	2	

* To be demanded from (Suptg.) Victualling Store Officer. All other items to be demanded from (Suptg.) Naval and Air Store Officer.

(DNAS 512/74/12.)

UNCLASSIFIED.

749.—Naval Stores (General) (Class E, Group 6)—Activated Alumina for use as Drying Agent for GRUS Mark 3 and GS Type 3 in FPS5 and MRS3 Fire Control Systems.

(*A.F.O.* 1740/1960.)

It has been reported that Silica Gel, pattern E6/3563, is being used as drying agent for air supplies to the GS type 3 in MRS3 Fire Control Systems. This material is unsatisfactory in this application because the crystals are too small.

2. The correct desiccant for these installations is Activated Alumina, pattern E6/7397, packed in 1-lb. tins, or pattern E6/5358, which is supplied in 2-lb. bags overpacked in 56-lb. air-tight drums and which is a hard, white, opaque, chemically inert material of tremendous porosity. For the purpose of absorber in a dryer cylinder, Activated Alumina has many advantages over Silica Gel: where the air to be dried is of low humidity initially (less than 30 per cent. relative humidity) Activated Alumina is the better absorbent although above this humidity, Silica Gel admittedly has a marked superiority. Silica Gel, however, is far more liable to disintegrate during use. (The proportions of breakdown to smaller particles are Activated Alumina 0.5 per cent.; Silica Gel 6 per cent.)

3. Re-activation of saturated desiccant is by controlled application of heat to evaporate the water, using a flow of air to remove it. It is possible to heat an absorbent to too high a temperature and destroy its absorbing properties (for Activated Alumina, this temperature is approximately 1,300° F. and for Silica Gel, 700° F.). Otherwise it is generally true that the higher the temperature of re-activation, the greater the drying efficiency obtainable. The re-activation temperature normally used is 400° F.

4. Any Silica Gel being used in the equipment mentioned in paragraph 1 should be replaced by Activated Alumina at the first opportunity.

5. First outfit quantities of Activated Alumina will be 50-lb. of either pattern E.6/7397 or pattern E6/5358, as available, to H.M.A. ships so equipped.

(DNAS 512/76/26.)

UNCLASSIFIED.

750.—Naval Stores (General) (Class E, Group 11)—Introduction of P.V.C. Gloves.

Trials have demonstrated that for some types of work, in wet and greasy conditions, a P.V.C. type of glove is superior to the current Admiralty patterns of leather gloves and lasts longer.

2. The following P.V.C. gloves have been introduced into the Rate Book and Authorized List of Naval Stores (B.R. 810) to partially replace pattern 101 Leather Gloves—

Pattern.	*Description.*	*Denom.*
7889	Glove, P.V.C. coated fabric 10½-in., smooth finish, size 9½ ..	Pair.
—	Glove, P.V.C. coated fabric 10½-in., smooth finish, size 9½, with ventilated back	Pair.

3. Until future expenditure indicates the proportions of P.V.C. gloves required in lieu of pattern 101 leather gloves, initial demands for P.V.C. gloves should provide for 20 per cent. of the normal requirement of leather gloves and should indicate whether gloves with or without ventilated backs are required.

(DNAS 514/56/23.)

UNCLASSIFIED.

751.—Naval Stores—General—Demands.

Following a recent case of mis-appropriation of Naval Stores, attention is to be paid in future to ensure that the certificate on the reverse of form A.S. 134/4 is signed only as a result of a proper check and comparison of forms A.S. 134/3 and 4 and that receipted Number 4 copies of forms A.S. 134 are returned promptly to the (Suptg.) Naval Store Officer concerned. (A.B.R. 4, Article 0705.)

2. As a further step towards reducing the possibility of stores being obtained fraudulently, through mis-representation, closer attention is to be paid in future to the curtailment of the presentation of casual demands, as far as practicable (A.B.R. 4, Article 0403.).

(DNAS 400/51/67.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

752.—Supply of Quick-frozen Vegetables—Prices.

The prices quoted for quick-frozen vegetables in the fixed issuing price list for provisions apply to packs of 3-lb. or over.

2. Packs under 3-lb. are to be charged for in accordance with C.O.R. Article 420, clause 2.

(DV 903/51/28.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
14th September, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

753.—Leave.

This order consolidates instructions regarding leave entitlements and the granting of leave. It has been divided into sections as follows—

I.—General.
II.—Short Leave.
III.—Long Leave, Sick Leave, &c.
IV.—Royal Navy Officers and Ratings.

SECTION I.—GENERAL.

1. *Attendance on Board.*—Every officer subordinate to the Captain, and every rating, is to be on board his ship, in his establishment or otherwise at his place of duty at all times, unless approved by superior authority to be absent on other duty or on leave. No officer is to remain out of his ship or establishment for the night without the previous sanction of the Captain.

2. When the Captain of a seagoing ship is absent from his ship for the night or has ceased to exercise Command by reason of sickness or for other cause, the Executive Officer or an officer entitled to exercise sea command (*see* Q.R. & A.I., articles 0131, sub-clause (*c*) and 0134 clause 1 (*a*)) who is either senior to the Executive Officer or of the same rank (other than an officer appointed additional for staff or special duties) is to sleep on board. This instruction may be relaxed only by permission of the senior officer present.

3. *Movements on Leave.*—Every officer and rating on leave is to keep his Captain informed of his movements in case the exigencies of the service should require his recall. On reporting address and movements when on leave in a foreign country, *see* Section III., paragraph 9.

4. No agency address such as that of a bank can be accepted as an address of an officer or rating for more than 48 hours. Before the expiration of this period the actual address at which the officer or rating can be found in person is to be reported.

5. Officers and ratings are to arrange that any official communications will be forwarded to them when they are absent from their reported addresses.

6. *Involuntary Absence.*—An officer or rating who for any reason beyond his control is unable to return to his place of duty at the expiration of his leave is to report to his Captain by telegram the circumstances and the expected date of his return.

7. If it should be proved to the satisfaction of the Captain that the absence of an officer or rating without leave was not due to misconduct or fault of his own, but to circumstances which made it impossible for him to return at the appointed time, he is not to be considered as a defaulter or subject to disciplinary action for his involun tary absence.

8. *Leave Passes.*—On the Australia Station and in British Commonwealth countries, leave passes (forms A.S. 248) are to be issued to ratings to whom leave exceeding 48 hours is granted. If considered desirable, passes may also be issued to ratings to whom leave of 48 hours or less is granted.

9. To guard against mistakes, the instructions written on the passes should be read out to the ratings before they go on leave.

10. Passes are to be given up on the expiration of the leave for which they were granted.

11. Completed forms A.S. 248 are to be destroyed by ships, in accordance with instructions for the disposal of confidential matter, as soon as ships are satisfied they are no longer required.

12. On ships paying off, uncompleted forms A.S. 248 with 100 or more leave passes remaining are to be returned to the Superintending Naval Store Officer, Sydney, for re-issue. Uncompleted books with less than 100 leave forms remaining are to be destroyed.

SECTION II.—SHORT LEAVE.

Short Leave.—Short leave is the authorized absence of an officer or rating from his ship or establishment or place of duty for a period of less than 72 hours. It may be granted by the Captain. It does not count against the annual allowance of leave.

2. To ensure uniformity in the short leave granted to each ship's company, when two or more ships are in company the Senior Officer present is to inform the Captains of the ships concerned of the times during which short leave may be granted.

3. Short leave is to be arranged on the principle of giving officers and ratings the maximum amount of leave which can be granted without affecting the efficiency of the ship or establishment.

4. Leave may be arranged by sections, watches and parts of watches, or by retaining a duty party. Sufficient senior ratings are to be retained for the safety or efficient supervision of junior ratings not granted leave.

5. In ships lying at anchor, sufficient men are always to be retained on board to ensure the efficiency and safety of the ship.

6. Facilities are to be afforded libertymen to return on board at night, but staying overnight with relatives and friends should be encouraged.

7. The Captain may restrict the night leave of Ordinary Seamen (and equivalent ratings of other branches) under the age of twenty by requiring them to be on board by 2300, should special circumstances make it undesirable to give them the same privileges as older ratings. Ratings under 17½ years of age are not to be allowed night leave beyond 2300 except in special cases. The Captain may require such ratings to be on board earlier than 2300.

8. *Short Leave Abroad.*—Ships abroad are to grant short leave in accordance with the local station orders or as the climate or local circumstances may make expedient. Leave is not to be given to large bodies of men on foreign soil without the permission of the local authorities.

9. *Ratings placed in the Report.*—The leave of ratings is not to be stopped when they are placed in the report, unless they are placed there for any of the following offences—

(*a*) Mutiny or highly insubordinate conduct.
(*b*) Desertion or deserting post.
(*c*) Sleeping on watch.
(*d*) Indecent acts of an immoral character.
(*e*) Theft or fraud (including major offences against the customs regulations when fraud is involved).
(*f*) Smuggling liquor into ship.

(*g*) Quitting ship, boat or working party, without leave.
(*h*) Drunkenness on duty.
(*i*) Violent assault.
(*j*) Aggravated or repeated leave-breaking.
(*k*) Flagrant contravention of the censorship regulations.
(*l*) Flagrant contravention of gasoline, ammunition, or damage control regulations, which endanger life, the ship, aircraft or establishment.

10. *Ratings who have never Broken Leave or Broken Out of Ship.*—In every sea-going ship a list is to be kept of ratings who have neither broken their leave nor broken out since they joined the ship.

11. On special occasions, when any cases of leave breaking would cause great inconvenience, leave may be restricted to those ratings whose names appear on the list.

12. *Short Leave outside Port Limits.*—An officer or rating is not to be absent from the port at which his ship is lying unless he has his Captain's permission. Captains of H.M.A. ships desiring to be absent are to seek the approval of their Operational Authority; if that authority is not readily available, e.g., not being on the same station, approval is to be sought from the Senior Officer present.

SECTION III.—LONG LEAVE, SICK LEAVE, ETC.

Definitions.—" Month " means the period from a date in any calendar month to the preceding date in the next month. In a total of odd periods of days, 30 days is to be regarded as one month. " Year " means the period beginning on 1st February and ending on the following 31st January.

2. *Granting of and Recall from Leave.*—Leave is to be granted or withheld as the circumstances of the service may render expedient, but subject to this condition the Captain is to make such arrangements as will allow each officer and rating under his command to receive leave in accordance with this order. *See also* paragraph 66 regarding leave before discharge. The occasions on which leave is normally to be taken are laid down in paragraphs 16 to 30 (home service leave) and paragraphs 31 to 42 (foreign service leave). On deferment of leave, *see* paragraphs 60 to 65.

3. Leave to ratings may be granted by the Captain; on the granting of leave to officers, *see* paragraphs 11 to 15.

4. An officer or rating is not to be recalled from leave unless absolutely necessary. On the issue of warrants for railway tickets when recalled from leave, *see* instruction 203 of Interim Pay Instructions; and on the report to be made when the full amount of leave approved is not taken, *see* paragraph 14.

5. Ratings who have been released from a sentence of detention for desertion are not to be granted long leave within three months of release from detention.

6. *Extension of Leave.*—If circumstances should arise when an officer or rating is on leave which make it essential, in his opinion, for him to be granted an extension of leave he should—

(*a*) if in the State in which his ship or establishment is situated, apply to his Captain; or
(*b*) if in a State other than that in which his ship or establishment is situated, apply to the nearest Naval Officer-in-Charge.

7. He should apply early enough to receive a reply enabling him to return to his place of duty at the time his leave will expire if the extension is not granted. When applying, he is to state his reasons fully and the number of days leave required. On extension of leave on compassionate grounds, *see* Navy Order 229 of 1959.

8. *Going Abroad on Leave.*—An officer or rating is not to leave Australia without first obtaining the permission of the authority granting his leave. All cases where there is any doubt as to the desirability of granting permission are to be referred to the Naval Board for decision. On spending foreign service leave abroad, *see* paragraph 41.

9. When permission to proceed abroad is granted, the officer or rating is to be informed that—

(*a*) He is to report his intended movements and addresses to his Captain and is to keep the Australian naval authority in the country visited informed of his address and movements or, if there is no naval authority, the Australian Government Consular or other representative.
(*b*) He must wear plain clothes when in the foreign country, subject to any special instructions that may have been issued.
(*c*) He should have a passport endorsed for travel to the country or countries to be visited and bearing any visas required. Visas should be obtained before leaving Australia.
(*d*) He must make his own arrangements for passports, visas, military permits, foreign currency and transport.

10. *Leave Conditions for Certain Categories of Officers and Ratings.*—The following officers and ratings are granted leave as shown—

Reserve officers	*See* the relevant Reserve Regulations and Instructions.
W.R.A.N.S. officers and ratings ..	*See* W.R.A.N.S. Instructions.
Cadet Midshipmen—	
(*a*) Under training at the R.A.N. College	*See* R.A.N. College Regulations and Instructions.
(*b*) On passing out of the R.A.N. College	As determined by the Naval Board.
Artificer Apprentices	*See* A.B.R. 91.
Junior Recruits	*See* A.B.R. 697.
Junior Musicians	42 days a year in two periods. Travelling leave is additional on each occasion subject to the conditions set down in paragraphs 45 to 49 below.

11. *Applications for Leave—Officers.*—All applications for long leave are to be made on forms A.S. 539.

12. Long leave may be approved as follows—

Applicant.	*Approving Authority.*
FOCAF, FOIC, NOIC	Naval Board.
Officers borne on the books of H.M.A.S. HARMAN for Navy Office or H.M.A.S. LONSDALE for Navy Office	Naval Board.
Captain of a ship or establishment ..	His Administrative Authority.
Any other officer	His Captain.

13. Applications to the Naval Board for leave should normally reach Navy Office at least four days before the date on which the leave is to begin. In urgent cases, application may be made in the first instance by signal.

14. A report is to be forwarded to the authority who approved the leave—

(*a*) when leave begins before or after the date approved; or

(*b*) when the full amount of leave approved is not taken. The amount actually taken and reasons for not taking the balance are to be stated.

15. No officer, without the approval of the authority approving the leave, is to be granted permission to join at a port other than that from which he takes his leave.

16. *Home Service Leave.*—In this order, " home service " means—

(*a*) service on the Australia Station, except when an officer or rating is on foreign service leave;

(*b*) any temporary absence of an officer or rating from the Australia Station (such as in a ship which is absent from the station for a short time or a brief duty visit overseas) which is determined by the Naval Board to count as home service; and

(*c*) any other service by an officer or rating which is determined by the Naval Board to count as home service. The following service counts as home service—

(i) In a ship allotted to the British Commonwealth Strategic Reserve.

(ii) As an Australian services attache in the South-East Asian area.

(iii) As a member of the S.E.A.T.O. planning staff.

(iv) When serving in the Antarctic.

17. *Service which does not Count for Leave.*—The following service does not count towards home service leave—

(*a*) Service prior to desertion.

(*b*) Any period for which pay is not credited, e.g., detention, imprisonment, cells or leave without pay.

18. Officers and ratings performing service which counts as home service accrue leave in accordance with the scales contained in the following table.

HOME SERVICE LEAVE.

Category. (1)	*Conditions.* (2)	*Entitlement.* (3)
Basic leave	.. .. ..	.. Twenty-eight days a year or, if service in the leave year is less than twelve months, two days for each completed month plus one additional day for each completed three months.
Seagoing leave	For service in a seagoing ship (i.e., one in which command money is payable, *see* I.P.I.). Seagoing leave is additional to basic leave	Fourteen days a year or, if service in a seagoing ship in the leave year is less than twelve months, one day for each completed month plus one additional day for each completed six months.
Flying leave—	For service ashore by flying personnel. Flying leave is additional to basic leave	Fourteen days a year or, if borne in the group or squadron for less than twelve months in the leave year, one day for each completed month plus one additional day for each completed six months.
(*a*) When borne in a group or squadron for full flying duties or appointed to R.A.N. Air Station, Nowra for full flying duties		One day for each completed two months of such service, plus one additional day for a completed twelve months.
(*b*) When borne for full flying duties but not in a group or squadron		(*a*) Fourteen days a year if 100 or more hours or sorties flown, *pro rata* leave being granted on the following basis where a period of less than a year is involved—one day for each month in which eight and one-third or more hours are flown, plus one additional day for each completed six months' flying at this rate.
(*c*) When borne for aircrew duties with the air force		(*b*) Seven days a year if less than 100 but not less than 50 hours on sorties flown, *pro rata* leave being granted on the following basis where a period of less than a year is involved—one day for each two months when less than eight and one-third hours, but not less than four and one-sixth hours a month are flown.

HOME SERVICE LEAVE—*continued.*

Category. (1)	*Conditions.* (2)	*Entitlement.* (3)
Flying leave—*continued.*		
(*d*) Aircrew trainees ..	.. ..	Fourteen days a year or, if an aircrew trainee for less than twelve months in the leave year, one day for each completed month plus one additional day for each completed six months, including any service with the Air Force.
Remote locality leave ..	.. For service in the Antarctic, Woomera, Maralinga, Darwin, New Guinea and South-East Asian posts. Remote locality leave is additional to basic leave but does not accrue concurrently with seagoing leave or flying leave	Fourteen days a year or, if service in the remote locality in the leave year is less than twelve months, one day for each completed month plus one additional day for each completed six months.

19. Officers and ratings serving in S.A.R. craft in commission are to be granted leave in accordance with the seagoing scale.

20. Officers and ratings of the Mobile Clearance Diving Team serving in H.M.A.S. WALRUS may be granted additional long leave in respect of the periods spent at sea (i.e., when command money is payable) on the basis of one day's leave for each month plus one additional day for each completed six months total sea service in the one leave year.

21. Home service leave is inclusive of Saturdays, Sundays and public holidays occurring within the period of leave.

22. Leave is to be calculated by working out each scale separately, adding them together and subtracting any leave taken. This is important for calculating leave entitlement at the end of the leave year as there may be broken periods of service with the same leave entitlement, e.g., two broken periods of sea service during the leave year.

23. In the case of—

(*a*) an officer or rating who serves overseas for a short period but remains entitled to leave at the home service scale (*see* paragraph 16 (*b*)); and

(*b*) an officer or rating recruited in the United Kingdom for service in the Royal Australian Navy,

service outside Australia is to be regarded as service in a seagoing ship for the purpose of calculating home service leave. The period of leave under this clause is to be calculated using the rule given in paragraph 31 for calculating periods of foreign service leave. Any leave taken overseas is to be deducted from home service leave accruing. Particulars of such leave are to be reported to Navy Office and, where applicable, to the ship or establishment to which the member remains appointed or drafted.

24. Should an officer or rating referred to in paragraph 23 be due to return to Australia in a new leave year and be unable to take his full entitlement of leave in the previous leave year because of the oversea service, application should be made for deferment of leave in accordance with paragraphs 60 to 65.

25. *When to be Taken.*—Home service leave is normally to be taken in the leave year in which it is due, in two periods—one during June and July and the other during December and January. (*Note.*—Chapter XII., Section 4 of I.P.I. governs the grant of leave travel concessions.)

26. Officers and ratings serving at the Royal Australian Naval College are to take leave during term breaks.

27. (*a*) A list is to be forwarded by all establishments on the 15th August each year to Manning Department, Navy Office of all ratings whose mid-winter leave has not been taken by that date indicating in the remarks column the reason for deferment. The list in respect of H.M.A.S. CRESWELL is to be forwarded by 30th September. This instruction does not apply to H.M.A.S. TARANGAU or H.M.A.S. MELVILLE.

(*b*) A list is to be forwarded by all ships within fourteen days of completion of Long Self Maintenance and Refit periods to Manning Department, Navy Office of all ratings who have not taken leave in accordance with the Rules for Leave promulgated separately, indicating in the remarks column the reason for deferment.

28. Officers and ratings serving in remote localities may allow their leave to accumulate with a view to taking it at the conclusion of their service in the remote locality, subject to the following conditions—

(*a*) in order to maintain physical and mental health, officers and ratings serving in South-East Asian posts are to take their remote locality leave in the South-East Asian area in the year in which it is due;

(*b*) irrespective of the period served in the remote locality, the maximum amount of leave (including remote locality leave) which may be accumulated is—

(i) in South-East Asian posts—84 days.

(ii) in other remote localities—126 days.

29. Formal application for deferment of leave is not required for acccumulation of leave under the above clause.

30. An officer or rating appointed or appropriated overseas or to a remote locality is normally to take all accrued leave before taking up the appointment or draft.

31. *Foreign Service Leave.*—In this order " foreign service " means all service outside the Australia Station except—

(*a*) that which counts as home service (*see* paragraph 16); and

(*b*) when an officer or rating is on foreign service leave.

32. Foreign service begins on the date of departure from the last Australian port if the officer or rating is travelling in a warship, or the date of embarkation in Australia if he is travelling by other means. It ends on the date of arrival at the first Australian port if the officer or rating is returning in a warship, or the date of disembarkation in Australia if he returns by other means.

33. The rules for the grant of foreign service leave will normally apply in respect of periods of service outside Australia with the following exceptions when home service leave will continue to accrue—

(*a*) Short term duty oversea where the member remains attached for pay purposes to an establishment in Australia; and

(*b*) Service in one of H.M.A. ships which proceeds outside the Australia Station and returns without granting long local leave at an oversea port.

34. Foreign service leave accrues at the rate of one day for each completed month of foreign service plus one additional day for each completed six months' foreign service. The maximum amount which may be accrued on each occasion of foreign service is 42 days.

35. Foreign service leave is inclusive of Saturdays, Sundays and public holidays occurring within the period of leave.

36. Service prior to desertion may be allowed to count as qualifying service for foreign service leave.

37. Foreign service leave does not accrue in respect of any period for which pay is not credited, e.g., detention, imprisonment, cells or leave without pay.

38. Local leave granted to an officer or rating while on foreign service is governed by the routine of the squadron, ship or establishment to which he is attached, and is in addition to foreign service leave accruing under paragraph 34. Oversea local leave may not be deferred for the purpose of taking it in Australia or adding it to foreign service leave.

39. When an officer or rating is granted leave (other than leave for compassionate purposes) in Australia during foreign service, the period during which he is absent from his ship or establishment on this leave is to be deducted from foreign service leave due. Leave granted for compassionate purposes is not to be deducted from foreign service leave due unless specially directed by the Naval Board.

40. Foreign service leave is normally to be taken immediately the officer or rating returns to Australia.

41. Naval Board approval must be obtained for officers and ratings to spend their foreign service leave abroad. Where approval is given, any expense which would not have been occasioned under the normal arrangements for the officer's or rating's return to Australia will be his own liability. Applications to take foreign service leave abroad are to give details of the normal and proposed passage arrangements. On reporting address and movements when on leave in a foreign country, *see* paragraph 9.

42. Officers and ratings recruited in the United Kingdom for service in the Royal Australian Navy do not accrue foreign service leave during the period between entry into the Royal Australian Navy and arrival in Australia, *see* paragraph 23.

43. *Arduous Service Leave.*—Leave additional to that provided for in paragraphs 16 to 30 (home service leave) and 31 to 42 (foreign service leave) may be granted by the Naval Board to officers and ratings who perform a period of specially arduous service.

44. Current approvals are—

(*a*) Ships of British Commonwealth Strategic Reserve:

One day a month up to a maximum of five days a year, subject to a minimum period of three months' service in the Strategic Reserve.

(*b*) Service at Maralinga :

One day a month up to a maximum of seven days a year, subject to a minimum period of three months' service in the area.

45. *Travelling Leave.*—An officer or rating proceeding on leave to visit the home of his next-of-kin within Australia or a destination accepted as his home town for the issue of leave concession warrants may, if the journey takes twelve or more hours, be allowed travelling leave in addition to long leave for the period of the journey, but if the journey takes more than 48 hours by surface transport (including waiting time) extra leave for travelling is not to be granted on more than one occasion in each leave year without Naval Board approval.

46. Travelling time added to the period of leave granted is to be recorded on the leave pass when the member proceeds on leave.

47. When compassionate leave is granted, the officer or rating is to be granted travelling leave if the single journey exceeds twelve hours by the approved means and route of travel. Travelling leave under this clause will not affect any entitlement to travelling leave under paragraph 45.

48. An officer or rating who is permitted to serve an additional period of service at Darwin or in New Guinea and is granted leave travel concessions under Interim Pay Instructions to the nearest capital city may be granted travelling leave for that purpose.

49. The rules for the grant of free travel and the method of travel to be used on leave when free travel is allowed are contained in Interim Pay Instructions.

50. *Officers—Leave for University and Technical College Courses.*—On the granting of leave to Medical, Dental and other officers for taking graduate, post-graduate and other courses of study at universities or technical colleges, *see* Interim Pay Instructions.

51. *Jewish Sacred Festivals.*—When practicable, leave may be granted to officers and ratings of the Jewish faith for the observance of certain Holy Days, the dates of which are published annually in Navy Orders.

52. Sufficient leave is to be given to enable the officer or rating to arrive at his home or if his home is too far distant the nearest synagogue or other place of observance, before sunset on the day before the festival.

53. This leave counts against the annual allowance of leave.

54. *Sick Leave.*—Sick leave is additional to home service leave and foreign service leave.

55. *Compassionate Leave.*—Instructions regarding the granting of compassionate leave are contained in Navy Order 229 of 1959.

56. Compassionate leave in excess of seven days in any one leave year counts against the annual allowance of leave except as directed in paragraph 39.

57. On additional travelling leave in compassionate cases, *see* paragraph 47.

58. *Leave Without Pay.*—The Naval Board may grant leave without pay for a period not exceeding three months to an officer or rating. Leave without pay for a period exceeding three months but not exceeding twelve months may be granted with the approval of the Governor-General.

59. Leave without pay counts as part of the period of service of the officer or rating, but does not count towards increment of pay, seniority for promotion or entitlement to leave.

60. *Deferment of Leave.*—Home service leave or foreign service leave which, owing to the exigencies of the service, cannot be taken in the leave year in which it becomes due may be deferred to the following leave year subject to the approval of the Naval Board or the Administrative Authority concerned as appropriate in the case of officers and that of the Captain in the case of ratings. *See* paragraph 24 on officers and ratings returning to Australia in a new leave year, and paragraph 28 on officers and ratings serving in remote localities.

61. Deferment should only be approved in exceptional circumstances and where it can be clearly shown that there are strong service reasons for the leave not being taken in the year in which it is due. It should be taken as early as possible in the subsequent leave year and steps should be taken to avoid officers proceeding from one administrative command to another with a large amount of accumulated leave. Any further deferment will be subject to the provisions of paragraph 60. Copies of the approval for deferment of officers' leave are to be forwarded to Navy Office for information, and notification of deferment of ratings' leave is to be forwarded to Manning Department, Navy Office.

62. Applications for deferment should be forwarded early so that, should deferment be refused, sufficient time will remain for the leave to be taken before the end of the leave year; otherwise a refusal of deferment will result in forfeiture of the leave.

63. An officer or rating whose home is more than 48 hours' travelling time by surface transport (including waiting time) from the place where leave is granted or whose home is in New Guinea or New Zealand may, subject to the approval of the Captain, accumulate the whole of his annual allowance of leave with a view to taking it once a year. Other cases where, in the opinion of the Captain, a request to take the whole of the year's leave at one time is deserving of special consideration on account of the time and expense involved in proceeding on leave are to be submitted to the Naval Board.

64. An officer who is about to retire or a rating who is about to complete his engagement may be permitted to accrue up to 21 days of leave with a view to taking it immediately before retirement or discharge.

65. Any leave not taken within the limits laid down in paragraphs 28 and 60 to 64 will lapse.

66. *Leave Before Discharge.*—All leave not taken before discharge from the service is forfeited.

67. *Discharge at Own Request.*—An officer discharged to shore upon resignation or a rating discharged at his own request before completion of engagement takes his discharge on the understanding that he forfeits leave that would otherwise be due to him. However, where a rating is discharged " Free " under section 25A of the Naval Defence Act he may be granted all accrued leave before discharge.

68. *Discharge Within Twelve Months of Entry.*—An officer or rating whose services are terminated for other than disciplinary reasons during the first year of his service may be granted leave in proportion to his period of service.

69. *Discharge " Unsuitable " or " Unsuitable on Account of Disability Present on Entry ".*—A rating discharged " Unsuitable " or " Unsuitable on account of disability present on entry " may be granted all accrued leave before discharge.

70. *Dismissal, Dismissal with Disgrace, Discharged Fraudulent Entry, S.N.L.R., &c.*—Where an officer is sentenced to dismissal with disgrace or to dismissal, or is discharged " Fraudulent entry ", or his appointment is cancelled under Naval Forces Regulations 101 or 122, he forfeits all leave that would otherwise be due to him.

71. Where a rating is dismissed, or is discharged " Fraudulent entry " or " Services no longer required ", he forfeits all leave that would otherwise be due to him.

72. Where discharge to shore is under consideration in a case to which paragraphs 70 and 71 refer, leave is not to be granted.

73. *Furlough and Extended Leave.*—The conditions governing the grant of furlough and extended leave are contained in Interim Pay Instructions.

74. Where a member is granted a period of furlough during his service, his leave entitlement will be adjusted as directed by the Naval Board.

75. *Members Invalided.*—A member who is invalided is not to be granted any period of home service leave or foreign service leave. Such a member will, however, be entitled to pay and allowances for fourteen days beyond the date of survey for invaliding, provided the overall period during which he may be retained on pay while under medical treatment is not exceeded.

76. *Record of Leave Taken.*—Leave taken is to be recorded on form A.S. 224Z, personnel card.

77. On the transfer from one ship or establishment to another of a rating, the amount of leave taken during the current leave year and the amount of leave deferred (if any) are to be entered on the rating's form A.S. 239.

SECTION IV.—ROYAL NAVY OFFICERS AND RATINGS.

General.—The general provisions of this order, where they do not conflict with Royal Navy regulations and instructions, apply to officers and ratings of the Royal Navy on loan to or exchange duty with the Royal Australian Navy.

2. *Loan Service.*—Officers and ratings on loan from the Royal Navy accrue local and foreign service leave in accordance with the following scales—

(*a*) Local leave ..	Fourteen days a year, calculated at the rate of one day for each completed month's absence from the United Kingdom plus one additional day for each completed six months.
(*b*) Foreign service leave	Two days for each completed month's absence from the United Kingdom (for any period of absence up to six years).

3. Leave is calculated on the total period of absence from the United Kingdom, the normal periods of passage each way being included.

4. *Local Leave.*—Leave years are not taken into consideration when granting local leave, but as far as practicable local leave should be taken during the normal leave periods, *see* section III., paragraph 25.

5. Where an officer or rating on loan takes leave in Australia in excess of the local leave scale (*see* paragraph 2), the excess will be deducted from his foreign service leave credits.

6. Officers and ratings who complete six years' loan service may be granted local leave at the R.A.N. home service leave scale without any increase to, or deduction from, foreign service leave accrued during the first six years' loan service.

7. Local leave accrued by an officer or rating and not taken before his relief in his last appointment or appropriation before passage will normally lapse. However, if the exigencies of the service permit, the member may take part or the whole of the accrued leave while awaiting passage.

8. *Foreign Service Leave* is normally to be taken on return to the United Kingdom on completion of loan service. The Naval Board may approve the taking of foreign service leave in Australia, or on the return passage where the member is permitted to make his own arrangements provided that the member's return passage can be arranged to ensure that he will be available for duty with the Royal Navy on the normal date of reversion.

9. *Leave Taken in Australia on Admiralty Account.*—When a Royal Navy officer or rating on loan wishes to take leave on Admiralty account while on loan service with the Royal Australian Navy or on being finally discharged from the Royal Navy in Australia, the circumstances are to be submitted to the Naval Board for consideration. Care is to be taken that terminal leave, re-engaging leave, &c., are not granted unless specific authority is given.

10. *Exchange Service.*—An officer or rating of the Royal Navy on exchange service with the Royal Australian Navy may be granted leave in accordance with Royal Navy scales of leave.

11. *Loan and Exchange Service in R.A.N. Ships in United Kingdom.*—Royal Navy loan and exchange officers and ratings serving in an H.M.A. ship which is visiting the United Kingdom, accrue leave at the Royal Navy home service scale while the ship is in United Kingdom home waters. Any leave granted in excess of this scale is to be deducted from foreign service leave credits.

12. This order will be incorporated in Regulations and Instructions for the Royal Australian Navy.

13. Navy Order 229 of 1959 is relevant.

14. Navy Orders 644 and 797 of 1959 are cancelled.

(HPB 47/8/1.)

(*Navy Orders* 229, 644 *and* 797 *of* 1959.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
16th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED. → Cancelled · CNO/520/62

754.—Uniform and Clothing Issuing Prices—Annual Revision.

The issuing prices of uniform and clothing have been revised with effect from 1st July, 1960. Copies of the pamphlet " Official Memorandum—Prices of Clothing, &c., Maintained for Issue to Ships' Companies ", together with copies of the poster, showing the revised prices, details of arrangements made for the supply of made-to-measure garments and details of consequential gratuities have been distributed to all H.M.A. ships and establishments. Further copies may be obtained, if required, on application to the Director of Victualling, Department of the Navy, Victoria Barracks, Melbourne.

2. Copies of the posters are to be displayed in positions which will permit scrutiny by ships' companies.

(DV 930/52/2.)

UNCLASSIFIED. → Cancelled CNO/521/62

755.—Alteration of Braiding of Uniforms, &c., of W.R.A.N.S. Officers at Melbourne—1960–61.

The following prices will be charged for the alteration of braiding of W.R.A.N.S. Officers' uniforms by the Commonwealth Government Clothing Factory, Miles Street, South Melbourne, during the period 1st July, 1960 to 30th June, 1961—

On Promotion to—

Rank.	*Jacket, Superfine or Barathea.* £ s. d.	*Shoulder Straps.* £ s. d.
3rd Officer	1 6 0	1 2 0
2nd Officer	1 6 0	1 2 0
1st Officer	1 5 0	1 2 0
Chief Officer	1 6 0	1 2 0
On Reversion from—		
Acting 2nd Officer to 3rd Officer	1 1 6	1 2 0
Acting 1st Officer to 2nd Officer	1 2 0	1 2 0
Acting Chief Officer to 1st Officer ..	1 1 6	1 2 0

(DV 930/52/2.)

UNCLASSIFIED. → Cancelled CNO 522/62

756.—Alteration of Lacing of Uniforms, &c., of R.A.N. Officers at Melbourne and Sydney—1960–61.

The costs of alteration of lacing of R.A.N. Officers' uniforms at Melbourne and Sydney during the period 1st July, 1960 to 30th June, 1961 are detailed in appendixes " A " to " D " of this order.

Appendix A.

Melbourne,
Commonwealth Government Clothing Factory, Miles Street,
South Melbourne.

Alteration of Lacing of Uniforms, &c.

On Promotion to:

Rank.	*Undress Coat and Mess Jacket.* £ s. d.	*Shoulder Straps.* £ s. d.
Lieutenant	2 2 6	1 6 0
Lieutenant Commander	2 9 0	1 7 0
Commander	2 15 6	1 8 6
Captain	3 16 6	1 8 6
Commodore (2nd Class)	5 13 6	2 19 6
Commodore 1st Class (from Captain)	4 17 6	9 3 6
Commodore 1st Class (from 2nd Class)	3 7 0	7 19 0
Rear-Admiral (from Captain)	4 17 6	4 17 6
Rear-Admiral (from Commodore 1st Class)	—	2 13 6
Vice-Admiral (from Rear-Admiral)	2 19 6	2 11 0
Removal of Gorget Patch from Shoulder Straps of Midshipman and relacing on promotion to A/Sub-Lieutenant		1 6 6
Replacement of Collar of Undress Coat of Midshipmen—		
Superfine Cloth		1 1 6
Lightweight Serge		0 18 6
Replacement of peak of cap on promotion to—		
Commander		2 19 6
Rear-Admiral		3 3 0
Replacement of and sewing on buttons on promotion to Rear-Admiral—		
Undress Coat		0 19 6
Greatcoat		1 7 0
Mess Jacket, blue		0 15 0
Mess Waistcoat, blue		0 10 0
Removal of letter from lacing of Reserve Officer transferred to R.A.N.		0 5 0

On Reversion from:

Acting Lieutenant-Commander to Lieutenant	1 10 0	1 1 6
Acting Commander to Lieutenant Commander	2 9 0	1 5 0
Acting Captain to Commander	2 15 6	1 1 6
Commodore 2nd Class to Captain	6 15 0	2 19 0
Commodore 1st Class to Captain	5 18 0	2 19 0
Commodore 1st Class to Commodore 2nd Class	1 14 0	2 13 0
Replacement of peak of cap on reversion from Acting Commander to Lieutenant-Commander		0 10 0
Replacement of peak of cap on reversion from Commodore 1st Class to Commodore 2nd Class or Captain		3 2 6
Replacement and sewing on of Buttons on reversion to Commodore 2nd Class or Captain—		
Undress Coat		1 0 6
Greatcoat		1 15 0
Mess Jacket Blue		0 14 6
Mess Waistcoat Blue		0 11 0

Prices Nett & f.o.b./f.o.r. Melbourne.

Appendix B.

Melbourne,
Commonwealth Government Clothing Factory, Miles Street,
South Melbourne.

Relacing of Uniforms and Shoulder Straps (i.e., where removal of old lace is involved)

Rank.	*Undress Coat and Mess Jacket.* £ s. d.	*Shoulder Straps.* £ s. d.
Sub-Lieutenant	3 5 6	1 19 6
Lieutenant	4 8 6	2 4 0
Lieutenant-Commander	5 5 6	2 12 0
Commander	5 12 0	2 13 0
Captain	6 15 0	3 0 0
Commodore (2nd Class)	5 12 0	2 12 6
Commodore (1st Class)	6 9 0	—
Rear-Admiral	6 9 0	—
Vice-Admiral	7 14 0	—

Prices Nett and f.o.b./f.o.r. Melbourne.

Appendix C.

Sydney,
Segrave Pty. Ltd., 213 George Street, Sydney.

Alteration of Lacing of Uniforms, &c.

On Promotion to:

Rank.	*Undress Coat and Mess Jacket.*		*Shoulder Straps.*	
	Without Distinctive Cloth.	*With Distinctive Cloth.*	*Without Distinctive Cloth.*	*With Distinctive Cloth.*
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Lieutenant	3 3 0	3 7 0	1 13 6	1 16 6
Lieutenant-Commander	3 2 3	3 8 6	1 16 6	2 1 0
Commander	3 12 9	3 18 6	1 18 6	2 4 6
Captain	3 17 6	4 8 9	2 3 3	2 12 6

On Reversion from:

Rank.	*Undress Coat and Mess Jacket.*		*Shoulder Straps.*	
	Without Distinctive Cloth.	*With Distinctive Cloth.*	*Without Distinctive Cloth.*	*With Distinctive Cloth.*
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Acting Lieutenant to Sub-Lieutenant	1 18 0	1 18 0	1 9 6	1 9 6
Acting Lieutenant Commander to Lieutenant	2 8 9	2 8 9	1 9 6	1 9 6
Acting Commander to Lieutenant Commander	3 3 0	3 3 0	1 16 6	1 19 0
Acting Captain to Commander	3 12 6	3 12 6	1 14 3	1 14 3

APPENDIX D.

SYDNEY.

Segrave Pty. Ltd., 213 George Street, Sydney.

Relacing of Uniforms and Shoulder Straps (i.e., where removal of old lace is involved).

Rank.	Undress Coat and Mess Jacket.		Shoulder Straps.	
	Without Distinctive Cloth.	With Distinctive Cloth.	Without Distinctive Cloth.	With Distinctive Cloth.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Sub-Lieutenant	3 17 6	4 2 6	2 10 9	2 13 9
Lieutenant	5 10 6	5 15 6	3 0 0	3 3 0
Lieutenant-Commander	6 5 0	6 10 0	3 6 9	3 9 9
Commander	6 15 0	7 0 0	3 8 4	3 11 4
Captain	7 19 0	8 10 3	3 18 6	4 3 6

Reduction for Permanent Officers for whom the letters " R " or " A " are not to be inserted in the curl of lace—7s. 6d. per uniform.

(DV 930/52/2.)

UNCLASSIFIED — Cancelled C N O 526/62

757.—Commonwealth Government Clothing Factory Prices for Officers' Uniforms—1960–61.

The prices detailed in appendixes A to C of this order will apply to Naval Officers' Uniforms obtained from the Commonwealth Government Clothing Factory during the period 1st July, 1960 to 30th June, 1961.

2. Navy Order 817 of 1959 is hereby cancelled.

APPENDIX A.

MADE TO MEASURE UNIFORMS FOR R.A.N. OFFICERS.

—	Superfine Cloth.				Cloth for Officers' Uniforms.		Lightweight Serge.	Greatcoat (with Shoulder Straps).	Shoulder Straps per Pair.
	Undress Coat.	Mess Jacket.	Undress Tail Coat.	Ceremonial Day Coat.	Undress Coat.	Mess Jacket.	Undress Coat.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Midshipmen (gorget patches extra) ..	16 15 0	14 19 0	—	—	13 17 6	12 15 6	12 7 0	17 4 0	0 19 6 (plain)
Sub-Lieutenant	19 1 0	17 5 0	—	—	16 3 6	15 1 6	14 13 0	18 1 6	1 7 6*
Lieutenant	20 4 0	18 8 0	—	—	17 6 6	16 4 6	15 16 0	18 6 0	2 5 0
Lieutenant-Commander ..	21 1 0	19 5 0	—	—	18 3 6	17 1 6	16 13 0	18 14 0	2 9 6
Commander	21 7 6	19 11 6	—	—	18 10 0	17 8 0	16 19 6	18 15 0	2 17 6
Captain	22 10 6	20 14 6	26 9 0	—	19 13 0	18 11 0	18 2 6	19 2 0	2 18 6
Commodore 2nd Class ..	21 7 6	19 11 6	25 6 0	—	18 10 0	17 8 0	16 19 6	18 14 6	3 5 6
Commodore 1st Class ..	22 4 6	20 8 6	26 3 0	—	19 7 0	18 5 0	17 16 6	24 2 0	2 18 0
Rear-Admiral	22 4 6	20 8 6	26 3 0	30 9 6	19 7 0	18 5 0	17 16 6	23 0 6	8 5 6
Vice-Admiral	23 9 6	21 13 6	27 8 0	31 14 6	20 12 0	19 10 0	19 1 6	23 18 6	7 4 0
									8 2 0

* Midshipmen's shoulder straps include gorget patches.

Note.—Above prices include distinction cloth between lace where required.

UNIFORMS FOR OFFICERS—R.A.N.R.(S), R.A.N.R. AND R.A.N.V.R.

The above schedule of prices is applicable, with the addition of 10s. per garment or per pair of shoulder straps for the addition of letter " R ". Where letters " SC " are added, additional cost is 15s. per pair.

Appendix A—*continued.*

(1960–1961)

All Officers.	*Superfine Cloth.*	*Cloth for Officers' Uniform.*	*Lightweight Serge.*	*White Drill.*	*Marcella.*	*Gabardine.*
	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
Cape, boat	16 16 0	13 11 0	—	—	—	—
Jacket, white, bush for Captains and above ..	—	—	—	5 2 6	—	—
Mess Jacket, white, with buttons	—	—	—	3 6 0	—	—
Mess Jacket, white, without buttons	—	—	—	2 15 6	—	—
Raincoat	—	—	—	—	—	10 12 6
Trousers, plain	7 3 6	5 0 0	3 16 6	2 0 0	—	—
Tunic, with buttons	—	—	—	3 1 6	—	—
Tunic, without buttons	—	—	—	2 12 0	—	—
Waistcoat, mess, blue	4 15 6	4 1 6	3 14 0	—	—	—
Waistcoat, mess, white	—	—	—	—	2 0 6	—

	£ *s.* *d.*
Lace, gold, complete with curl ready for placing on cuffs, ¼-in., per pair	1 4 0
Lace, gold, complete with curl ready for placing on cuffs, $\frac{9}{16}$-in., per pair	1 10 6
Lace, gold, complete with curl ready for placing on shoulder straps, ½-in., per pair	0 18 6
Lace, gold, complete with curl ready for placing on shoulder straps, ¼-in., per pair	0 17 6

OFFICERS TAKING UP APPOINTMENTS IN THE U.S.A. WITH A BRITISH DELEGATION.

		£ *s.* *d.*
As per plate 17 of 1937 edition " Uniform Regulations for Officers of the Fleet "	Jacket, khaki, gabardine, made-to-measure ..	14 11 6
	Trousers, khaki, gabardine, made-to-measure ..	4 19 6
	Jacket, khaki, drill, made-to-measure	6 1 6
	Trousers, khaki, drill, made-to-measure ..	2 17 6

Appendix B.

UNIFORM OF NAVAL CHAPLAINS.

—	*Superfine Cloth.*	*Cloth for Officers' Uniforms.*	*Lightweight Serge.*	*Black Cloth Serge.*	*White Drill.*
	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
Jacket, mess, white with buttons	—	—	—	—	3 6 0
Jackets, mess, white, without buttons	—	—	—	—	2 15 6
Trousers	7 3 6	5 0 0	3 16 6	4 13 6	—
Tunic or coat with buttons	—	—	—	—	3 1 6
Tunic or coat without buttons	—	—	—	—	2 12 0
Undress coat (without gold lace)	16 15 0	13 17 6	12 7 0	13 10 6	—

	£ *s.* *d.*
Greatcoat (with plain shoulder straps)	15 16 6
Shoulder straps, plain, per pair	0 19 6

APPENDIX C.

UNIFORM FOR W.R.A.N.S. OFFICERS.

	Superfine Cloth.		Cloth for Officers' Uniforms.		Lightweight Serge.		Greatcoat (without Shoulder Straps).	Shoulder Straps per Pair (Braided).
	Jacket.	Skirt.	Jacket.	Skirt.	Jacket.	Skirt.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Chief Officer ..	17 8 0	5 2 6	14 10 0	3 13 6	13 0 0	2 18 6	13 1 0	1 11 6
1st Officer ..								
2nd Officer ..								
3rd Officer ..								

(Navy Order 817 of 1959.)

(DV 930/52/2.)

UNCLASSIFIED Cancelled C NO 524/62

758.—Commonwealth Government Clothing Factory Prices for Made-to-Measure Uniforms for Naval Dockyard Police—1960–61.

The following prices will apply to Naval Dockyard Police made-to-measure uniforms obtained from the Commonwealth Government Clothing Factory, Melbourne, during the period 1st July, 1960 to 30th June, 1961—

	£	s.	d.
Jacket, diag. serge, for Inspector and Sub-Inspector, with buttons	12	5	6
Jacket, diag. serge, for Inspector and Sub-Inspector, without buttons	12	2	6
Jacket, diag. serge, police, with buttons	10	19	0
Jacket, khaki drill, for Inspector and Sub-Inspector, without buttons	5	15	0
Jacket, khaki drill, police, with buttons	5	1	6
Jacket, khaki drill, police, without buttons	4	18	0
Jacket, lightweight serge, for Inspector and Sub-Inspector, with buttons	11	19	6
Jacket, lightweight serge, for Inspector and Sub-Inspector, without buttons	11	16	6
Jacket, lightweight serge, police, with buttons	10	13	6
Overcoat, police, with buttons	14	5	0
Trousers, khaki, drill, police	2	1	6

2. This order will be reprinted for posting on Notice Boards.

3. Navy Order 819 of 1959 is hereby cancelled.

(DV 930/52/2.)

(*Navy Order* 819 *of* 1959.)

UNCLASSIFIED Cancelled C NO. 523/62

759.—Commonwealth Government Clothing Factory Prices for Made-to-Measure Uniforms for Ratings—1960–61.

The following prices will apply to ratings' made-to-measure uniforms obtained from the Commonwealth Government Clothing Factory, Melbourne, during the period 1st July, 1960 to 30th June, 1961—

Ratings, Classes I., II., and III.	£	s.	d.
Blouse, lightweight serge, working dress	4	12	0
Blouse, seamen's serge, working dress	5	6	0
Jacket, diag. serge, for Chief Petty Officer with gilt buttons ..	11	9	6
Jacket, diag. serge, for Petty Officer, over one year's service, with gilt buttons	11	5	6
Jacket, diag. serge, with gilt buttons (without cuff buttons) ..	11	2	6
Jacket, diag. serge, other ratings with horn buttons	10	17	0
Jacket, lightweight serge, for Chief Petty Officer with gilt buttons	11	4	0
Jacket, lightweight serge, for Petty Officer, over one year's service with gilt buttons	11	0	0
Jacket, lightweight serge, with gilt buttons (without cuff buttons)	10	17	0
Jacket, lightweight serge, other ratings, with horn buttons ..	10	11	6
Jumper, seaman's serge	3	16	0
Jumper, white, drill	1	9	0

Ratings Classes I., II., and III.—continued.

	£	s.	d.
Overcoat, with gilt buttons	14	11	6
Overcoat, with horn buttons	14	4	6
Raincoat	11	2	0
Trousers, diag. serge, Classes I. and III.	4	0	0
Trousers, lightweight serge, Classes I. and III.	3	15	0
Trousers, lightweight serge, working dress	4	8	6
Trousers, seaman's serge, Class II.	4	0	6
Trousers, seaman's serge, working dress	5	3	0
Trousers, serge, gymnastic (P.T. Rating only)	3	16	0
Trousers, white, drill, Class II.	1	17	6
Trousers, white, drill, Classes I. and III.	1	15	6
Tunic, white, drill, for Chief Petty Officer, with gilt buttons	2	16	0
Tunic, white, drill, for Petty Officer, over one year's service, with gilt buttons	2	8	6
Tunic, white, drill, other ratings, with white buttons	2	5	6
Tunic, white, drill, without buttons	2	3	6
Tunic, white, drill, with blue facings, without buttons	2	7	6

2. This order will be reprinted for posting on notice boards.

3. Navy Orders 820 and 990 of 1959 are hereby cancelled.

(DV 930/52/2.)

(*Navy Orders* 820 *and* 990 *of* 1959.)

UNCLASSIFIED. Cancelled C N O 712/61

760.—Contract for Made-to-Measure Uniforms at Canberra—1960–61.

The following prices will apply until 30th June, 1961, for made-to-measure uniforms obtained from the Canberra contractor, viz., "Joseph" (Mr. G. Aloisi), Bunda Street, Canberra. The contractor is required to visit H.M.A.S. HARMAN at approximately fortnightly intervals and orders for uniforms may be placed through the Commanding Officer of that establishment.

R.A.N. Officers.	*Superfine Cloth.*	*Cloth for Officers' Uniform.*	*Lightweight Serge.*
Coat, Undress—	£ s. d.	£ s. d.	£ s. d.
Sub-Lieutenant	23 0 0	20 5 0	18 14 0
Lieutenant	23 10 0	20 15 0	19 4 0
Lieutenant-Commander	23 16 0	21 1 0	19 10 0
Commander	25 5 0	22 5 0	20 19 0
Captain	25 15 0	23 0 0	21 9 0
Trousers	11 5 0	9 0 0	8 2 0

R.A.N. Ratings—

	£	s.	d.
Jacket, lightweight serge, for—			
(*a*) C.P.O., with gilt buttons	14	15	0
(*b*) P.O., with gilt buttons	14	7	0
(*c*) Other ratings, with horn buttons	14	4	0
Trousers, lightweight serge, Classes I. and III.	7	19	6
Jumper, seaman's serge	11	12	0
Trousers, seaman's serge, Class II.	8	2	0
Overcoat, with gilt buttons	22	15	0
Overcoat, with horn buttons	22	5	0

Naval Dockyard Police—

Jacket, lightweight serge, police	14	6	0

Women's Royal Australian Naval Service—

Officers—

Jacket, superfine—			
1st Officer	23	10	0
2nd Officer	23	0	0
3rd Officer	22	10	0
Skirt, superfine	9	15	0
Greatcoat—			
1st Officer	22	10	0
2nd Officer	22	5	0
3rd Officer	21	15	0

Ratings—

Jacket, diagonal serge	13	15	0
Skirt, diagonal serge	7	5	0

Extra Charges—

	s.	d.	
Attaching badges, chevrons, letters, &c.	1	9	each
Alteration to length of Skirts	15	0	each
Sleeves	8	0	per jacket
Trousers	10	0	pair.

Terms—

Nett.

2. The conditions of the contract for ratings are—

(*a*) When ordering garments, the rating must present to the contractor a written authority, on form A.S. 87X, signed by the Supply Officer of his ship, if one is borne, otherwise by the Commanding Officer or an officer delegated by him. This authority is to state the rating's name, official number, rating, ship or establishment in which serving, and must specify in detail the articles and quantities thereof authorized to be purchased. Unless form A.S. 87X containing the full details required is lodged with the contractor at the time of ordering the order may not be accepted.

(*b*) The rating must sign the order book of the contractor when placing the order and all orders are to be paid in full on delivery.

(*c*) The garments ordered are to be made by the contractor to the measurements of the rating and are to be tried on at the contractor's premises at once in the basted or unfinished condition and again in the finished state.

(*d*) The garments are to be made to the complete satisfaction of the rating but must conform to service requirements and specifications held by the contractor.

(*e*) Completion of garments is to be effected as soon as possible after the date of measurement of the rating, or as otherwise arranged by mutual consent between the rating and the contractor.

(*f*) Delivery of garments is to be taken at the contractor's premises, otherwise at the rating's expense.

3. Ratings are warned that they are responsible for ensuring that uniforms obtained under the contract or from private fitters are made strictly to the approved patterns and that they are liable to disciplinary action if incorrect uniform is worn.

4. In addition to the supply of personal requirements of made-to-measure garments, the contract provides for the supply of garments against official orders in circumstances where this may be necessary. In these circumstances the following conditions shall apply—

(*a*) Orders shall be placed by Supply Officers on Treasury Form 11 accompanied by a properly completed self-measurement form (if ratings are unable to attend for measurement) and form N.A. 4.

(*b*) Garments shall be completed as soon as possible after receipt by the contractor of the official order and delivered by parcel post to the address shown thereon, postal charges being to the account of the ship or establishment concerned.

(*c*) Unsatisfactory garments supplied against official orders shall be returned to the contractor to be altered to the complete satisfaction of the ordering officer and at the contractor's expense, including forwarding charges each way.

5. This order will be reprinted for posting on notice boards.

(DV 930/52/2.)

UNCLASSIFIED. Cancelled C N O. 523/62

761.—Contracts for Ratings' Made-to-Measure Uniforms at Sydney and Perth—1960–61.

The following prices will apply until 30th June, 1961, for ratings' made-to-measure uniforms obtained from the Sydney and Perth contractors, viz., Evers & Cohen Pty. Ltd., 16 Wentworth Avenue, Sydney, Wende Bros., 80 Barrack Street, Perth and Jackman's, 861 Hay Street, Perth.

Items.	*Evers & Cohen Pty. Ltd.*	*Wende Bros.*	*Jackman's.*
	£ s. d.	£ s. d.	£ s. d.
R.A.N. Ratings—			
Jacket, lightweight serge, for—			
(*a*) C.P.O., with gilt buttons	10 10 0	—	9 7 9
(*b*) P.O., with gilt buttons	10 5 5	—	9 2 11
(*c*) Other ratings with black horn buttons	9 18 1	—	8 14 0
(*d*) Naval Artificer Apprentices ..	10 7 6	—	—
Trousers, lightweight serge, Classes I. and III.	4 2 7	—	4 10 10
Jumper, seaman's serge	5 14 4	8 14 7	—
Trousers, seaman's serge, Class II. ..	4 14 11	7 10 3	—
Overcoat, with gilt buttons	13 10 2	17 13 2	—
Overcoat, with horn buttons	12 19 1	17 2 10	—
Naval Dockyard Police—			
Jacket, lightweight serge, police ..	9 19 8	—	8 15 11
Extra Charges—			
Sewing on of badges, chevrons, &c. ..	0 11 0 per uniform	0 7 6 each	—
Taping on bottoms of trousers, seaman's serge, Class II.	—	0 12 6 per pair	—

Terms—

Evers and Cohen Pty. Ltd.—2½ per cent., 30 days.
Wende Bros.—Nett.
Jackman's—Nett.

2. The conditions of the contracts are—

(*a*) When ordering garments, the rating must present to the contractor a written authority, on form A.S. 87X, signed by the Supply Officer of his ship, if one is borne, otherwise by the Commanding Officer or an officer delegated by him. This authority is to state, the rating's name, official number, rating, ship or establishment in which serving, and must specify in detail the articles and quantities thereof authorized to be purchased. Unless form A.S. 87X containing the full details required is lodged with the contractor at the time of ordering, the order may not be accepted.

(*b*) The rating must sign the order book of the contractor when placing the order and make an initial payment of at least the sum shown at* below. All orders are to be paid in full on delivery.

(*c*) The garments ordered must be made by the contractor to the measurements of the rating and are to be tried on at the contractor's premises at least once in the basted or unfinished condition and again in the finished state.

(*d*) The garments are to be made to the complete satisfaction of the rating but must conform to service requirements and specifications held by the contractor.

(*e*) Completion of garments is to be effected within the time shown at * below from the date of measurement of the rating or as otherwise arranged by mutual consent between the rating and the contractor, the delivery period to be subject to the rating attending for a try-on on the date specified by the contractor.

(*f*) Delivery of garments is to be taken at the contractor's premises, otherwise at the rating's expense.

3. Ratings are warned that they are responsible for ensuring that uniforms obtained under the contracts or from private fitters are made strictly to the approved patterns and that they are liable to disciplinary action if incorrect uniform is worn.

4. In addition to the supply of personal requirements of made-to-measure garments, the contracts provide for the supply of garments against official orders in circumstances where this may be necessary. In these circumstances the following conditions shall apply—

(*a*) Orders shall be placed by the Supply Officers on Treasury Form 11, accompanied by a properly completed self-measurement form (if ratings are unable to attend for measurement) and form N.A. 4.

(*b*) Garments shall be completed within the time shown at * below of receipt by the contractor of the official order and delivered by parcel post to the address shown thereon, postal charges being to the account of the ship or establishment concerned.

(*c*) Unsatisfactory garments supplied against official orders shall be returned to the contractor to be altered to the complete satisfaction of the ordering officer and at the contractors' expense, including forwarding charges each way.

5. This order will be reprinted for posting on notice boards.

6. Navy Order 106 of 1960 is hereby cancelled.

* *Note.*—

		Initial Payment. s. d.	*Delivery.*
Sydney ..	Evers & Cohen Pty. Ltd. ..	25 0	21 days.
Perth ..	Wende Bros.	5 0	14 days.
	Jackman's—Coats	5 0	10 days.
	Trousers		8 days.

(DV 930/52/2.)

(*Navy Order* 106 *of* 1960.)

UNCLASSIFIED → Cancelled C NO 526/62

762.—Women's Royal Australian Naval Service—Made-to-Measure Uniforms for Officers—Melbourne and Sydney—1960–61.

Made-to-measure uniforms for officers of the Women's Royal Australian Naval Service may be obtained from the Commonwealth Government Clothing Factory, Miles Street, South Melbourne, and Evers and Cohen Pty. Ltd., 16 Wentworth Avenue, Sydney.

2. Details of the 1960–61 contract at Sydney and the Commonwealth Government Clothing Factory prices have been communicated direct to the authorities concerned. Clothing Factory prices are also promulgated in Navy Order 757 of 1960.

3. Navy Orders 817 and 955 of 1959 are hereby cancelled.

(DV 930/52/2.)

(*Navy Orders* 817 *and* 955 *of* 1959 *and* 757 *of* 1960.)

UNCLASSIFIED → Cancelled C NO 527/62

763.—Women's Royal Australian Naval Service—Made-to-Measure Uniforms for Ratings—Melbourne and Sydney—1960–61.

Made-to-measure uniforms for ratings of the Women's Royal Australian Naval Service may be obtained from the Commonwealth Government Clothing Factory, Miles Street, South Melbourne, and Evers and Cohen Pty. Ltd., 16 Wentworth Avenue, Sydney.

2. The following prices will operate during the period 1st July, 1960 to 30th June, 1961—

	C.G.C.F. £ s. d.	*Evers & Cohen Pty. Ltd.* £ s. d.
Jacket, diagonal serge	10 1 0 Nett	9 15 0 *Less* 2½ per cent.—30 days.
Skirt, diagonal serge	2 14 6 Nett	3 17 8 *Less* 2½ per cent.—30 days.

3. Navy Order 8 of 1960 is hereby cancelled.

(DV 930/52/2.)

(*Navy Order* 8 *of* 1960.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED → Cancelled C NO 515/62

764.—Officers' Mess Traps—Replacement Allowances for 1960–61.

Consequent on the revision of prices to be charged for Mess Gear, details of which have been distributed, the authorized amounts to which free replacement of consumable items of officers mess traps may be made for the financial year 1960–61 are as follows—

	In Stationary Ships and Establishments.			In Seagoing Ships.		
Mess—	£	*s.*	*d.*	£	*s.*	*d.*
Flag Officer		..		158	5	3
Commodore or Captain	64	0	6	76	16	6
Flag Captain		..		45	0	3
Commander or Lieutenant-Commander in Command of detached Independent Command ..	37	5	6	44	14	9
Ward Room—						
Mess of one officer..	12	3	0	14	10	9
Mess of two officers	20	18	6	25	2	3
For every officer borne in excess of two ..	5	6	3	6	11	5

2. All consumable stores drawn against the above allowances are to be valued at the prices shown in the " Official Memorandum—Fixed Issuing Price List for Mess Gear " dated 1st July, 1960.

3. Replacement allowances are to be calculated in accordance with Navy Order 546 of 1959.

4. Navy Order 725 of 1959 is hereby cancelled.

(DV 914/52/35.)

(*Navy Orders* 546 *and* 725 *of* 1959.)

UNCLASSIFIED. Cancelled CNO. 516/62

765. ~~—Ratings'~~ Mess Utensils—Replacement Allowances for 1960–61.

Consequent on the revision of prices to be charged for Mess Gear, details of which have been distributed, free replacement of consumable items of mess utensils will be allowed for Chief Petty Officers, Petty Officers and Seamen's Messes in H.M.A. ships and establishments during the financial year 1960–61 up to the following amounts—

	£	*s.*	*d.*	
(*a*) Chief Petty Officers and Petty Officers ..	2	6	6	per head.
(*b*) All other ratings	1	2	9	per head.
(*c*) W.R.A.N.S. ratings messed separately ..	2	6	6	per head.

2. All consumable stores drawn against the above allowances are to be valued at the prices shown in the " Official Memorandum—Fixed Issuing Price List for Mess Gear " dated 1st July, 1960.

3. Replacement allowances are to be calculated in accordance with Navy Order 546 of 1959.

4. Navy Order No. 724 of 1959 is hereby cancelled.

(DV 914/52/35.)

(*Navy Orders* 546 *and* 724 *of* 1959.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
19th September, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

766.—Books—Distribution of Non-Accountable Publications During July, 1960.

The non-accountable publications, amendments to A.P.'s, B.R.'s, miscellaneous publications, &c., and A.F.O. " SC " Series contained in the appendix to this order, have been distributed to ships and services during July, 1960. Article 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments, referred to in the appendix to this order, are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Navy Order 1063 of 1958.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	15th April, 1960.
Aeroplane	6th May, 1960.
Aeroplane	13th May, 1960.
Aeroplane	20th May, 1960.
Aeroplane	27th May, 1960.
Aeroplane	3rd June, 1960.
Aircraft	Volume 39, No. 9, June, 1960.
Aircraft	Volume 39, No. 10, July, 1960.
The Communicator	Volume 14, No. 1, Easter, 1960.
Fibres and Plastics	Volume 21, No. 6, June, 1960.
Flight	29th April, 1960.
Flight	6th May, 1960.
Flight	13th May, 1960.
Flight	20th May, 1960.
Manual of the Audit Act and Treasury Regulations	Issue No. 28, Pages 1–11, dated 15th March, 1960.
N.A.M.A.N.	N.2091–N.2102, dated 30th June, 1960.
The Petty Officer	Volume I., No. 2, April, 1960.
Post Office Guide	Supplement No. 58, April, 1960.
Post Office Guide	Supplement No. 59, May, 1960.
Post Office Guide	Supplement No. 60, June, 1960.
Post Office Guide	Airmail Schedule, No. 17, March, 1960.
United Nations Review	Volume 6, No. 11, May, 1960.
United States Naval Institute Proceedings	Volume 86, No. 1, January, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 4	Amendment No. 3.
B.R. 31	Appendix No. 6, April, 1960.
B.R. 31	Appendix No. 16, March, 1960.
B.R. 31	Chapter 44, March, 1960.
B.R. 70/59	Supplement, March, 1960.
B.R. 125, 1959–60	Supplement No. 11, May, 1960.
B.R. 125, 1959–60	New Entries, No. 11, May, 1960.
B.R. 128 (1), July, 1959	Supplement No. 6, April, 1960.
B.R. 129 (4) (1)	17th Edition, Supplement No. 3.
B.R. 129 (4) (2)	17th Edition, Supplement No. 3.
B.R. 155C (1)	Amendment No. 7.
B.R. 155C (6)	4.
B.R. 207/1957	3.
B.R. 333 (2)	57.
B.R. 601 (2)	Errata.
B.R. 667, 34th Edition	Cumulative Supplement No. 5 dated 26th May, 1960.
B.R. 667, 34th Edition	Noter-up Issue No. 5, dated 26th May, 1960.
B.R. 675/1957	Amendment No. 8.
B.R. 763, Vol. III., 6th Edition	New Pages, 1284 and 1285.
B.R. 763, Vol. III., 6th Edition	Supplement No. 3, dated 31st December, 1959.
B.R. 810/52, Section 1	Amendment No. 9.
B.R. 1043 (2)	Amendments Nos. 4 and 5.
B.R. 1066/1955	Amendment No. 5.
B.R. 1159	Amendments Nos. 12 and 13.
B.R. 1332 (12)	Amendment No. 6.
B.R. 1332 (13)	6.
B.R. 1644 (2) (B)	2.
B.R. 1730/1957	4.
B.R. 1739/1958	1.
B.R. 1794	13.
B.R. 1822 (3)	3.
B.R. 1837 (4), Division T, Section TA	2.
B.R. 1837 (4), Division T, Section TB	2.
B.R. 1837 (4), Division T, Section TF	1.
B.R. 1837 (4), Division T, Section TH	2.
B.R. 1837 (4), Division T, Section TJ	3.
B.R. 1837 (4), Division U, Section UA	3.
B.R. 1837 (4), Division U, Section UD	3.
B.R. 1837 (4), Division U, Section UC	2.
B.R. 1837 (4), Division U, Section UE	3.
B.R. 1837 (4), Division U, Section UQ	5.
B.R. 1837 (4), Division U, Section UR	5.
B.R. 1837 (4), Division U, Section US	4.
B.R. 1837 (4), Division U, Section UT	4.
B.R. 1837 (4), Division U, Section UV	4.
B.R. 1837 (7), Division J, Section JC	6.
B.R. 1837 (7), Division J, Section JD	13.
B.R. 1837 (7), Division J, Section JF	6.
B.R. 1837 (7), Division J, Section JJ	6.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 1837 (7), Division J, Section JP	9.
B.R. 1837 (7), Division J, Section JT	4.
B.R. 1837 (7), Division K, Section KB	16.
B.R. 1837 (7), Division K, Section KF	7.
B.R. 1837 (7), Division K, Section KM	8.
B.R. 1837 (7), Division K, Section KS	4.
B.R. 1837 (7), Division K, Section KZ	14.
B.R. 1837 (8), Division M, Section MA	10.
B.R. 1837 (8), Division M, Section MB	10.
B.R. 1837 (8), Division M, Section MC	10.
B.R. 1837 (8), Division M, Section MM	14.
B.R. 1837 (8), Division M, Section MP	16.
B.R. 1837 (8), Division M, Section MV	14.
B.R. 1837 (8), Division M, Section MX	9.
B.R. 1837 (8), Division M, Section MY	11.
B.R. 1837 (8), Division M, Section MZ	8.
B.R. 1846 (1) (2)	13.
B.R. 1865C/1959—(Addendum to B.R. 1865 A and B)	1.
B.R. 1944 (3)	Australian Amendment No. A.N. 1.
B.R. 1981	Amendment No. 13.
B.R. 1988	Amendments Nos. 24, 25 and 26.
B.R. 2047A (1)	Amendment No. 5.
B.R. 2047A (2)	5.
B.R. 2047A (3)	5.
B.R. 2047A (4)	5.
B.R. 2047A (11)	3.
B.R. 2047A (19)	4.
B.R. 2047A (20)	5.
B.R. 2047A (21)	2.
B.R. 2047B (5)	6.
B.R. 2047B (6)	5.
B.R. 2050 (361)	1.
B.R. 2050 (369)	5.
B.R. 2050 (373B)	5.
B.R. 2050 (399A)	6.
B.R. 2050 (402B)	5.
B.R. 2050 (402C)	5.
B.R. 2050 (581)	6.
B.R. 2050 (641)	3.
B.R. 2050 (644)	3.
B.R. 2050 (653)	2.
B.R. 2050 (656)	2.
B.R. 2050 (689)	1.
B.R. 2125 (5)	3.
B.R. 3010/1958	1.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
A.C.P. 118–1 (European Supplement No. 1)	S.C. 10/60, Change No. 11.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 162.
880A, Vol. 1	A.L. 27.
1086, Book 3, Part 2 (2nd Edition)	A.L. 127, 128 and 129.
1086, Book 4, Part 2 (2nd Edition)	A.L. 54.
1086, Book 4, Part 3 (2nd Edition)	A.L. 83.
1086, Book 8, Part 1 (2nd Edition)	A.L. 56.
1086, Book 9 (2nd Edition)	A.L. 128 (Erratum).
1086, Book 11 (2nd Edition)	A.L. 151.
1086, Book 15 (2nd Edition)	A.L. 150.
1234A, Vol. 1	A.L. 6.
1275A, Vol. 1, Section 16	A.L. 37 and 38.
1275A, Vol. 1, Section 18	A.L. 33 (with Corrigendum).
1275A, Vol. 1, Section 26	A.L. 25.
1275G, Vol. 1	A.L. 64 and 65.
1275T, Vol. 1	A.L. 85.
1355D, Vol. 1	A.L. 32 and 33.
1464D, Vol. 1	A.L. 202 and 208.
1464G, Vol. 1	A.L. 163, 164 and 165.
1492A, Vol. 1	A.L. 89.
1500M.L.	A.L. 3.
1641F, Vol. 1, Part 2 and Vol. 5 (2nd Edition)	A.L. 15.
1661B, Vol. 1 (2nd Edition)	A.L. 96.
1661C, Vol. 1 (2nd Edition)	A.L. 76.
1661E, Vol. 1 (2nd Edition)	A.L. 89.
1664A (2nd Edition), Vol. 2, Part 3, Book 1	A.L. 6, 7, 21, 22, 23, 24 and 25.
1664A (2nd Edition), Vol. 2, Part 3, Book 2	A.L. 15, 18 and 19.
1803B, Vol. 2, Part 2	A.L. 98.
1803B, Vol. 2, Part 3	A.L. 99 and 100.
1803D, Vol. 1, Book 1	A.L. 60.
1803D, Vol. 1, Book 3	A.L. 118, 119 and 120.
1803D, Vol. 2, Part 3	A.L. 263 and 764.
1803E, Vol. 1	A.L. 118.
1803E, Vol. 2, Part 2	A.L. 78.
1803E, Vol. 2, Part 3	A.L. 88 and 89.
1803N, Vol. 1, Book 2	A.L. 17.
1803R, Vol. 1	A.L. 75.
1803S, Vol. 1, Book 1	A.L. 12.
1803T, Vol. 1	A.I.L. 1/60 A.I.L. 2/60 A.I.L. 3/60 A.L. 84.
1803T, Vol. 6	A.L. 52.
2039M.L.	A.L. 4.
2276F (2nd Edition), Vol. 3	A.L. 1.
2276J, Vol. 1	A.L. 25.
2306B, Vol. 1 and Vol. 6 (2nd Edition)	A.L. 6.
2337, Vol. 1, Book 1	A.L. 49 and 50.
2337, Vol. 1, Book 2	A.L. 44.
2337, Vol. 6	A.L. 78.
2517A, Vol. 1	A.L. 10.
2531J, Vol. 1	A.L. 12.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2531L, Vol. 1	A.L. 9.
2533C, Vol. 1 (3rd Edition)	A.L. 5.
2533C, Vol. 2, Part 1	Mod. No. Radio/8, A.L. 1 Mod. No. Radio/9, A.L. 1 Mod. No. Radio/11, A.L. 1.
2538HA, Vol. 4, Part 6 (N) (Issue 2) (Office and Working Copies)	A.L. 3.
2568F, Vol. 3, Parts 3 and 4	A.L. 4.
2656A, Vol. 1 (2nd Edition)	A.L. 7, 8 and 9.
2802A, Vol. 1, Parts 1 and 3 (2nd Edition)	A.L. 44.
2876A, B and E, Vol. 3 (3rd Edition) ..	A.L. 3.
2887N, Vol. 1 and Vol. 6	A.L. 19.
2887H	A.L. 23.
2892F, Vol. 3, Part 1 (2nd Edition) ..	A.L. 12.
3042A, Book 3.	A.L. 2.
3280A	A.L. 16.
3280B	A.L. 16.
3358	A.L. 4 and 5.
4099J, Vol. 3, Part 2 (App. " A ", 2147) ..	A.L. 50.
4117B, Vol. 1 and 6	A.L. 25 and 26.
4121M, L	A.L. 4.
4269C, Vol. 1	A.L. 66.
4269C, Vol. 3, Part 1	A.L. (RAN) 1.
4269C, Vol. 3, Part 2, App. " A ", 1970 ..	A.L. 60 and 61.
4269C, Vol. 4, Part 3 (N) (Issue 1) (Office and Working Copies)	A.L. 11.
4269C, Vol. 5, Part 2 (N) (Issue 3) ..	A.L. 7.
4282A, Vol. 1	A.L. 70.
4282C, Vol. 1	A.L. 35 and 39.
4288, Vol. 1, Part 1	A.L. 57 and 58.
4288, Vol. 1, Part 2 and Vol. 5	A.L. 79 and 80.
4300, M.L., Vol. 2	A.L. 4.
4303B, Vol. 1, Book 1	A.L. 31.
4303B, Vol. 1, Book 2	A.L. 18 and 19.
4303E, Vol. 1	A.L. 60.
4303Z, Vol. 1	A.L. 55.
4306A	A.L. 41.
4320 M.L.	A.L. 5.
4340, Vol. 1, Book 1	A.L. 21.
4340, Vol. 1, Book 2	A.L. 42 and 43.
4340, Vol. 4, Part 6, Book 2 (2nd Edition)	A.L. 4.
4343, Vol. 1	A.L. 161 and 163.
4343, Vol. 6	A.L. 30, 31 and 32.
4343A, Vol. 6	A.L. 14 and 15.
4343B, Vol. 1, Book 1	A.L. 13.
4343B, Vol. 1, Book 2	A.L. 23.
4343B, Vol. 1, Book 3	A.L. 21, 22 and 23.
4343B, Vol. 6	A.L. 26.
4343C, Vol. 1, Book 1	A.L. 19 and 20.
4343C, Vol. 1, Book 3	A.L. 16.
4343C, Vol. 6	A.L. 13.
4343D, Vol. 1, Book 1	A.L. 7.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4343D, Vol. 1, Book 2	A.L. 24.
4343D, Vol. 1, Book 3	A.L. 52 and 54.
4343D, Vol. 1, Book 4	A.L. 22.
4343D, Vol. 6	A.L. 74 and 75.
4343E, Vol. 1	A.L. 132, 133, 134, 135 and 136.
4343E, Vol. 6	A.L. 8.
4360C, Vol. 1	A.L. 35.
4360C, Vol. 3, Part 1	A.L. 11.
4361, Vol. 6, Part 4	A.L. 27.
4361D, Vol. 3, Part 2 (App. " A ", 2015) ..	A.L. (RAN) 5.
4361F, Vol. 3, Part 2 (App. " A ", 2076) ..	A.L. (RAN), 6.
4411A, Vol. 1	A.L. 10 and 11.
4471A, Vol. 1, Part 2	A.I.L. 1/60.
4487, Vol. 6	A.L. 24. (Altering Designation to A.P. 4487A, B, D and E, Vol. 6).
4487A, B, D and E, Vol. 5, Part 2 (N) (Issue 3)	A.L. 6.
4487A and D, Vol. 4, Part 3 (N) (Issue 2) (Office and Working Copies)	A.L. 12.
4487B and E, Vol. 5, Part 3 (N) (Issue 1) ..	A.L. 14.
4511, Vol. 1 and Vol. 6	A.L. 60.
A.P. (N) 377	A.L. (RAN) 28.
A.P. (N) 400 (G.A.)	A.L. 14.
A.P. (RAN) 101	A.L. 33.
N.A.M.O. Engines	E. (AS) 14 (14.4.60) E. (AS) 15 (30.3.60) E. (RR) 55 (11.4.60) X.95 (25.3.60) X.96 (11.4.60) X.100 (1.4.60) STI/Double Mamba/6 (29.3.60) STI/Double Mamba/6 (Diagram) SI/Goblin/9E (1.4.60).
N.A.M.O. General	R.70 (17.3.60) R.86 (14.4.60) X.123 (17.3.60) STI/Electrical/180A (31.3.60) STI/Electrical/181 (14.4.60) STI/RAA/145 (25.3.60) STI/RAA/145 (Diagram).
N.A.M.O. Miscellaneous	Sea Prince/X.8 (11.4.60).
N.A.M.O. Meteor	STI/131 (25.3.60).
N.A.M.O. Sea Venom	R.9 (14.4.60) X.73 (Issue 2) (8.4.60).
N.A.M.O. Westland Whirlwind	X.23 (Issue 2) (17.3.60) X.32 (11.4.60) STI/63A (1.4.60) STI/66 (24.3.60) STI/67 (30.3.60).
R.A.N.A.M.O. Ejection Seat	No. 10 (Issue 2) (April, 1960) No. 11 (March, 1960).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
R.A.N.A.M.O. Gannet	SI/RAN/33 (Issue 2) (June, 1960).
R.A.N.A.M.O. General	A.L. 15 G.22 (Issue 2) (June, 1960) L64 (June, 1960) Q.25 (Issue 2) (June, 1960) Q.26 (February, 1960) STI/RAN/16 (February, 1960).
R.A.N.A.M.O. Goblin	X.1 (June, 1960) STI/RAN/10 (June, 1960).
R.A.N.A.M.O. Leonides	X.3 (June, 1960).
R.A.N.A.M.O. Sea Venom	A.42 (June, 1960) STI/RAN/12 (Issue 2) (March, 1960) STI/RAN/74 (February, 1960) SI/RAN/30 (June, 1960).
R.A.N.A.M.O. Sycamore	X.10 (June, 1960) STI/RAN/41 (June, 1960).
R.A.N.A.M.O. Vampire Trainer	STI/RAN/50 (June, 1960).
Air Clues	March, 1960 April, 1960.
Air Pictorial	April, 1960.
D.C.A. Aeronautical Information Circulars	16/60 (22.6.60) 20/60 (8.7.60) 21/60 (15.7.60).
D.C.A. Aviation Safety Digest	No. 22 (June, 1960).
D.C.A. NOTAM	No. 2/1960 (20.6.60).
R.A.F. Flight Information Publication—	A.L. 13 to T.A.P. Check List (29.2.60)
Terminal Approach Procedure Charts—Far East Area—High and Low Altitudes	A.L. 14 to T.A.P. Check List (29.2.60).
A.M.P. 326C, Issue 6	A.L. 1.
A.A.P. 382, Vol. 1	A.L. 3.

Title.	*Date.*
Lloyds Shipping Index	4th July, 1960.
Lloyds Shipping Index	11th July, 1960.
Lloyds Shipping Index	18th July, 1960.
Lloyds Shipping Index	25th July, 1960.

(DNAS 465/57/215.)

(*Navy Order* 1063 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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C.N.O.'s 767-790/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
21st September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

7116/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

767.—A.B.C.D.—Exercises—Closing Down Machinery Spaces.

(*A.F.O.* 1106/1960.)

A number of cases have occurred recently of heat exhaustion collapse of engineering personnel in machinery spaces while carrying out closing down trials or exercises.

2. Although it is already well known that the environment in closed down machinery spaces very quickly reaches the limits of habitability, the time being of the order of 15 to 20 minutes in tropical and 30 to 60 minutes in temperate waters for typical warship machinery spaces, reliable information about the endurance of personnel at very high temperatures and humidities is so sparse, the reaction of personnel to these conditions so variable, and measurement of environmental conditions so subject to error, that limiting conditions to avoid casualties cannot be laid down.

3. As a general rule, watchkeepers can safely remain in machinery spaces for 10 minutes after closing down in tropical waters, and for longer periods in temperate waters. The safe limit varies widely with the class of ship, the power at which the machinery is being operated, the state of maintenance, the climatic conditions and the extent to which watchkeepers are acclimatized to a high temperature environment by recent continual exposure. Conditions at the time and the standard of training achieved must be considered when planning a trial or exercise.

4. The following precautions are therefore to be observed when exercising closing down machinery spaces—

(*a*) (i) In tropical waters, machinery spaces are not to be kept manned for more than 20 minutes after closing down and watchkeeping spells are to be limited to 10 minutes.

(ii) In temperate waters, closing down should normally be limited to 30 minutes, but this may be extended to 60 minutes in favourable circumstances. Watchkeepers below on closing down should be relieved after 15 minutes and subsequent spells should be limited to 10 minutes, but some increase in these periods is permissible in favourable circumstances.

(*b*) Before re-entering a compartment in which the above times of closing down have been exceeded, or which has been evacuated because of excessive heat, full ventilation is to be run for 5 minutes. In emergency, ventilation is to be fully restored before re-entering.

(*c*) The instructions in (*b*) above apply to remote controlled compartments when closed down.

(*d*) Only men who are entirely fit are to remain below during closing down exercises.

(*e*) The number of men on watch is to be reduced to a minimum, and watchkeepers are to take all possible advantage of cooler positions such as low down in the compartment and near main condensers. No attempt is to be made to maintain a watch in the hotter parts of machinery spaces.

5. Closing down machinery spaces is not to be exercised under *extreme* climatic conditions such as exceptionally hot weather in tropical waters, unless such closing down is required for the purposes of a formal trial.

(DME 156/51/22.)

UNCLASSIFIED.

768.—" Knock for Knock " Agreements—Naval Vehicles.

" Knock for Knock " Agreements affecting Commonwealth owned or controlled vehicles operate between the Commonwealth and the various Insurance Companies and public bodies listed in the following appendixes to this order—

Appendix A.—Agreements with self insurers in which property damage provisions are not included.

Appendix B.—Agreements with self insurers in which property damage provisions are included.

Appendix C.—Agreements with insurers in which property damage provisions are not included.

Appendix D.—Agreements with insurers in which property damage provisions are included.

2. The effect of these agreements in relation to the Department of the Navy is that where a Naval vehicle is involved in an accident with a vehicle insured with one of the insurers or owned by one of the self-insured bodies listed in the appendixes, each party will bear its own expenses of repairing its vehicle, irrespective of the responsibility for the accident. The Agreements shall not prejudice any claim by or on behalf of the insured person or party, servant of the Commonwealth, or any other person or party, for consequential damage and/or personal injury sustained.

3. Under the agreements with the companies listed in Appendixes C and D, the insurer undertakes to bear the cost of damage to the insured vehicle, subject to the terms and conditions of its policy. A number of policies issued by companies subscribing to the agreements contain a " franchise " clause providing for the owner of the insured vehicle to bear the cost of damage up to a specified amount and consequently agreements will not operate in respect of claims for sums not exceeding the specified amounts.

4. The Agreements with the companies listed in Appendixes B and D include provision for the mutual sharing of certain incidental property damage repair costs, i.e., each party shall pay, irrespective of the liability for the accident, equal proportions of the cost of repairing or making good such damage, but the company insuring such property shall not be liable to pay more than 50 per cent. of the sum insured under its policy.

5. The " Knock for Knock " Agreements do not cover private cars which are being used for official purposes.

6. The " Knock for Knock " principle also applies inter-departmentally between Commonwealth Departments. When damage to Commonwealth property (including vehicles) arises from an accident in which no outside person or authority is involved, each Commonwealth Department will bear the cost of repairing the damage to its own property, irrespective of the responsibility for the damage.

7. When a Naval vehicle is involved in an accident, the following procedure should be adopted—

(*a*) The driver of the Naval vehicle should inquire of any other party concerned whether he holds a comprehensive policy of insurance for his vehicle and if so, the name of the insurance company and whether the policy contains a franchise clause. This information should be included in the driver's report.

(*b*) If the other party refuses to disclose such information, the driver of the Naval vehicle should record such refusal in his report.

8. Particulars of accidents covered by a " Knock for Knock " Agreement should be forwarded immediately to the insurance company or self-insured body concerned with a view to confirming the application of the agreement. When forwarding such particulars, brief details of the accident only, i.e., date and place of accident, registered numbers and types of vehicles involved and name and address of the owner of the other vehicle involved, should be furnished.

9. In every case when a claim arising out of an accident involving a Naval vehicle is received, inquiry should be made as to whether the claimant is insured and with what company. The following provisions will apply to the settlement of such claims—

(*a*) If the other party is insured with one of the insurance companies or is one of the self-insuring bodies named in the appendixes hereto—

(i) Insofar as the claim relates to damage to the other party's vehicle not covered by a franchise clause liability should be denied.

(ii) Insofar as the claim relates to damage to property other than the vehicle insured, personal injuries, loss of use of vehicle, while under repair, damage to vehicle not covered by the policy, &c., the matter should be referred to the local Deputy Crown Solicitor for advice.

(*b*) If it appears that a " Knock for Knock " Agreement is not applicable, the claim should be referred to the local Deputy Crown Solicitor for advice.

10. In the event of Naval property being damaged by impact by or through a vehicle or vehicles insured with a company listed in Appendixes B and D, the matter should be referred to the local Deputy Crown Solicitor with a view of recovery of portion of the cost of repair of such property damage.

11. In all cases, the advice of the Deputy Crown Solicitor should, on receipt, be forwarded to Navy Office for consideration.

12. Where doubt exists as to whether the other vehicle is covered by a " Knock for Knock " Agreement and the other party is considered to be responsible, a claim should be made immediately on the owner of the other vehicle, indicating that it is proposed to proceed with repairs to the Naval vehicle and extending him an opportunity to survey the damage and estimate the cost of repairs. Once the opportunity has been afforded and whether accepted or not, repairs to the Naval vehicle may be safely commenced without awaiting settlement of the question of liability.

13. Claims for damage to Naval vehicles will not be pursued when evidence is produced that a " Knock for Knock " Agreement applies to the accident in which the damage was sustained.

14. In certain circumstances, where a " Knock for Knock " Agreement is applicable, the amount of a " no-claim " bonus cancelled by the insurer may be paid by the Commonwealth.

15. In the event of a claim by an insured being received for the amount of a " no-claim " bonus, the matter should be referred to the local Deputy Crown Solicitor for advice. Treasury Instructions 15/20–15/25 refer.

16. Navy Orders 949 of 1958 and 146 and 375 of 1959 are hereby cancelled.

Appendix A.

AGREEMENTS WITH SELF INSURERS IN WHICH PROPERTY DAMAGE PROVISIONS ARE NOT INCLUDED.

Name of Authority.	*Remarks.*
(*a*) Commissioner for Road Transport and Tramways, New South Wales	(*a*) This Agreement also covers accidents with tramcars.
Launceston City Council.	
Melbourne Harbour Trust Commissioner.	
(*a*) Melbourne and Metropolitan Tramways Board.	
South Australia Railway Commissioner.	
(*b*) State Government of South Australia	(*b*) Includes all State Government Departments, Electricity Trust of South Australia, and the Municipal Tramways Trust. The term "vehicle" includes trams, motor omnibuses and trolley buses.
(*c*) State Government of Tasmania ..	(*c*) Includes all State Government Departments but excludes State Statutory Authorities.

Appendix B.

AGREEMENTS WITH SELF INSURERS IN WHICH PROPERTY DAMAGE PROVISIONS ARE INCLUDED.

Tasmanian Government Insurance,
General Manager.

Appendix C.

AGREEMENTS WITH INSURERS IN WHICH PROPERTY DAMAGE PROVISIONS ARE NOT INCLUDED.

Name of Authority.

Federation Insurance Ltd.
Medical and Dental Insurance Ltd.
National Employers' Mutual General Insurance Assoc. Ltd. (N.S.W.).
National Employers' Mutual General Insurance Assoc. Ltd. (Vic.).
N.R.M.A. Insurance Ltd.
Security & General Insurance Co. Ltd.
T. P. Clark and Co., Sydney.
Victorian Automobile Chamber of Commerce Insurance Co. Ltd.,

Appendix D.

AGREEMENTS WITH INSURERS IN WHICH PROPERTY DAMAGE PROVISIONS ARE INCLUDED.

A.

*Administration of Papua and New Guinea.
African Guarantee & Indemnity Co. Ltd.
*(*a*)Ajax Insurance Co. Ltd.
*Albion Insurance Company Limited.
Alliance Assurance Co. Ltd.
Amalgamated General Assurance Co. Pty. Ltd.
(includes: Adelaide Fire Office
Melbourne Fire Office
Sydney Fire Office
Brisbane Fire Office).
A.M.P. Fire and General Insurance Coy. Ltd.
*Australasian Catholic Assurance Coy. Ltd.
Assurance and Thrift Association Ltd.
Atlas Assurance Co. Ltd.
Australasian Mutual Insurance Society.
Australian Alliance Assurance Co.
*Australian Aluminium Production Commission.
Australian and Eastern Ins. Co. Ltd.
Australian Equitable Ins. Co. Ltd.
Australian General Insurance Co. Ltd.
*Australian Indemnity Insurance Co. Ltd.
Australian and International Insurances Ltd.
Australian Mutual Fire Ins. Soc. Ltd.
*Australian National Airlines Commission.
Australian National Assurance Co. Ltd.
Australian Natives Ass. Ins. Co. Ltd.
Australian Union Assurance Association Ltd.
Australia Netherlands Ins. Co. Ltd.
*(*a*)Automobile Fire & General Ins. Co. of Aust. Ltd.

B.

Baloise Marine Insurance Co. Ltd.
Bankers and Traders Insurance Co. Ltd.
British America Assurance Co.
British Commonwealth Insurance Co. Ltd.
British Crown Assurance Corp. Ltd.
British Equitable Assurance Co. Ltd.
British General Insurance Co. Ltd.
*(*a*)British Medical Insurance Co. of Vic. Ltd.
British Traders Insurance Co. Ltd.

C.

Caledonian Insurance Co.
Central Insurance Co. Ltd.
Century Insurance Co. Ltd.
Chamber of Manufactures Ins. Ltd.
Church of England Ins. Co. of Aust. Ltd.
City Mutual Fire Insurance Co. Ltd.
Club Motor Insurance Agency Pty. Ltd.
Colonial Mutual Fire Insurance Co. Ltd.
Commercial of Australia Ins. Co. Ltd.
Commercial Union Assurance Co. Ltd.
Commonwealth Bank Pool.
*Commonwealth General Assurance Corporation Ltd.
Commonwealth Insurance Co.
Congregational Ins. Co. of Aust. Ltd.
Contingency Insurance Co. Ltd.
Co-operative Ins. Co. of Aust. Ltd.
Cornhill Insurance Co. Ltd.

D.

Derwent and Tamar Assurance Co. Ltd.

E.

Eagle Star Insurance Co. Ltd.
*Eastern States Insurance Co. Ltd.
Eastern United Assce. Corp. Ltd.
Economic Insurance Co. Ltd.
*Edward Lumley & Sons (A.C.T.) Pty. Ltd.
*Edward Lumley & Sons (N.S.W.) Pty. Ltd.

APPENDIX D—*continued.*

*Edward Lumley & Sons (Vic.) Pty. Ltd.
*Edward Lumley & Sons (Q'ld.) Pty. Ltd.
*Edward Lumley & Sons (S.A.) Pty. Ltd.
*Edward Lumley & Sons (W.A.) Pty. Ltd.
*Edward Lumley & Sons (Tas.) Pty. Ltd.
*Edward Lumley & Sons (N.T.) Pty. Ltd.
*(*a*)Empire Insurances Ltd.
Employers Liability Ass. Corp. Ltd.
*Employers Mutual Indemnity Assoc. Ltd.
Equitable Probate & Gen. Ins. Co. Ltd.
*Excelsior Insurance Coy. Pty. Ltd.

F.

Farmers & Citizens Insurance Co. Ltd.
Farmers & Graziers Co-op. Grain Ins. and Agency Co. Ltd.
Farmers & Settlers Co-op. Co. of Aust. Ltd.
Federal Mutual Ins. Co. of Aust. Ltd.
Fylgia Insurance Company Ltd.
Fire & Accident Underwriters Ass.

G.

*General Accident Fire & Life Ass. Corp. Ltd.
*Government Insurance Office of N.S.W.
Gresham Fire & Accident Ins. Soc. Ltd.
Guardian Assurance Co. Ltd.
Guildhall Assurance Co. Ltd.

H.

Hanover Fire Ins. Co., New York.
Hartford Fire Insurance Co.
*Harvey Trinder (Vic.) Pty. Ltd.
*Harvey Trinder (S.A.) Pty. Ltd.
*Harvey Trinder (W.A.) Pty. Ltd.
*Harvey Trinder (Tas.) Pty. Ltd.
Helvetia Swiss Fire Insurance.
Hibernian Fire, Accident & Gen. Ins. Co. Ltd.

I.

Imperial Fire Office.
Industries Insurance Ltd.
Insurance Office of Australia.
Indemnity Marine Assurance Co. Ltd.
Insurance Corp. of Ireland Ltd.
Insurance Co. of North America.
*The Invincible Fire and General Insurance Coy. Ltd.

J.

Java Sea & Fire Insurance Co. Ltd.

L.

Lancashire Insurance Co.
Law, Union & Rock Insurance Co. Ltd.
Legal Insurance Co. Ltd.
Legal & General Assurance Soc. Ltd.
*Liberty Insurance Ltd.
Licences and General Ins. Co. Ltd.
Liverpool & London & Globe Ins. Co. Ltd.
Lombard Insurance Co. Ltd.
London Assurance.
London Guarantee & Accident Co. Ltd.
London & Lancashire Insurance Co. Ltd.

M.

Manchester Assurance Co.
Manchester Unity Fire Ins. Co. of Vic. Ltd.
Manufacturers' Mutual Insurance Ltd.
Master Builders Insurance Co. Ltd.
Mercantile Mutual Insurance Co. Ltd.
Mutual Fire & General Insurance Co. of Tasmania Ltd.

N.

National Co-operative Ins. Society Ltd.
National and General Ins. Co. Ltd.
National Ins. Co. of New Zealand Ltd.

APPENDIX D—*continued.*

National Union Insurance Society.
New India Assurance Co. Ltd.
New Zealand Insurance Co. Ltd.
New Zealand Accident Insurance Co.
North British & Mercantile Ins. Co. Ltd.
North Queensland Accident Ins. Co. Ltd.
Northern Assurance Co. Ltd.
Norwich & London Accident Ins. Co.
Norwich Union Fire Insurance Soc. Ltd.
*(*b*)Nottingham Insurance Co. Ltd.

O.

Ocean Accident & Guarantee Corp.
Oceanic Insurance Co. Ltd.
Orion Insurance Co. Ltd.

P.

Pacific Insurance Co. Ltd.
Palatine Insurance Co. Ltd.
Patriotic Assurance Co. Ltd.
Pearl Assurance Co. Ltd.
Perpetual General Ins. & G'tee Co. Ltd.
Phoenix Assurance Co. Ltd.
Prudential Assurance Co. Ltd.
Provincial Insurance Co. Ltd.

Q.

Queensland Insurance Co. Ltd.

R.

*(*a*)R.A.C. Insurance Pty. Ltd.
Real Australian Insurance Co. Ltd.
*Robert Paxton (Insurances) Pty. Ltd.
Royal Insurance Co. Ltd.
Royal Exchange Assurance of London.

S.

Scottish Insurance Corporation Ltd.
Scottish Union & National Insurance Co.
Sea Insurance Co. Ltd.
*Seven Seas Insurance Co. Pty. Ltd.
Skandia Insurance Co. Ltd.
South African Fire & Accident Ins. Co. Ltd.
South Australian Insurance Co. Ltd.
South British Insurance Co. Ltd.
Southern Star Fire Accident & General Insurance Co. Ltd.
Southern Union Insurance Co. of Aust.
Sphere Insurance Co. Ltd.
Standard Insurance Co. Ltd.
*State Government Ins. Office (W.A.).
State Assurance Co. Ltd.
*State Motor Car Insurance Office.
*Steeves Agnew & Co. (Vic.) Pty. Ltd.
*Steeves Agnew & Co. (W.A.) Pty. Ltd.
Sun Insurance Office Ltd.
Switzerland and General Insurance Co. Ltd.

T.

Tasmanian Insurance Co. Ltd.
*Transport & General Insurance Co. Ltd.
*Trinder Forsaith Insurances Pty. Ltd.
Triton Insurance Co. Ltd.

U.

Union Assurance Society Ltd.
Union Insurance Society of Canton Ltd.
United Insurance Co. Ltd.

V.

Vanguard Insurance Co. Ltd.
Victoria Insurance Co. Ltd.
Victorian Wheatgrowers Corp. Ltd.

W.

Western Assurance Co.
Western Australian Insurance Co. Ltd.
*Western Australian Government Ins. Fund.
Westralian Farmers Co-op. Ltd.
World Auxiliary Insurance Corp. Ltd.

Y.

Yorkshire Ins. Co. Ltd.

APPENDIX D—*continued.*

(*a*) The Agreements with these insurers do not extend to the Territory of Papua and the Mandated Territory of New Guinea.

(*b*) The Agreement with this insurer includes at the end of Clause 1 (*a*) and 1 (*b*) the words—" But does not include vehicles used for the conveyance or carriage of passengers for hire, fare or reward (ambulances excepted) or used under the " Drive Yourself System ".

* Not members of the Council of Fire and Accident Underwriters.

(DNAS 210/51/11.)

(*Navy Orders* 949 *of* 1958 *and* 146 *and* 375 *of* 1959.)

UNCLASSIFIED.

769.—Return of Signalling with Merchant Ships—Quarter Ended 30th June, 1960.

A.S. 174 returns for the quarter ended 30th June, 1960, show a total of 280 successful exercises and 30 reports of failure to establish communication. All exercises were conducted by flashing.

2. Exercises reported by H.M.A. ships were as follows—

H.M.A. Ship.	*British.*	*Other SEATO/NATO.*	*RFA.*
MELBOURNE	9	15	—
VOYAGER	11	11	—
VENDETTA	19	34	—
VAMPIRE	26	12	—
TOBRUK	12	3	—
QUEENBOROUGH	14	31	—
QUIBERON	10	—	—
QUICKMATCH	3	1	—
SWAN	26	4	—
DIAMANTINA	2	—	—
GASCOYNE	4	—	—
BARCOO	6	2	—
WARREGO	6	—	—
WOOMERA	3	—	—
KIMBLA	11	5	—

3. There were seven cases of Merchant Ship signalling reported as worthy of special mention which have been communicated to the shipping companies concerned.

4. The return of signalling with merchant ships is to be rendered in original only to Director of Signals Division in the following form—

(*a*) Total number of successful exercises with—
(i) British Merchant Vessels.
(ii) Other SEATO/NATO Merchant Vessels.
(iii) R.F.A.'s.

(*b*) Total number of failures to establish communication.

Note.—Nil returns are required.

(*c*) Details of merchant vessels worthy of special mention should be as follows—

Date, Shipping Co., Merchant Vessel, performance details.

5. The attention of Commanding Officers is drawn to the necessity for keeping this interest in merchant ship communications active and to ensure that Communication Officers adequately check the details of successful/unsuccessful exercises.

6. Navy Orders 361 and 506 of 1960 are hereby cancelled.

(DSD 77/5/2.)

(*Navy Orders* 361 *and* 506 *of* 1960.)

UNCLASSIFIED.

770.—Visits by Personnel to Areas other than Their Own.

Navy Order 600 of 1960 is to be amended as follows—

Delete in example, " C.N.O. 601/1960 " and *insert* in lieu " C.N.O. 600/1960 ".

(DTSR 42/22/45.)

(*Navy Order* 600 *of* 1960.)

Section 2.
PERSONNEL.

UNCLASSIFIED. Cancelled C N O. 619/62

771.—Aircraft Artificers, Mechanicians and Electrical Artificers (Air) Recognition by Department of Civil Aviation.

The Naval Board have been notified by the Department of Civil Aviation that certain concessions will be available to *ex* Fleet Air Arm ratings, who are desirous of making a career in the civil air industry, as follows—

(*a*) Aircraft Artificers and Mechanicians who have served five years in the Fleet Air Arm, will be eligible to sit for the Department's Basic Examinations for either Groups 1, 2, or 3 Category Airframe or Engine but not for both trades.

(*b*) If Fleet Air Arm service is over seven years they will be eligible to sit for both trades.

(*c*) Electrical Artificers (Air) will be eligible to sit for the Basic Electrical Examinations after five years Fleet Air Arm experience.

2. The effect of the above experience credits is that, after successful completion of the Basic Examinations, and six months experience in the civil industry on Group 2 and 3 aircraft with an approved course *ex* Fleet Air Arm personnel would be eligible

to sit for the Specific Type Examination. Successful completion of this examination would make them eligible for an Aircraft Maintenance Engineer's Licence. This would also apply to Group 1 Engines or Aircraft **without** an approved course and also to the Electrical Systems Category.

3. Department of Civil Aviation experience requirements for specific type transport aircraft which are used by the Fleet Air Arm and the civil industry, will be considered as having been met by Navy experience on such aircraft provided that it covers D.C.A. requirements for the addition of a rating (i.e., type).

4. Each individual's application for an Aircraft Maintenance Engineers Licence will be considered by the Department of Civil Aviation on its merits. Intending candidates for licences are advised to obtain full particulars from—

Regional Aircraft Surveyor,
Department of Civil Aviation (N.S.W. Region),
Private Mail Bag,
Post Office,
NORTH SYDNEY.

(DAMR 347/1/2.)

RESTRICTED.

772.—Armament Maintenance—Employment of User Ratings.

In order to achieve a high degree of availability of the armament in H.M.A. ships it is necessary for user ratings to be allocated to carry out the semi-skilled and unskilled components of the maintenance task, including the cleanliness of the equipment, under the direction of the officers responsible for its mechanical or electrical efficiency.

2. The requirement for semi-skilled and unskilled maintenance has been assessed and the minimum numbers of user ratings considered necessary are shown in the Appendix to this Order. In the case of Battle Class Destroyers and Type 15 Frigates the Reduced Peace Complements and limited role of the ships have been taken into account. Captains of H.M.A. ships are to ensure that these ratings are made available for the maintenance of the armament.

3. The ratings shown in Section 1 of the Appendix are to be employed full time, at sea and in harbour, on maintenance but should normally be available for sea watches after 1800. The ratings, shown in Section 2 of the Appendix are normally to be employed in the weapon maintenance party, but are availalbe for sea watches at all times.

4. The organization drawn up for the employment of the ratings shown in the Appendix must make allowance for occasions at sea or in harbour when the maintainer officer may need to work a section of his team out of routine on some specific task.

5. Although it is desirable for all user ratings to obtain maintenance experience, they should if possible not be changed round at intervals of less than six months.

6. While the present shortage of Ordnance Artificers exists, 1st Class Armourers may be drafted to ships to fill vacant O.A. complement billets.

7. It is appreciated that junior ratings of the weapon maintenance party will have to bear their share of special tasks such as store parties, but they should not be detailed for other daily routine tasks.

APPENDIX.

WEAPON MAINTENANCE PARTIES.

—	*Rate.*	*H.M.A.S. MELBOURNE.*	*Darings.*	*Battles.*	*Type 15.*	*Type 12.*
		Section 1.				
Semi-skilled component of maintenance	F.C.1	1	—	—	—	—
	F.C.2	3	2	1	1	1
	G.A.2	5	2	2	1	1
	Q.A.1	—	1	1	—	—
	Q.A.2	—	4	3	1	2
	U.W.1	—	1	—	1	1
	U.W.2	1		1		1
	U.W.3	1	—	—	1	—
	U.C.1	—	1	—	1	1
	U.C.2	1	1	1	—	—
	U.C.3	—	—	—	—	1
		Section 2.				
Unskilled component of maintenance	S.G. (C) or (Q)	13	12	6	1	4
	U.W.3	3	3	2	3	4
	U.C.3	—	1	1	1	1

(DMT 303/221/9.)

UNCLASSIFIED.

773.—Hard-Lying Money for Personnel in Ships Undergoing Refit or Whilst Reducing to Reserve.

Cancelled 232/62

With reference to I.P.I. 80/6, the Naval Board have approved that, in the case of seagoing ships, Hard-lying Money is payable during refit periods or whilst reducing to reserve.

2. With effect from 1st July, 1960, the following ships when in commission are to be regarded as seagoing for the purposes of the preceding paragraph—

H.M.A. Ships—
ANZAC.
BANKS.
BARCOO.
BASS.
DIAMANTINA.
GASCOYNE.
KIMBLA.
MELBOURNE.
PALUMA.
QUIBERON.
QUICKMATCH.
QUEENBOROUGH.
SWAN.
TOBRUK.
VAMPIRE.
VENDETTA.
VOYAGER.
WARREGO.
WOOMERA.

3. In addition, H.M.A. ships BANKS, BARCOO and BASS should be regarded as seagoing during refitting periods since commissioning, prior to 1st July, 1960.

4. Naval personnel living and sleeping on board H.M.A. ships, specified in paragraph 2 may, therefore, be paid Hard-lying Money in respect of any day on which the ship is undergoing refit, or reducing to reserve.

5. Payment during the periods specified in the preceding paragraph, is only to be made where the member otherwise qualifies for payment under the normal rules governing payment to personnel serving in a seagoing ship as contained in I.P.I. 80–80/5 and 80/7–80/9 inclusive.

6. The list of ships shown above will be amended as required.

7. Navy Order 731 of 1959 is hereby cancelled.

(HPB 252/6/4.)

(*Navy Order* 731 *of* 1959.)

UNCLASSIFIED.

774.—Medical and Hospital Treatment, Sick Leave and Date of Discharge for Members of the Permanent Naval Forces.

The conditions under which medical and hospital treatment may be provided for members of the Permanent Naval Forces, and the duration of such treatment have recently been reviewed and the conditions of this order will apply as from 1st July, 1960.

2. Under the new conditions, the retention of a member in the Service beyond six months will be determined according to whether or not the member's condition is attributable or not attributable to service. For a medical condition to be regarded as attributable to service, the member's claim must have been accepted under the Commonwealth Employees' Compensation Act or the Repatriation Act. The onus is on the individual to forward the claim. Therefore, if it appears on admission to hospital that the member's condition will need extended treatment, he should, in his own interests, lodge a claim under the appropriate act as soon as possible.

3. The following are the conditions which apply—

A. Pay—

(i) A member absent from duty on account of a disability (whether or not attributable to service) for which he is not himself responsible may, if not previously invalided from the Service, be retained on full pay for a period not exceeding six months subject to the provision of Section B.

(ii) Where a member becomes incapacitated whilst serving abroad, the Naval Board may determine a period in addition to that prescribed in (i) above, during which the member may continue to receive full pay but the total period on full pay shall not exceed twelve months.

(iii) A member who suffers a disability (other than V.D.) which is the result of his own misconduct will be placed on half pay (i.e., half his daily rate of pay but excluding all allowances) at the expiration of 30 days and shall forfeit all pay after 91 days. However, Marriage and Provision or Separation Allowance, if previously paid will continue to be credited in full even when the member has commenced to forfeit all pay. The amount of the member's contribution to the standard allotment will be reduced by one-half whilst the member is placed on half pay. This rate is shown in instruction 52/5 of I.P.I.

(iv) If the Captain is of the opinion that the member's condition is the result of serious and wilful misconduct, a full report of the circumstances is to be submitted to the Naval Board for decision.

Note.—If the member's entitlement to Marriage Allowance does not arise under instruction 49 (1) of I.P.I. (i.e., if he is not in receipt of the full rate of that allowance) the Naval Board will decide the rates of allowances to be paid and the amount of the member's contribution to the allotment.

B. Date of Discharge—

(i) Any member not in need of active medical treatment who is found to be unfit for further service by a Medical Board and is capable at that time of following either his pre-enlistment or some other occupation, will be discharged from the service as soon as possible after the findings of the Board of Medical Survey have been confirmed by the Naval Board.

(ii) When a member has been absent from duty and in receipt of active medical treatment on account of incapacity for a continuous period of 91 days, he is to be subjected to an interim medical survey in accordance with C.O.R. Article 557. In addition to making the usual recommendations regarding disposal of the member, the Survey Board is to give an opinion as to the likelihood of the member being fit to resume duty prior to the expiration of six months from the date of commencement of absence from duty. Instructions will then be issued from Navy Office as to the procedure to be adopted in each individual

case. In the case of a member whose disability is not attributable to service, and who is unlikely to be fit to resume duty within the six months' period, he is to be finally medically surveyed at the expiration of five months and discharged as soon as possible after the findings of the Medical Board of Survey are confirmed by the Naval Board, but not later than the day six months from the date the period of continuous absence from duty commenced. This applies also to members to whom paragraph 3, A, (iii) refers.

(iii) A member who is again absent from duty with the same complaint within fourteen days will be regarded for purposes of this order above as being continuously absent.

C. Medical and Hospital Treatment—

(i) A member of the Permanent Naval Forces will be entitled under this order to receive such medical attention (surgical or otherwise) and hospital treatment as is required to restore him as far as possible to normal health. It includes such medical, dental and surgical appliances as may be prescribed by a legally qualified medical practitioner as being essential to arrest or cure his condition, or to assist to rehabilitate him for civil life.

(ii) Hospital treatment includes convalescent treatment and will normally be afforded to a member of the Permanent Naval Forces in a Service or Repatriation Hospital but, where no such accommodation is available it may be given in—

(*a*) a public hospital; or

(*b*) if accommodation as in (*a*) is not available—in an intermediate hospital; or

(*c*) if accommodation in (*a*) and (*b*) are not available—in a private hospital.

(iii) Where an officer is admitted to a public hospital he should, where possible, be accommodated in an intermediate ward of that hospital.

(iv) Where a member is accommodated in a public hospital the charge to be paid will not exceed that legally recoverable from members of the general public.

D. Wounds, Injury or Disease Attributable to Service.

(i) A wound, injury or disease will be regarded for the purpose of these provisions, as attributable to service if such is accepted by the appropriate authority under the Commonwealth Employees' Compensation Act, the Repatriation Act or such other legislation as may be introduced to cover operational or active Service.

(ii) Where a wound, injury of disease is attributable to service within the meaning of (i) above, the following special provisions will apply to such members—

(*a*) Where the board of medical survey, with the concurrence of the Naval Board considers that a particular member's recovery or rehabilitation into civilian life may be furthered by retention in hospital for a further period; the member's discharge from the Service may be postponed accordingly. However, the maximum extension which may be granted is six months—making a total maximum period of twelve months hospitalization with pay.

(*b*) A member suffering from an incurable malignant disease whose expectation of life is a matter of months may be retained in hospital and his discharge from the Service postponed accordingly for as long as he is in need of active medical treatment provided that the total period of hospitalization with pay does not exceed a total maximum period of twelve months.

(*c*) In severe amputation, bonegrafting and skingrafting cases in which the treatment is necessarily prolonged, the Naval Board, on the recommendation of the Medical Director-General may authorize any period of up to six months additional to that specified in (*a*) above, making a total maximum period of hospitalization in such special cases of eighteen months.

4. Where a member (including a member whose injury or disease is not attributable to Service) who has reached the limit of the period for which he may be retained in pay under this instruction is, in the opinion of the Medical Director-General, too ill to be moved from a Repatriation or Service Hospital he may be retained there as long as the Medical Director-General considers essential but his discharge from the Service will not on that account be delayed. The member will be discharged from the Service immediately the limit of his category has been reached. Except as provided under paragraph 9, no charge will be made to the member for medical treatment whilst he is retained in hospital following discharge from the Service.

Conditions under which Sick Leave may be Granted.

5. (*a*) Sick leave may be granted to—

(i) Members requiring convalescence after a severe illness or operation, or illness due to service in the tropics or in an unhealthy climate on the recommendation of a Naval Medical Officer.

(ii) Members who elect to be treated privately and accept the cost of medical treatment as their own liability.

(iii) Members sick on shore in consequence of being unfit to travel.

(*b*) Sick leave may be approved for a period not exceeding 21 days by the Captain on the recommendation of the Medical Officer, but the Medical Director-General may, at his discretion, extend this period up to a maximum of three months in any one case.

Deferred Pay during Illness.

6. Where a member is eligible for credit of Deferred Pay, no reduction shall be made in Deferred Pay in respect of any period—

(*a*) during illness when reduced pay is drawn; or

(*b*) of sick leave granted on reduced pay.

Deferred pay is not credited in respect of any day for which Active Pay is not payable.

Leave and Pay when Invalided.

7. Members who are discharged " B.N.P.S." or " P.U.N.S." are entitled to pay and allowances for fourteen days following the date his discharge is approved by the Naval Board provided the periods prescribed in paragraph 3, *A* and *D* are not exceeded. Living Out Allowance is payable during this period, subject to the normal rules, except when the member is victualled.

Sick Leave Credits—Auxiliary Forces.

8. Sick leave credits which accumulated in respect of service with the Auxiliary Services prior to 1942 and " frozen " at that date are now cancelled. The provisions of this order will apply to such members.

Recovery of Cost of Medical Treatment.

9. The provisions of this order do not affect the operation of regulation 244 of the Naval Financial Regulations, clause 11 of article 186 or article 244 of Naval Financial Regulations and Instructions relating to the power of the Naval Board to require a member who has been provided with medical treatment to pay to the Department such amount, not exceeding the expenses incurred by the Department, as the Naval Board determines. (These provisions chiefly concern cases where members have possible third party claims as a result of accidents.)

10. Article 1782 of A.B.R. 5016 (R.I.) also refers. (Accidents to pillion riders, &c.)

Members admitted to Sick List before 1st July, 1960.

11. The new conditions will apply in all cases where a member is admitted to the Sick List on or after 1st July, 1960. Members admitted to the Sick List before that date, will continue to receive pay and treatment in accordance with previous conditions, except that a member whose condition is not attributable to Service will not be retained on pay and treatment for more than six months after 1st July, 1960.

(HPB 302/2/12.)

UNCLASSIFIED.

775.—Ration Allowance—R.N. Personnel.

The daily rates of ration allowance payable to R.N. personnel serving in Australia and in receipt of R.N. rates of pay and allowances, have been revised with effect from 1st July, 1960.

2. The following rates will operate from 1st July, 1960, until further notice—

Canberra	111 pence (sterling).
Sydney	104 pence (sterling).
Elsewhere	98 pence (sterling).

3. Navy Order 363 of 1960 and A.C.N.B. message 170F of 28th July are hereby cancelled.

(DNA 903/51/25.)

(*Navy Order* 363 *of* 1960.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

776.—Electronic Valves—Pre-Issue Testing.

Navy Order 278 of 1960 is to be amended as follows—

Paragraph 1—

Insert new sub-paragraph—

" (*g*) Gyro Compasses—Valve, follow-up type."

(DEE 1224/66/60.)

(*Navy Order* 278 *of* 1960.)

RESTRICTED.

777.—Radio Receivers—Policy for Re-alignment.

Because of the high standard of performance inherent in modern wireless and radar receivers, re-alignment of receivers will normally be carried out by dockyards, and ships should only attempt re-alignment as an emergency measure except as promulgated by Navy Order for specific equipment. Although an emergency re-alignment may have been carried out by ship's staff, the receiver should be treated as defective beyond the resources of ship's staff and dealt with accordingly at the first opportunity. Defect items for re-alignment of receivers by dockyards should not be raised as a matter of routine, defect action being confined to those receivers which have been proved to be defective.

2. The considerations dictating this policy are as follows—

(*a*) Experience has shown that receivers retain their alignment over long periods.

(*b*) Re-alignment of modern receivers and amplifiers require a skill that can only be developed by practice; it cannot be acquired by instruction alone. Lack of opportunity precludes ship's staffs from perfecting the technique of re-alignment and this difficulty is accentuated because design performance can only be obtained by specific methods for each type of receiver; re-alignment in accordance with general principles is not sufficient. Prior to first installation, either during new construction, modernization, conversion or A and A procedure, the dockyard officers will prove a receiver to be up to optimum performance standard. The receiver will then be installed on board and the E.E. and T.U. will produce figures for noise factor and noise gain with the receiver installed, using the ship's test equipment. The figures obtained will be recorded in the ship's records by the E.E. and T.U. as the " Installation Figures ". Figures obtained in subsequent checks by the ship's staffs should be compared against installation figures.

3. It has been proved that small changes in alignment will cause a change in noise gain even though the response of the receiver is not seriously effected. Such a change indicates a fall in the overall gain of the receiver which may be due to causes such as ageing valves, low mains voltage, defective components or mis-alignment of the tuned circuits. The definition of noise gain and the methods used for its measurement are the subject of an article printed in the January, 1957 issue of the Naval Electrical Review to which reference should be made. General information on receiver noise and noise factor will also be found in B.R. 1600A—" The Inter-services Radar Manual ".

4. It should be noted that in the case of certain receivers wherein the local oscillator is crystal controlled, the set may be unsatisfactory operationally even though the noise measurements are within the specified limits, due to the centre frequency of the I.F. band being incorrect. Such a condition should rarely occur if the I.F. alignment is correct on installation. Similarly with receivers such as the B.40 and B.41, when used for R.A.T.T. reception, satisfactory performance is dependent upon the B.F.O. frequency being correct. Noise measurements give no indication of this. In both the above cases the record of noise measurement gives a useful indication of the general state of the receiver and is therefore of great value.

5. Modern receiver circuits are inherently stable and, because spare receivers are generally carried on board, the necessity for emergency re-alignment should be rare; before emergency re-alignment is attempted, additional checks should be carried out

with a test oscillator or signal generator to prove mis-alignment Equipment which has been aligned and installed by dockyard officers should require re-alignment only at long intervals; any loss of overall performance of a receiver system should first be sought in aerial circuits, resonator unit, &c.

6. It should be noted that great importance is attached to gradual changes in noise factor and noise gain and accurate recording of results is therefore essential.

7. Noise factor and noise gain values are to be recorded in Equipment Log Sheets and Planned Maintenance Schedules.

(DEE 1211/51/172.)

UNCLASSIFIED.

778.—Radio Receivers—Policy for Re-alignment—B40 Re-alignment.

Navy Order 777 of 1960 states, in paragraph 1, that re-alignment of radio receivers is not to be carried out as a matter of routine in ships except as promulgated by Navy Order for specified equipment. This order deals with the re-alignment of B40 receivers by ship's staff.

2. I.F., B.F.O. and Crystal Filter re-alignment is, when necessary, to be carried out in accordance with the procedures laid down in B.R. 1617, using the test equipment shown therein.

3. When carrying out the alignment procedure on B40D receivers, it has been found that accuracy sufficient for the reception of F.S.K. signals can be obtained using A.P. 54704/A signal generator, provided drift is checked between each step in the alignment procedure, i.e., A.P. 54704/A is checked against the B40D crystal calibrator and G.205 oscillator (B.F.O.) is zero set.

4. R.F. re-alignment is to be carried out using A.P. 67166 noise generator CT82 and lining up for maximum sensitivity at lining up points.

5. Navy Order 1046 of 1958 is hereby cancelled.

(DEE 1211/51/172.)

(*Navy Orders* 1046 *of* 1958 *and* 777 *of* 1960.)

RESTRICTED.

779.—Ammunition—Cartridges 40/60 of U.S. Manufacture—Withdrawal.

Action to be taken—

By H.M.A. Ships—

Exchange all cartridges 40/60 of U.S. manufacture for unrestricted cartridges at the earliest opportunity.

By R.A.N.A.D.'s—

All stocks and future receipts of these cartridges are to be disposed of in accordance with N.O.C.M. 91.

Reason for Action—

Because of failure in service.

Safety Category—

N.M.E.R. (B.R. 862) Article 304, Category " dd ", i.e., dangerous if used.

(DW 726/66/33.)

UNCLASSIFIED.

780.—A/S Mortar, Mark 10 Equipment—Examination of Plane Converters to Ensure that the Fine Dial of the Trajectory Bearing Servo is Correctly Marked.

(*A.F.O.* 1997/1960.)

Reports have been received that a number of plane converters have been manufactured with the fine dial (Drawing No. U.C.W. 4050/533) of the trajectory bearing servo incorrectly marked, inasmuch as the outer figures on the scale are painted GREEN instead of RED and the inner figures RED instead of GREEN.

2. All plane converters, whether fitted or in store, are to be examined, and if incorrect in this respect, rectified at the earliest opportunity.

3. The serial number and maker's name of the effected plane converters is to be reported after rectification.

4. Navy Order 367 of 1960 is hereby cancelled.

(DW 707/51/41.)

(*Navy Order* 367 *of* 1960.)

UNCLASSIFIED.

781.—A/S Weapons—A/S Mortars, Marks 3 and 4—TC 083 Fuzes A/S, Mark 2, Mod. 1–4 Filled of Lot 723—Withdrawal.

(*A.F.O.* 1929/1960.)

Ammunition item .. TC 083 fuzes A/S, mark 2, mod. 1–4 filled of lot 723.

Action to be taken—

By H.M.A. Ships .. Exchange TA 170 projectiles A/S mark 3 or TA 196 projectiles A/S, mark 3, mod. 1 filled Minol fitted with fuzes of this lot no. for unrestricted projectiles at the first opportunity.

By R.A.N.A.D.'s .. Projectiles fitted with fuzes of lot 723 are to be refuzed. Recovered fuzes of this lot together with any held in stock are to be set aside under restricted charge quoting this order. Quantities are to be reported to Navy Office in due course.

Reason for action .. Fuzes have failed in service.

Safety Category .. N.M.E.R. (B.R. 862), Article 304—Category f.f., i.e., not dangerous but may have an unacceptable percentage of failures to function.

(DW 714/51/79.)

UNCLASSIFIED.

782.—Inclining Experiment—Presence of Free Liquids.

In order to obtain accurate readings and results from an inclining experiment, it is essential to eliminate all avenues of error, and free liquids in the ship must be reduced to a minimum consistent with the requirements of oil fuel and water. To this end free surface can be accepted only in those tanks which are essential for the working of auxiliary machinery required during the period of the experiment. All other tanks containing liquids are to be either empty and dry or pressed, and bilge water is to be eliminated.

2. Attention is drawn to the instructions contained in Consolidated Orders and Regulations, Article 318, and sub-clause (*f*) in particular.

(DNC 1211/51/171.)

UNCLASSIFIED. Cancelled with C NO 589/62

783.—Inflatable Liferafts—Care and Maintenance in Ships.

Instances continue to occur of neglect in the care and maintenance of inflatable liferafts in ships. Apart from the waste of money which results if this valuable equipment is not properly maintained, it is unacceptable for Her Majesty's Australian Ships to be at sea with inefficient life saving equipment.

2. Liferafts have been found defective through being folded and packed whilst wet presumably after being used for drill purposes. The result of this misuse is that the raft begins to perish in spots where the rubber has hardened, and while immediate repair of spots that are leaking can be effected, the deterioration in other spots is progressive. Unless a drill raft is certain to be used again within a few days, it is to be thoroughly dried before it is re-packed.

3. The attention of Commanding Officers is drawn to Navy Order 35 of 1959 and to B.R. 1977 (i), which includes details of the maintenance routine to be carried out on board.

(DNC 1275/57/35.)

(*Navy Order* 35 *of* 1959.)

UNCLASSIFIED.

784.—Naval Stores (Air)—Safety Equipment—Packs Personal Survival.

The following types of personal survival packs are currently in use in the R.A.N.—

(*a*) Ref. 27C/2241 Pack, type " L ". Used in Gannet, Firefly, Auster, Dakota and Sycamore Helicopter.

(*b*) Ref. 27C/2372 Pack, type " N ". Used in Sea Venom and Vampire Trainer aircraft.

2. Packs, type " L " (complete with survival equipment) are issued as Squadron Mobile Equipment, whilst packs, type " N " (complete with survival equipment) are part of the Aircraft equipment and will not be issued as personal flying equipment.

3. The contents of packs, personal survival, are listed in the appendix to this order, which also details the appropriate sources of supply. The contents of the packs are to be demanded separately.

4. Technical instuctions are contained in A.P. 1182 (C) (Naval) volumes 1, 2, 4 and 6.

APPENDIX.

Stores Ref. No. Naval Pattern or Vocab. No.	*Description.*	*Denom. of Qty.*	*Scale of Equipment per Pack.*	*Source of Supply.*
27C/2356 or	Dinghy, type " SS ", Mk. 3	No.	1	N.S. (Air)
27C/N1V	Dinghy, type R.F.D., Mk. 3A	No.	1	N.S. (Air)
6D/9430549	Cylinder CO^2, Mk. 9Q, complete with operating head type " Q "	No.	1	N.S. (Air)
27C/N1V	Bellows, hand, RFD1567C	No.	1	N.S. (Air)
*5A/N1V	Light attachment, RFD24591	No.	1	N.S. (Air)
27C/1902	Cup/baler	No.	1	N.S. (Air)
27C/2044	Sleeve fabric	No.	1	N.S. (Air)
27C/1890	Drogue	No.	1	N.S. (Air)
27C/2182	Stoppers, leak	Set	2	N.S. (Air)
32B/726	Sponge	No.	1	N.S. (Air)
27C/1906	Paddles, small	No.	2	N.S. (Air)
27C/2161	Kit, de-salting, 2-pint	No.	1	N.S. (Air)
22P/25	Ration, emergency flying, Mk. 4	No.	1	Vict.
524/6 (*d*)	Outfit, first aid, aircrew general (Ref. 9A–02409)	No.	1	Medical
KF 045	Signals, distress, day and night, Mk. 13, Mod. O	No.	2	Arm.
AP(N)115	Aircrew survival booklet	No.	1	N.S. (Air)
22P/11	Knife, single blade	No.	1	Vict.
KF 017	Matches	Tins of 30	2	Arm.
6E/374	Compass, marching	No.	1	N.S. (Air)
22B/154	Socks, woollen	Prs.	1	Vict.
25403–4	Gloves, blue	Prs.	1	Vict.
27C/2230	Cushion, water, type B (2 pints)	No.	1	N.S. (Air)
E10/T329	Mosquito netting (54-in. wide)	Ft.	7	N.S.
15C/N1V	Fluorescent panel (yellow)	No.	1	N.S. (Air)
15C/N1V	Fluorescent panel (Rodamine pink)	No.	1	N.S. (Air)
27C/N1V	Tin, yellow (9C/MED/019)	No.	1	N.S. (Air)
	Stowed in Tin, Yellow.			
22P/8	Fishing tackle, tropical	No.	1	Vict.
F5/14A/3437	Lens, burning	No.	1	N.S.
E8/2949	Stone, sharpening	No.	1	N.S.
B11/716	Needles	No.	3	N.S.
32B/498	Thread	Yds.	4	N.S. (Air)
11666	Water sterilizing outfit	No.	1	Vict.
27C/2366	Code, ground/air emergency	No.	1	N.S. (Air)
27C/2364	Heliograph, 2-in. x 2-in.	No.	1	N.S. (Air)

* *Note.*—Ref. 5A/N1V Light attachment R.F.D. 24591 is used only with Ref. 27C/N1V Dinghy, type R.F.D., Mk. 3A.

(DNAS 603/77/87.)

UNCLASSIFIED.

785.—Naval Stores (General) (Class B, Group 11, Part E)—Patterns 5976 and 5977—Pipe and Drain Clearing Tools—Allowances.

(*A.F.O.* 1224/1960.)

The undermentioned pipe and drain clearing tools have been adopted in the R.A.N. for use in clearing blocked scupper and galley drain pipes—

Class and Group.	*Pattern No.*	*Description.*	*Ships Accounting Classification.*
B11E	5976 5977	" Sani-Snake " Pipe and Drain Clearing Tool	P

2. Allowances of these tools to H.M.A. ships in commission will be as follows—

Pattern 5976 .. 1 No. Outfit to each ship of O.M.S. size and above.
Pattern 5977 .. 1 No. Outfit to Aircraft Carriers.

3. Ships in commission should forward their demands to the appropriate (S)N.S.O. Supply to ships under construction or restoring after refit will be arranged by the storing yards in the normal manner. For ships in Operational Reserve, dormant demands should be raised in accordance with A.B.R. 4, Article 1101 (2).

4. The relevant Establishment of Sea Stores (Executive Department) should be amended.

(DNAS 506/71/77.)

UNCLASSIFIED.

786.—Naval Stores (General) (Class F, Group 5)—Sling, Neck for Use with Cameflex Cameras, Patterns F5/8840 and F5/8991—Introduction and Allowances.

(*A.F.O.* 1301/1960.)

The following neck sling has been introduced to provide a steady platform for Cameflex cameras, patterns F5/8840 and F5/8991, so that they may be used by hand when a fixed mounting is undersirable or inconvenient—

Pattern No.	*Description.*	*Ships Accounting Classification.*
F5/162123 (N.A.T.O. Group 6760)	Sling, neck, for use with Cameflex cameras, patterns 8840 and 8991	P.

2. Allowances are as follows—

Service.	*Quantity.*
Flagship	1 No.
H.M.A.S. KUTTABUL	1 No.
R.A.N.A.S. NOWRA	1 No.
Flinders Naval Depot	1 No.

3. Demands to complete to these allowances should be forwarded to the appropriate (S)N.S.O.

(DNAS 519/55/56.)

UNCLASSIFIED.

787.—Reserve Ships—Coating of Bronze Propellers.

The corrosion of the underwater hulls of ships in reserve can be greatly reduced by the application of an impervious coating to the bronze propeller surfaces.

2. On the last occasion of docking prior to a ship entering into reserve, its propellers are to be coated with four coats of anti-corrosive primer and one coat of anti-fouling. The coating is to cover all surfaces of the propeller, propeller boss and nut, and is to extend over the adjacent shafting so that all bronze surfaces are completely sealed.

3. The propellers of ships now in reserve are to be coated at the next occasion of docking.

4. Work is to be carried out as a defect quoting this order as authority.

5. I.P.R. and A.R.F. Form 1 will be amended.

(DNC 1209/51/52.)

UNCLASSIFIED.

788.—Testing of Brows.

The testing of brows in H.M.A. Dockyards is the responsibility of the management.

2. The regulations with regard to the examination, repair and testing of brows, which are now contained in Article 55 (*a*) (6), B.R. 2101 (Management Regulations), are as follows—

(*a*) All normal steel brows are to be examined annually, repaired if necessary and tested after repairing. If repairs are not necessary, steel brows are only to be tested at intervals of two years. Lightweight brows made for special requirements are to be examined, repaired if necessary and tested annually, to the locally restricted test loads where applicable. All wood brows are to be examined, repaired if necessary and tested annually.

(*b*) The test loads are to be calculated from the formula:

$$\text{Test load in tons} = \frac{\text{Area of brow in square feet}}{12}$$

(or $1\frac{2}{3}$-cwts. per square foot)

(*c*) This test load is to be evenly distributed over the length of the brow, the brow being supported at its ends in a horizontal position. For steel brows, no permanent set should remain after removal of the test load. For wood brows, the permanent set (which may be due to take-up of fastenings) should not exceed $\frac{1}{4}$-in. per 10-ft. length of brow. If a permanent set greater than this is recorded, the brow should be accepted into service only after a thorough check that general structure and fastenings are sound and in good order.

(DNC 1275/56/11.)

UNCLASSIFIED. Cancelled C.NO. 693/61

789.—A.B.C.D.—Respirators, Anti-gas—Policy as to Type and Scale of Supply.

Two types of respirators anti-gas are in general supply to the Navy, viz., the Light type and the G.S. type. The G.S. respirator (with tube and separate container) is just as effective as the Light type, but speech is less clear as it has no speech device. Both types will continued in service until replaced by a new respirator designed to give a greater degree of comfort.

2. The normal issue in the R.A.N. is the G.S. respirator, but stocks of Light type are available for issue for the use of officers and ratings whose action duties necessitate clear speech, and personnel whose duties require them to speak into telephones, microphones or voice pipes, e.g., communication numbers, quartermasters, and telephone switchboard operators.

3. Both types of respirators are available in three sizes small, normal and large. The Light type respirator has the container mark 2 on the left cheek, and a holder valve L3 or L5 which incorporates a speech device enabling speech to be carried on with minimum loss of clarity.

4. The undermentioned facepieces anti-dermatitis for respirators, anti-gas Light type, have been introduced for supply to individuals who are sensitive to the rubber of the respirator's standard facepiece—

FW 705—Facepiece, light type, Derm, normal-assembly.
FW 718—Facepiece, light type, Derm, large-assembly.
FW 731—Facepiece, light type, Derm, small-assembly.

5. These facepieces are made of black rubber and can be identified by the word "DERM" stamped in YELLOW on the exterior of the mask underneath the chin and inside the mask on the reinforced nose portion.

6. Two derm facepieces are issued per person and both are held on permanent loan by the individual concerned, together with the container, haversack, already held. The standard facepiece is to be withdrawn. The facepiece in use, viz., that to which the container is fitted is to be identified by the normal method of marking. The second facepiece which acts as a spare is to be fitted with a tally of the usual type, secured to one end of the lower head harness buckles and is to be stowed with the recipient's kit, care being taken to avoid damage.

7. The fact that Derm facepieces have been issued is to be recorded on the Medical History Sheet. When the individual is drafted to another ship or establishment the Medical Officer will, on receipt of the Medical History Sheet, inform the Anti-Gas Officer and the Divisional Officer concerned so that appropriate decontamination arrangements and periodic inspection of the facepiece can be initiated.

8. Demands for Derm facepieces specifying size required are to be forwarded to the R.A.N. Armament Depot, Spectacle Island, Sydney, together with a certificate from the Dermatologist that issue is necessary.

9. Respirators are not on issue to W.R.A.N.S.

10. Allowances of Light type respirators, spare G.S. type respirators, containers and accessories are shown in Ships Warrants.

11. The attention of Commanding Officers is drawn to B.R. 1062 (Instructions regarding the supply, care and maintenance of anti-gas apparatus and anti-gas training.)

12. Navy Order 42 of 1960 is hereby cancelled.

(DW 710/251/3.)

(*Navy Order* 42 *of* 1960.)

Section 5.
BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

790.—Form A.S. 1233—Trade Certificate—Seaman Branch—Gunnery Specialist Qualification.

Form A.S. 1233 has been revised to conform with the existing structure of gunnery specialist qualifications.

2. The revised form is available on demand from the Superintending Naval and Air Store Officer, Sydney.

3. Existing form A.S. 1233 (established 1955) held in ratings Certificates of Service or in stock are to be disposed of. Initially revised forms are to be demanded on the basis of one for each seaman gunnery specialist qualification rating borne plus 25 per cent. of numbers borne to represent stock for twelve months.

(HPB 464/54/77.)

With reference to Navy Order 1094 of 1959, Navy Orders 664 to 769 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

FOR OFFICIAL USE ONLY. C.N.O. 791/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
9th September, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED. Cancelled vide CNO 850/61

791.—Regulations and Instructions for the Royal Australian Navy.

With reference to paragraph 3 of Navy Order 475 of 1959, *Regulations and Instructions for the Royal Australian Navy* (Short title—R.I.) is in course of distribution and is effective on receipt.

2. The passing of the new Navy Act by Parliament, the making of regulations thereunder, and the issue of the complete R.I. will take considerable time.

3. It is to be specially noted that, pending the passing of the new Act and the issue of new regulations, Q.R. & A.I., as provided in Section 36 of the present Naval Defence Act, continues to apply to the R.A.N., except where modified by Australian regulations (and except where, because of their special nature in relation to the Royal Navy, they cannot have practical effect in the R.A.N.). In short, Q.R. & A.I. applies except where it is replaced by R.I. Details are shown in paragraphs 5 and 6 of this order.

4. Because of legal requirements it is not possible at this stage to transfer to R.I., chapters 18, 19, 20, 21 and 22 of Q.R. & A.I. which derive sanction directly from the *Naval Discipline Act* 1957. These chapters, as modified by the Naval Forces Regulations, remain the authority for the regulation of discipline and the conduct of courts-martial and disciplinary courts in the R.A.N. The modifications made by the Naval Forces Regulations are at present reprinted in chapter VI. of C.O.R.

5. R.I. as now being issued is not complete. A list of the chapters and appendixes contained therein is shown in appendix A of this order. Additional chapters, appendixes and an index will be issued in due course.

Q.R. & A.I.

6. The following chapters and appendixes of Q.R. & A.I. remain in force in the R.A.N. until further notice—

Chapters.	*Appendixes.*
1–10 (inclusive)	1
12	5
13	8
18–22 (inclusive)	9
28	10
51	14
54–57 (inclusive)	19

A list of chapters and appendixes no longer effective in the R.A.N. is given in appendix B and a disposal table showing superseded articles of Q.R. & A.I. and corresponding R.A.N. instructions is given in appendix C.

C.O.R.

7. The only chapters of C.O.R. which continue in force for the present are :

I.
II.
III.
IV.
VI.
VII.
IX.
XII.
XV.–XIX.
XXII.

A list of C.O.R. articles to be cancelled is given in appendix D.

Navy Orders.

8. A list of Navy Orders to be cancelled is given in appendix E.

References.

9. Certain publications referred to in the appendixes to this order and in R.I. itself have not yet been issued. Pending issue, reference is to be made to the corresponding publication shown in the following table—

Reference in R.I.	*Corresponding Existing Publication.*
A.B.R. 93 .. .. *Victualling Manual.*	B.R. 93 *Victualling Manual*, C.O.R. chapters XV. to XIX., and Navy Orders.
A.B.R. 1921 .. .. .. *Trials Manual.*	B.R. 1921 *and Navy Orders.*
A.B.R. 1991 .. .. .. *Handbook of Standing Orders for the R.A.N. Medical and Dental Service.*	C.O.R. chapter XII. and *Navy Orders.*
A.B.R. 5013 .. .. .. *Motor Transport Instructions.*	*R.A.N. Motor Transport Instructions.*
A.B.R. 5018 .. .. .. *Navy Accounts Manual.*	*Naval Accounts Regulations and Instructions.*
A.B.R. 5020 .. .. .. *Naval Pay Instructions.*	*Interim Pay Instructions.*

Corrigenda.

10. The following corrections to R.I. should be noted—

(*a*) List of Effective Pages (page vii)—
For: " Appendix 3A .. .. 3A–1 ".
Read: " Appendix 2A .. .. 2A–1 ".

(*b*) Appendix 18A—
For: " Q.R. and A.I., appendix 6 ".
Read: " Q.R. and A.I., appendix 5 ".

R.I. will be amended in due course.

Appendix A.

R.I—CHAPTERS AND APPENDIXES CONTAINED IN INITIAL ISSUE.

Chapter

11 Uniforms, Decorations and Medals.
14 Messing and Accommodation.
15 Welfare, Canteens and Non-Public Funds.
16 Casualties.
17 Movements.
23 Boards of Inquiry and Naval Courts.
24 Official Secrets and Publicity.
25 Political and Electoral Matters.

APPENDIX A—*continued.*

Chapter

26 Quarantine and Customs.
27 Instructions to Flag Officers and Senior Officers.
29, 30 Instructions to Captains.
31 Instructions to Officers.
32 Instructions to Ratings.
33 Instructions to the Executive Officer and Others.
34 Instructions to Specialist Officers.
35 Navigation and Direction.
36 Regulations for Preventing Collisions at Sea.
37 Aviation.
38 Meteorology.
39 Photography.
40 Bands.
41 Hull.
42 Engineering.
43 Electrical.
44 Medical and Dental.
45 Education.
46 Religion.
47 Supply and Secretariat.
48 Pay, Retirement Benefits and Compensation.
49 Stores.
50 Victualling.
52 Correspondence, Returns and Mails.
53 Inventions, Patents and Improvement Funds.
56 Property and Works.

Appendix

11A Dress of Officers and Ratings on Passage.
15A Audit of Non-Public Funds.
15B R.A.N. Central Canteens Organization.
17A Forms of Agreement or Indemnity.
17B Care and Safe Custody of Baggage.
26A Customs Concessions to Passengers Arriving in Australia.
26B Customs Concessions to Officers and Ratings Returning from War Service or Occupational Duties Overseas or Service with the British Commonwealth Strategic Reserve.
26C Customs Concessions to Officers and Ratings arriving in the United Kingdom.
26D Effects of Officers and Ratings arriving at Sydney from Abroad—Handling, Storage and Clearance through Customs.
26E First Ports of Entry and Customs Ports—Australia.
29A Reports of Proceedings.
29B Battle Honours.
30A Form of Statutory Declaration.
30B Commissioners for Declarations.
31A Stamp for Marking Declared Clothing.
35A Standard Towage Conditions.
45A Educational Tests and Certificates.
52A Authorized Channels of Communication.
53A Inventions—Form of Agreement.

APPENDIX B.

Q.R. & A.I.—CHAPTERS AND APPENDIXES NO LONGER EFFECTIVE IN THE R.A.N.

Chapter

11	23	29	34	39	44	49
14	24	30	35	40	45	50
15	25	31	36	41	46	52
16	26	32	37	42	47	53
17	27	33	38	43	48	

Appendix

2	4	11	13	16	18	21
3	6	12	15	17	20	22

APPENDIX C.

Q.R. & A.I.—DISPOSAL TABLE SHOWING SUPERSEDED ARTICLES OF Q.R. & A.I. AND CORRESPONDING R.A.N. INSTRUCTIONS.

(R.A.N. references are to articles and chapters, &c., of R.I. unless otherwise stated.)

Q.R. & A.I.	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*
1101 ..	1101	1414 ..	1414	1508 ..	—
	1102	1415 ..	1415	1521–30 ..	—
	1124	1416 ..	1416	1551–5 ..	Ch. 15 Sec. II
1102 ..	1104	1417 ..	1417	1561 ..	1551
	1105	1418 ..	—	1562 ..	1552
1103 ..	1104	1419 ..	—	1581 ..	1571
1104 ..	1104	1431 ..	1431	1582 ..	—
1105 ..	1107	1432 ..	1432	1583 ..	1572
1106 ..	—	1441 ..	1451	1584 ..	1573
1107 ..	1108	1442 ..	1452	1585 ..	1574
1108 ..	1103	1443 ..	1453	1586 ..	1575
	1106	1444 ..	1454	1587 ..	1576
1131 ..	1121	1445 ..	4921	1601–30 ..	Ch. 16 Sec. I
1132 ..	1122	1446 ..	1455	1641 ..	1641
1133 ..	1124	1447 ..	1456	1642 ..	1642
1151 ..	1125	1451 ..	1471	1643 ..	1622
1401 ..	1401	1452 ..	1472	1644 ..	1643
1402 ..	1402		A.B.R. 5020	1645 ..	1643
1403 ..	1403	1453 ..	A.B.R. 5020	1651	1644
1404 ..	1404	1454 ..	1472	1652	1655
1405 ..	1405		A.B.R. 5020		A.B.R. 5020
1406 ..	1406	1455–84 ..	A.B.R. 5020	1653 ..	—
1407 ..	1407	1501 ..	1501	1654 ..	1647
1408 ..	1408		1522	1661 ..	1661
	A.B.R. 5018	1502 ..	1502	1665 ..	1672
1409 ..	1409	1503 ..	1503	1666 ..	1673
1410 ..	1410	1504 ..	1504		1680
1411 ..	1411	1505 ..	1505	1667 ..	1674
1412 ..	1412	1506 ..	1506	1668 ..	1671
1413 ..	1413	1507 ..	1507	1669 ..	—

APPENDIX C—*continued.*

Q.R. & A.I.	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*
1670 ..	1675	2322 ..	—	2729 ..	2705
1671 ..	1676	2401 ..	2401	2730 ..	2704
1672 ..	—	2402 ..	2402	2731 ..	2706
1673 ..	—	2403 ..	2403		2906
1674 ..	1677	2404 ..	2404	2732 ..	2707
1675 ..	1678	2405 ..	2405	2733 ..	2723
1676 ..	1678	2406 ..	2406	2734 ..	—
1677 ..	—	2407 ..	2407	2735 ..	2728
1678–81 ..	1679	2408 ..	2408	2736 ..	2758
1701 ..	1701	2409 ..	2409	2737 ..	Ch. 28
	A.B.R. 5020	2501 ..	2501	2738 ..	2712
1702 ..	1706	2502 ..	2502	2739 ..	2713
1711 ..	1701	2521 ..	2521–4	2740 ..	—
1712 ..	1702	2601 ..	2601	2761 ..	2757
	A.B.R. 5020	2602 ..	2603	2762 ..	—
1713 ..	1728	2603 ..	2602	2763 ..	—
1714 ..	1702	2604 ..	2602	2764 ..	5631
1715 ..	1721	2611 ..	2621	2765 ..	5604
1716 ..	—	2612 ..	2624	2766 ..	—
1717 ..	1706	2613 ..	2624	2781 ..	2701
1718 ..	1721	2614 ..	4943		2751
1719 ..	1721	2615 ..	—		2753
1720 ..	1703	2616 ..	2622	2782 ..	2752
1731 ..	1723	2617 ..	—	2783 ..	2753
1732 ..	—	2618 ..	—	2784 ..	—
1733 ..	1724	2619 ..	2628	2785 ..	—
1734 ..	—	2620 ..	—	2786 ..	2754
1735 ..	—	2701 ..	2702	2787 ..	—
1751 ..	1725	2702 ..	2709	2788 ..	2755
1752 ..	1726	2703 ..	2710	2789 ..	—
1753–6 ..	—	2704 ..	2711	2790 ..	—
1757 ..	1727	2705 ..	—	2791 ..	2756
1758 ..	4947	2706 ..	2716	2792 ..	—
1759 ..	—	2707 ..	2715	2793 ..	—
1771 ..	1743	2708 ..	2714	2901 ..	2901
1772 ..	1744	2709 ..	2703	2902 ..	2902
1773 ..	1741	2710 ..	2724	2903 ..	2903
1774–7 ..	—	2711 ..	2725	2904 ..	2905
1778 ..	4947	2712–4 ..	—	2905 ..	2906
1791 ..	—	2715 ..	2722	2906 ..	2907
2301 ..	2301	2716 ..	—	2907 ..	2908
2302 ..	2302	2717 ..	2717	2908 ..	2909
2303 ..	2303	2718 ..	2720	2909 ..	2910
2304 ..	2304	2719 ..	—	2910 ..	2911
2305 ..	2305	2720 ..	2719	2911 ..	2912
2306 ..	2306	2721–4 ..	—	2912 ..	2913
2307 ..	2307	2725 ..	2727	2913 ..	2914
2308 ..	2308	2726 ..	2703	2914 ..	2917
2309 ..	2309	2727 ..	—	2915 ..	2919
2321 ..	2321	2728 ..	2726	2916 ..	2918

APPENDIX C—*continued.*

Q.R. & A.I.	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*	*Q.R. & A.I.*	*R.I., &c.*
2931 ..	2931	3036 ..	3026	3142 ..	3142
2932 ..	—	3037 ..	3027		3143
2933 ..	2932	3038 ..	3028		3144
2934 ..	2933	3039 ..	3029	3143 ..	3142
2935 ..	2934	3040 ..	3030		3144
2936 ..	2935	3041 ..	3031	3151 ..	3161
2937 ..	2936	3042 ..	3032	3152 ..	3162
2938 ..	2937	3043 ..	3033	3153 ..	3163
2939 ..	2938	3044 ..	3034	3154 ..	3164
2940 ..	2939	3045 ..	3035	3155 ..	3165
2941 ..	2940	3046 ..	3036	3201 ..	3301
2942 ..	2941	3047 ..	3037	3202 ..	3303
2951 ..	2951	3048 ..	3038	3203 ..	..
2952 ..	2952	3049 ..	3039	3204 ..	3303
2953 ..	2953	3050 ..	3040	3205–7 ..	—
2954 ..	2954	3051 ..	3041	3221 ..	3251
2955 ..	2955	3052 ..	3042	3222 ..	3254
2956 ..	2956	3053 ..	3043	3223 ..	3252
2957 ..	2957	3054 ..	3044	3224–7 ..	3253
2958 ..	2958	3055 ..	3046	3228 ..	—
2959 ..	2959	3056 ..	3047	3229 ..	—
2960 ..	2960	3071 ..	3061	3230 ..	3253
2961 ..	2961	3072 ..	A.B.R. 5018	3231 ..	3253
2962 ..	2962	3073 ..	A.B.R. 5018	3241 ..	4121
2981 ..	2981	3074 ..	3062	3242 ..	4123
2982 ..	2982	3075 ..	3063		4125
2983 ..	2983	3076 ..	3064	3243 ..	4124
2984 ..	2984	3077 ..	3065		4126
2985 ..	2985	3081 ..	3071	3244 ..	4127
2986 ..	2986	3082 ..	3073	3245 ..	4134
2987 ..	2987	3083 ..	3072	3246 ..	4128
3001 ..	3001	3084 ..	3071	3247 ..	4132
3002 ..	3002	3085 ..	3077	3248 ..	4129
3003 ..	3003	3086 ..	3078	3249 ..	4131
3004 ..	3004	3091 ..	3091	3250 ..	4133
3005 ..	3005	3101 ..	3102	3251 ..	4130
3006 ..	3006	3102 ..	—	3252 ..	4122
3007 ..	3007	3121 ..	3121	3253 ..	4151
3008 ..	3008	3122 ..	3122	3254 ..	4153
3009 ..	3009	3123 ..	3123	3261 ..	3321
3010 ..	3010	3124 ..	3125	3262 ..	3322
3011 ..	3011	3125 ..	3126	3263 ..	3321
3012 ..	3011	3126 ..	3127		3322
3013 ..	3012	3127 ..	—	3264–7 ..	3322
3014 ..	3013	3128 ..	3128	3269 ..	—
3031 ..	3021	3129 ..	—	3270 ..	—
3032 ..	3022	3130 ..	3129	3281 ..	3351
3033 ..	3023	3131 ..	3130	3282 ..	3352
3034 ..	3024	3141 ..	3141	3283 ..	—
3035 ..	3025		3142	3284 ..	3353

APPENDIX C—*continued.*

Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.
3285 ..	3354	3410 ..	3509	3473 ..	3572
3286 ..	3355	3411 ..	3510	3474 ..	3571
3301 ..	3411	3412 ..	3511	3475 ..	3573
3302 ..	3412	3413 ..	3513	3476 ..	3572
3303 ..	3413	3414 ..	3514	3477 ..	—
3304 ..	3411	3415 ..	3515	3478 ..	3572
3305 ..	3414	3416 ..	3516	3479 ..	3574
3306 ..	3415	3417 ..	3517	3480 ..	3575
3307 ..	3416	3418 ..	3518	3481 ..	3576
3321 ..	3421	3420 ..	3520	3482 ..	3577
3322 ..	3422	3421 ..	3521	3483 ..	—
3323 ..	3423	3422 ..	3522	3491 ..	3591
3331 ..	3431	3425 ..	3525	3492 ..	3592
3332 ..	3432	3426 ..	3526	3493 ..	3593
3341 ..	3441	3427 ..	3527	3494 ..	3594
3342 ..	3442	3431 ..	2704	3495 ..	3595
3343 ..	3443		3532	3496 ..	3596
3344 ..	3444	3432 ..	3531	3497 ..	—
3345 ..	3445	3433 ..	3503	3498 ..	3597
3346 ..	3446		3533	3499 ..	3597
3347 ..	3447	3434 ..	3533	3501 ..	3601
3348 ..	3448	3435 ..	3534	3502 ..	3602
3349 ..	3449	3436 ..	3535	3601 ..	3701
3350 ..	3450	3437 ..	3536	3602 ..	3702
3355 ..	3455	3438 ..	3537	3603 ..	3703
3361 ..	3461	3439 ..	3537	3604 ..	3704
3362 ..	3462	3440 ..	3538	3605 ..	3705
3363 ..	3463		3594	3606 ..	—
3364 ..	3464	3441 ..	3537	3607 ..	3706
3365 ..	3465	3442 ..	3538	3608 ..	3707
3366 ..	3466	3442a ..	3539	3609 ..	3708
3367 ..	3467	3443 ..	3540	3610 ..	3709
3368 ..	3468	3444 ..	3541	3611 ..	3710
3369 ..	3469	3445 ..	3542	3612 ..	3711
3370 ..	3470	3446 ..	3544	3613 ..	3712
3371 ..	3471	3447 ..	3545	3614 ..	3713
3372 ..	3472	3448 ..	3546	3615 ..	3714
3373 ..	3473	3449 ..	3547	3616 ..	3715
3381 ..	3481	3450 ..	3548	3617 ..	3716
3382 ..	3482	3451 ..	—	3618 ..	3717
3383 ..	—	3452 ..	3502	3641 ..	3742
3401 ..	3501	3453 ..	3502	3642 ..	—
3402 ..	3503	3454 ..	3549	3643 ..	3743
3403 ..	3504	3455 ..	3550	3644 ..	3744
3404 ..	—	3456 ..	3551	3645 ..	3745
3405 ..	3504	3457 ..	3552	3646 ..	3746
3406 ..	3505	3458 ..	—		3748
3407 ..	3506	3471 ..	3571		3750
3408 ..	3507		3572	3647 ..	3751
3409 ..	3508	3472 ..	3572	3648 ..	3752

APPENDIX C—*continued.*

Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.
3649 ..	3753	3977 ..	4033	4153 ..	4353
3650 ..	3754	3978 ..	4034	4154 ..	4354
3651 ..	3755	3979 ..	4005	4155 ..	4355
3661 ..	—	4001 ..	4201	4201 ..	1021
3662 ..	3303	4002 ..	4202		4401
3663 ..	3412	4003 ..	4203	4202 ..	4402
	3442	4004 ..	4204	4203 ..	1021
	3443	4005 ..	4205		4404
3664 ..	3432	4006 ..	4206	4204 ..	4405
	3455	4011 ..	4211	4205 ..	4406
3665 ..	4242	4012 ..	4212	4206 ..	4407
3666 ..	4226	4013 ..	4213		4409
3701 ..	3801	4014 ..	4214		4412
3702 ..	3802	4015 ..	4215	4207 ..	4453
3703 ..	3803	4016 ..	4216	4208 ..	4407
3704 ..	3804	4017 ..	4217	4209 ..	4407
3705 ..	3805	4018 ..	4218		4475
3706 ..	3806	4021 ..	4222	4210 ..	4407
3707 ..	3807	4022 ..	4223	4211 ..	4407
3708 ..	3808	4023 ..	4224	4212 ..	4407
3721 ..	3821	4024 ..	—		4408
3722 ..	3822	4025 ..	4225	4213 ..	4407
3801 ..	3901	4031 ..	4231		4408
3802 ..	3902		4232	4214 ..	4407
3811 ..	3921		4233	4215 ..	4481
3812 ..	3922	4032 ..	4234	4216 ..	4407
3813 ..	3923	4037 ..	4241	4217 ..	4480
3814 ..	3924		4242	4218 ..	4452
3815 ..	3925	4041 ..	4251	4219 ..	4458
3816 ..	3926	4042 ..	4252	4220 ..	4410
3817 ..	3927	4043 ..	4253	4221 ..	1021
3818 ..	3951	4044 ..	4254		4411
	3952	4045 ..	4255	4222 ..	4447
	3953	4046 ..	4256	4223 ..	4485
3901–31 ..	—	4061 ..	4271	4224 ..	4414
3951 ..	4002	4062 ..	4272	4225 ..	4413
3952 ..	4003	4063 ..	4273	4231 ..	4421
3953 ..	4004		4274	4232 ..	4422
3954–7 ..	—		4275	4233 ..	4423
3958–60 ..	4007	4064 ..	—	4234 ..	4424
3961 ..	4009	4065 ..	4276	4235 ..	4425
3962 ..	4008	4066 ..	4277	4236 ..	4426
3963 ..	—	4101 ..	4301	4237 ..	4427
3964 ..	4010	4102 ..	4302	4238 ..	4428
3971 ..	—	4111 ..	4311	4239 ..	—
3972 ..	—	4131 ..	4331	4240 ..	A.B.R. 1991
3973 ..	4031	4132 ..	4332	4241 ..	4429
3974 ..	—	4133 ..	4333	4242 ..	4430
3975 ..	—	4151 ..	4351	4243 ..	4431
3976 ..	4032	4152 ..	4352	4244 ..	4432

APPENDIX C—*continued.*

Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.
4245 ..	—	4314 ..	4523	4517 ..	4712
4251 ..	4445	4315 ..	4524	4518 ..	4722
4252 ..	4448	4316 ..	4525	4519 ..	4721
4253 ..	4449	4317 ..	4526	4520 ..	4723
4254 ..	4450	4318 ..	4527	4521 ..	4724
4255 ..	4451	4319 ..	—	4601 ..	4801
4256 ..	4452	4401 ..	4601	4602 ..	3061
4257 ..	4454	4402–4 ..	4602	4603 ..	3062
4258 ..	1603	4405 ..	—	4604–6 ..	—
4259 ..	4455	4406 ..	—	4621–69 ..	—
4260 ..	4456	4411	4601	4701 ..	4881
4261 ..	4457	4412 ..	—		A.B.R. 5020
4262 ..	—	4413 ..	4641	4702–13 ..	A.B.R. 5020
4263 ..	4478	4414–9 ..	4622	4714 ..	1127
4264 ..	4476	4420–3 ..	—		A.B.R. 5020
4265 ..	4477	4424 ..	0952	4801 ..	4901
4266 ..	4491		4623	4802 ..	4902
	Appx. 17B	4425 ..	—	4803 ..	4903
4267 ..	4492	4441 ..	4603	4804 ..	4904
4268–70 ..	4489	4442 ..	—	4805 ..	—
4271 }	4490	4443 ..	—	4821 ..	4921
4272 }	A.B.R. 5020	4444 ..	1002		4922
4273 }			A.B.R. 5020	4822 ..	4923
4274 ..	4490	4451–88 ..	—	4823–5 ..	—
	4493	4501 ..	4701	4841 ..	4961
	A.B.R. 5020	4502 ..	4702	4842–4 ..	—
4275 ..	4490		A.B.R. 5018	4845 ..	4962
	A.B.R. 5020	4503 ..	4704	4846 ..	4963
4276 ..	4491		A.B.R. 5018	4847 ..	4964
	A.B.R. 5020	4504 ..	4705	4848 ..	4965
4277 ..	4490		A.B.R. 5018	4901 ..	5001
	A.B.R. 5020	4505 ..	4702	4902 ..	5002
4278 ..	4461		4703	4903 ..	5003
4279 ..	4455	4506 ..	4702	4904 ..	5004
4280 ..	4460	4507 ..	4720	4921 ..	5021
4281 ..	4460	4508 ..	4707	4922 ..	5022
4282 ..	4462	4509 ..	..	4923 ..	5026
4283 ..	—	4510 ..	4708	4924 ..	5023
4291 ..	4441	4511 ..	4709	4925 ..	5024
4301 ..	4501	4512 ..	4710	4926 ..	—
4302 ..	4502	4513 ..	4711	4927 ..	5025
	4503	4514 ..	4702	4928 ..	—
	4505		4713	4951–7 ..	A.B.R. 93
4303 ..	4503		4714		A.B.R. 5020
4304 ..	4503	4515 ..	4715	4958 ..	5052
4305 ..	4504		4716	4959 ..	A.B.R. 93
4306 ..	—		4717		A.B.R. 5020
4311 ..	4521		4718	4960 ..	5053
4312 ..	4522		4719	4961 ..	—
4313 ..	4505	4516 ..	4702	5001 ..	2729

APPENDIX C—*continued.*

Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.	Q.R. & A.I.	R.I., &c.
5002–7 ..	A.B.R. 5018	5214 ..	5253		5322
5008 ..	4906	5215 ..	5214		5323
5009 ..	4907	5216 ..	—		5324
5010 ..	A.B.R. 5018	5217 ..	—	5321 ..	5341
5031 ..	1623	5218 ..	5216	5322 ..	A.B.R. 5018
5041 ..	A.B.R. 5018	5219 ..	5216	5323 ..	5342
5201 ..	5201	5220 ..	5217	Appx. 2..	Appx. 45A
5202 ..	—	5251 ..	5241	Appx. 3..	—
5203 ..	5202	5252 ..	5242	Appx. 4..	—
5203a ..	5203		A.B.R. 18	Appx. 6..	—
5204 ..	5204	5253 ..	5243	Appx. 11..	—
5205 ..	5206		A.B.R. 18	Appx. 12..	—
5206 ..	5207	5254 ..	—	Appx. 13..	Ch.16 S.I
5207 ..	5208	5301 ..	5304	Appx. 15..	Ch.25 S.II
5208 ..	5209		5305	Appx. 16..	—
5209 ..	5210		5306	Appx. 17..	Appx. 17A
5210 ..	5205		Appx. 53A	Appx. 18..	Appx. 11A
5211 ..	5211	5302 ..	5307	Appx. 20..	Appx. 15A
5212 ..	5212	5303 ..	5307	Appx. 21..	—
5213 ..	5251		5321	Appx. 22..	—

APPENDIX D.

C.O.R.—ARTICLES CANCELLED.

The following articles of Consolidated Orders and Regulations are hereby cancelled.

2. Where a superseding reference is quoted, the reference is to an article, &c., of R.I. unless otherwise stated.

C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.
1 ..	—	18 ..	C.C.N.O. 109/58	32 ..	—
3 ..	—	19 ..	C.N.O. 642/59	34 ..	Ch. 53
4 ..	C.N.O. 875/59	20 ..	—		Appx. 53A
5 ..	2715	21 ..	—	35 ..	2403
	2904	22 ..	—	36 ..	2408
	Appx. 29A	23 ..	2701	37 ..	3924
6 ..	2716	24 ..	—	40 ..	—
13 ..	3101	25 ..	2701	41 ..	3742
14 ..	3075	27 ..	C.N.O. 856/59	42 ..	3077
16 ..	2701	27A	Appx. 29A		A.B.R. 5018
	2753	28 ..	2708	43 ..	2521
	C.N.O. 855/59		2721		2522
17 ..	2701	29 ..	C.N.O. 865/59	44 ..	4962
	C.N.O. 875/59	30 ..	5202	45 ..	—
	C.C.N.O. 109/58	31 ..	C.N.O. 773/58	46 ..	5604

APPENDIX D—*continued.*

C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.
47 ..	—	214 ..	4622	315 ..	—
48 ..	2758	215 ..	4602	316 ..	—
49 ..	4007	216 ..	4622	329 ..	5252
50 ..	—	217 ..	2954		5253
52 ..	} RANOPS	218 ..	—		5255–9
53 ..		221 ..	I.F.A.A.	330 ..	5254
54 ..	Appx. 30A	222 ..	I.F.A.A.	331 ..	—
55 ..	1647	223 ..	—	332 ..	5258
56 ..	5604	224 ..	I.F.A.A.	333 ..	—
57 ..	3078	225 ..	I.F.A.A.	333A	5215
	Appx. 30A	227 ..	C.N.O. 1104/58	334 ..	—
57A	1643	229 ..	—	336 ..	5204
58 ..	—	230 ..	2406–8		5205
59 ..	1452	232 ..	2501		5253
	1471	233 ..	2502	337 ..	5208
60 ..	3072	234 ..	—	338 ..	5202
	A.B.R. 5018	235 ..	—	339 ..	5211
61 ..	} RANOPS	236 ..	2306	341 ..	3510
62 ..		238 ..	—	343 ..	3576
63 ..	—	239 ..	2957	344 ..	—
64 ..	—	240 ..	—	345 ..	3591
95 ..	1104	241 ..	—		3594
96 ..	—	242 ..	—	346 ..	3536
109 ..	—	244 ..	C.N.O. 901/59	347 ..	3572
110 ..	—	247 ..	—	348 ..	3508
111 ..	—	248 ..	3072	349 ..	3511
112 ..	—	250 ..	1121	350 ..	3512
115 ..	—	251 ..	1126	351 ..	3510
116 ..	—		1127	352 ..	3510
121 ..	C.N.O. 862/58	253 ..	1783	353 ..	—
135 ..	C.N.O. 405/59	267–71	C.N.O. 644/59	354 ..	3544
	C.N.O. 622/59	274 ..	C.N.O. 644/59	355 ..	3541
137 ..	—		4493	380 ..	C.C.N.O. 67/58
138 ..	—	275–8	C.N.O. 644/59	381 ..	—
138A	—	279 ..	C.N.O. 644/59	382 ..	—
143 ..	C.N.O. 862/59		A.B.R. 5018	383 ..	—
144 ..	C.N.O. 500/59	280 ..	—	384 ..	—
157 ..	4004	281 ..	1765	385 ..	—
163 ..	C.N.O. 156/60	282 ..	1762	386 ..	2916
164 ..	—	283 ..	—		5640
165 ..	C.N.O. 156/60	284 ..	1723	387 ..	—
	A.B.R. 8	285 ..	1701	393–	
167 ..	—	286 ..	—	400..	A.B.R. 4
172 ..	—	303 ..	2911	401 ..	4923
173 ..	—		3507	402–	
174 ..	C.N.O. 111/60	304 ..	4217	406..	A.B.R. 4
175 ..	1661	309 ..	B.R. 1754	407 ..	Appx. 17B
175A	1661	310 ..	B.R. 1754	408–10	A.B.R. 4
176 ..	5243	313 ..	A.B.R. 19	412–6	A.B.R. 4

APPENDIX D—*continued.*

C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.	C.O.R. Article.	Replaced by.
417 ..	4962	516 ..	B.R. 16	547 ..	1622
418 ..	A.B.R. 4	517 ..	B.R. 16	549A	4411
419B	—	518 ..	B.R. 16	556 ..	4449
446 ..	1411	519 ..	4277	561 ..	—
447 ..	2626	520 ..	B.R. 16	581 ..	4459
448 ..	1411	521 ..	B.R. 16	582 ..	4463
449 ..	C.N.O. 1035/59	523 ..	A.B.R. 5013	585 ..	—
450 ..	1452	524 ..	A.B.R. 5013	589 ..	4455
454 ..	1521	525 ..	—	595 ..	5602
455 ..	1521–36	526 ..	4943		5604
455A	1502	527 ..	2627		5631
455B	1534	528 ..	2627		5638
456 ..	1101	529 ..	2626	596 ..	5636
	1104	530 ..	4941	597 ..	5631
457 ..	—	531 ..	—	598 ..	5605
460 ..	1102	532 ..	—	599 ..	—
462 ..	1106	533 ..	A.B.R. 4	600 ..	5639
471 ..	1104	534 ..	4944	601 ..	5637
484 ..	C.N.O. 1069/58	535 ..	4945	602 ..	—
	C.N.O. 1076/59	536 ..	4946	603 ..	5632
485 ..	A.B.R. 4	538 ..	2601	604 ..	—
486 ..	A.B.R. 4	539 ..	2601	605 ..	5607
500 ..	4706		2602	Appx. I	—
511 ..	2707	540 ..	4479	Appx.	
	2906	541 ..	4462	II ..	A.B.R. 93
	B.R. 16	544 ..	1601–6	Appx.	
512 ..	—		1641	III ..	—
513 ..	4274		1643	Appx.	
514 ..	4273	545 ..	1623	IV ..	A.B.R. 4
514A	—	545A	—	Appx.	
515 ..	—	546 ..	—	V. ..	Appx. 53A

Appendix E.

NAVY ORDERS CANCELLED.

The following Navy Orders are hereby cancelled.

2. The superseding references are to articles of R.I. unless otherwise stated.

Navy Order.	*Replaced by R.I.*	*Navy Order.*	*Replaced by R.I.*
1958—		433	2408
556	Ch. 16 S.I	479	5301
835	5307	486	Appx. 17A
858	1641	516	1624
	1643	555	2524
1100.. ..	1764	558	3078
1150.. ..	4495–8	703	2984
		750	1524
1959—		837	1704
6	1573	874	3143
93	2915	920	Ch. 16 S.I
231	Appx. 26B	925	3924
232	2730		3925
238	1703	951	2985
264	3074	1960—	
265	3045	23	4505
379	Ch. 41	173	1707
431	2406	174	1722
432	2407	253	1783

(SEC 47/8/3.)

(Navy Order 475 of 1959—*see also* those listed in appendix D and those cancelled in appendix E).

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

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C.N.O.'s 792-814/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
28th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

7348/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

RESTRICTED.

792.—General Messages to be Held at Ports and by Establishments.

The appendix to Navy Order 709 of 1959 is to be amended as follows—

(*a*) After " F " *insert* " LF " (six places).

(*b*) Against " NOIC Jervis Bay " and " Other Establishments " *insert* " * ".

(*c*) After the " Note " at end of appendix *insert*—

" * Only those messages of the LA, LF and LX series which refer to publications and material held on charge by the establishment and/or ships and authorities for whom its M.S.O. is responsible need be filed."

(DSD 77/201/2.)

(*Navy Order* 709 *of* 1959.)

UNCLASSIFIED.

793.—H.M.A.S. KUTTABUL II.—Commissioning.

H.M.A.S. KUTTABUL II. was commissioned on Monday, 21st March, 1960, under the command of the Captain of the Port, Sydney, for the administration of the Naval Dockyard Police.

(HNB 1605/3/2.)

Cancelled vide CNO/427/62

UNCLASSIFIED.

794.—Medical Diagnosis—International Classification—Statistics.

Navy Order 620 of 1960 is to be amended as follows—

Paragraph 1, first line—

Delete " diagnose " and *insert* " diagnoses ".

(MDG 327/54/25.)

(*Navy Order* 620 *of* 1960.)

UNCLASSIFIED.

795.—Usage of Stores—Prevention of Waste—Publicity Campaign.

A significant factor in the cost of operating the Royal Australian Navy is the consumption of stores of all kinds by ships and establishments. The increased complexity of the equipments introduced into service has added considerably to this cost over recent years, and this trend will continue.

2. The cost of maintaining the Navy has also risen because of—

(*a*) The decline in the purchasing power of money.

(*b*) The increased cost of inescapable charges such as pay and allowances for the sea-going forces salaries and wages for the civil staff, removals and travelling, &c. It is accordingly imperative that full value must be obtained for every pound spent, if the maximum logistic effort is to be maintained in the most economical way.

3. It follows, therefore, that the expenditure of stores by all ships and establishments must be kept to the minimum, consistent with the Naval Defence role, and that the drain on our limited financial resources due to avoidable losses, excessive usage and damage to stores and equipment must be countered with all means possible.

4. The Naval Board are convinced that the seriousness of the situation demands a vigorous campaign to impress all concerned with the necessity for rigid control over the usage of stores.

5. It has accordingly been decided to launch such a campaign throughout H.M.A. ships and establishments, and arrangements have been made for the production of the following publicity media—

(*a*) Posters 10-in. x 12-in.—Six different designs.

(*b*) Pay envelope slips—Six different designs.

(*c*) Recorded messages (for use with S.R.E. systems—Disc with three different messages).

(*d*) Slides—for 16-mm. and 35-mm. projectors.

6. The Naval Board also believe that worthwhile results from the campaign will be achieved only with the fullest measure of co-operation from all concerned in the use of stores, and it is desired that dissemination of the propaganda material be arranged, particularly in regard to the selection of poster sites, and rotation of poster and pay envelope slips, with a view to ensuring that the widest possible publicity is attained.

7. Demands for requirements of posters, recorded messages and slides should be forwarded to the Superintending Naval and Air Store Officer, Sydney.

8. Distribution of pay envelope slips will be arranged without demand.

(4th NM 400/52/4.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

796.—Divisional Officers—Ratings Sentenced to Imprisonment or Detention—Information to Next-of-Kin.

Q.R. & A.I. Article 3124, Clause 2, directs that a rating is to be advised to inform his next-of-kin when he is sentenced to imprisonment, whether by Naval or civil authorities, or to detention. When considered necessary, and provided the rating has no objection, the Divisional Officer is required to write to the next-of-kin on the offender's behalf.

2. The Naval Board has decided to amplify these provisions with regard to all ratings under the age of eighteen years. In these cases the Divisional Officer is always to inform the next-of-kin.

3. The provisions in paragraphs 1 and 2 above are to apply also when ratings are about to be tried by the civil power on charges which, if proved, could lead to a sentence of imprisonment or other form of confinement. The information by the Divisional Officer is to be given sufficiently early to enable the next-of-kin to arrange legal representation if they so desire.

4. The need for the rating, or Divisional Officer, to write immediately so that the next-of-kin do not receive prior intimation from another source (for example, by stoppage of allotment or from a press report) is to be stressed in all cases.

5. These changes are to come into effect forthwith.

(HPB 321/1/5.)

UNCLASSIFIED.

797.—Higher Rates Training.

The table printed as an appendix to this Navy Order shows the number of ratings who qualified professionally for higher rate other than by course during the period 1st January, 1960 to 30th June, 1960.

2. The numbers qualified in the previous six months is shown in Navy Order 340 of 1960.

Appendix.

RATINGS PASSED PROFESSIONALLY FOR HIGHER RATING 1st JANUARY TO 30th JUNE, 1960.

—	Seaman.		Communication.		Engine Room Artificer.	Engineering Mechanic.			Electrical Artificer.	Electrical (P).		Electrical (E).		Radio Electrical.	
	PO.	LDG.	LTO.	LRO.	CERA.	CPO.	PO.	LDG.	CEA.	PO.	LDG.	PO.	LDG.	PO.	LDG.
MELBOURNE ..	1	9	1	1	—	1	2	8	—	1	1	—	3	—	—
VOYAGER	1	7	—	—	—	—	3	5	—	—	—	—	2	—	1
VENDETTA ..	2	7	—	—	2	2	5	—	—	1	1	—	4	1	—
VAMPIRE	1	1	—	—	—	1	1	4	—	1	—	1	1	—	—
ANZAC	1	2	—	—	—	—	—	1	—	—	—	—	—	—	—
TOBRUK	1	—	—	—	—	1	2	4	—	—	—	—	—	—	1
QUEENBOROUGH	1	3	—	—	—	1	—	—	—	—	—	—	—	—	—
QUICKMATCH ..	—	—	—	—	—	1	—	2	—	1	—	—	1	—	1
QUIBERON ..	3	1	—	1	—	1	2	2	—	—	—	—	—	—	1
BARCOO	1	3	—	—	—	—	—	3	—	—	—	—	—	—	—
SWAN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KIMBLA	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—
WARREGO	—	—	—	—	—	—	1	4	—	—	—	—	—	—	—
PALUMA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WOOMERA ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GASCOYNE ..	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—
DIAMANTINA ..	—	4	—	—	—	—	—	1	—	—	—	—	—	—	—
ALBATROSS ..	—	—	—	—	—	1	—	4	—	—	—	—	—	—	—
CERBERUS.. ..	—	6	—	—	—	—	7	3	1	—	1	—	1	—	1
CRESWELL ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
HARMAN	—	2	—	3	—	—	—	1	—	1	1	—	—	—	4
KUTTABUL ..	—	1	1	3	—	—	—	—	1	—	—	—	1	—	1
MELVILLE	—	2	—	2	—	—	—	—	—	—	—	—	—	2	—
NIRIMBA	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—
PENGUIN	—	—	1	—	—	—	1	2	—	—	—	—	—	—	—
TARANGAU ..	2	—	—	—	—	—	—	2	—	—	—	—	—	—	—
WATSON	1	3	—	—	—	—	—	—	—	—	1	—	4	—	—
Total ..	15	51	3	10	2	9	27	50	2	5	5	1	17	3	10

APPENDIX.

RATINGS PASSED PROFESSIONALLY FOR HIGHER RATING 1ST JANUARY TO 30TH JUNE, 1960.

—	*Electrical (Air).*		*Radio Electrical (Air).*		*Sick Berth.*	*Dental.*	*Writer.*		*Stores (S).*		*Stores (V).*		*Steward.*	
	PO.	*LDG.*	*PO.*	*LDG.*	*LDG.*	*LDG.*	*PO.*	*LDG.*	*PO.*	*LDG.*	*PO.*	*LDG.*	*PO.*	*LDG.*
MELBOURNE ..	—	—	—	1	—	—	—	3	—	—	—	—	—	7
VOYAGER	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VENDETTA ..	—	—	—	—	—	—	1	1	—	—	—	—	—	1
VAMPIRE	—	—	—	—	—	—	—	1	—	—	—	—	—	1
ANZAC	—	—	—	—	—	—	—	1	—	—	—	—	—	4
TOBRUK	—	—	—	—	—	—	—	—	—	—	—	—	—	—
QUEENBOROUGH	—	—	—	—	—	—	—	—	—	—	—	—	—	—
QUICKMATCH ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1
QUIBERON ..	—	—	—	—	—	—	—	—	—	—	—	1	—	—
BARCOO	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SWAN	—	—	—	—	—	—	—	—	—	—	—	—	—	2
KIMBLA	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WARREGO ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PALUMA	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WOOMERA ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GASCOYNE ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—
DIAMANTINA ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ALBATROSS ..	1	5	1	2	—	—	1	1	—	2	—	—	—	3
CERBERUS ..	—	—	—	—	3	—	2	5	—	—	—	—	—	4
CRESWELL ..	—	—	—	—	—	—	—	1	—	—	—	—	—	—
HARMAN	—	—	—	—	—	—	—	2	—	—	—	—	—	1
KUTTABUL ..	—	—	—	—	1	—	3	3	—	—	—	—	—	—
MELVILLE.. ..	—	—	—	—	—	1	—	—	—	—	—	1	—	—
NIRIMBA	—	—	—	—	—	—	—	—	—	—	—	—	1	—
PENGUIN	—	—	—	—	—	—	—	—	—	—	1	—	—	—
TARANGAU ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WATSON	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ..	1	5	1	3	4	1	7	18	1	2	1	2	1	24

(DMT 311/201/4.)

(*Navy Order* 340 *of* 1960.)

UNCLASSIFIED.

798.—Ratings—Supply Branch—Introduction of Refresher Courses for Higher Rating in Writer, Stores (S), Stores (V) and Steward Categories.

In order to assist Supply Branch personnel to reach the standards required for the professional examination for the Petty Officer rate, it has been decided to introduce refresher courses of four weeks duration at the Supply School, Flinders Naval Depot, for Leading Rates of the Writer, Stores (S), Stores (V) and Steward categories.

2. Names of recommended volunteers who are eligible for the examination and can be spared without relief are to be forwarded to the Commodore Superintendent of Training, Flinders Naval Depot, copy to Naval Board, at least one month prior to the course. Ratings who are accepted for the course are to be lent to H.M.A.S. CERBERUS and are to join on the previous day.

3. Although it is desirable for candidates to attend the refresher courses, it is optional for them to do so prior to taking the examination. It is therefore emphasized that these courses are not intended to replace organized instruction in own ship and establishment which will be essential for ratings who are not accepted for course or who cannot be spared.

4. Two courses a year will be held immediately prior to the April and October professional examinations. Courses will commence on the first Monday in March and September each year. The first course will start on Monday, 6th March, 1961.

(DMT 311/3/4.)

UNCLASSIFIED.

799.—Services Canteens Trust Fund—Education Awards for 1961.

The Trustees of the Services Canteens Trust Fund are inviting applications for Education awards for 1961.

2. *Education Awards.*—Education awards range in value from £5 to £200 depending on the nature and cost of the course taken by the child and the circumstances of the family. There is a means test based on the adjusted family income. Education awards may be granted if the adjusted family income is £500 or less in the case of orphans and £450 for other children. The adjusted family income is calculated by taking the gross income of the family and deducting 10 per cent. for each dependant if the gross income is less than £1,200, and £120 for each dependant if the gross income is over £1,200. The awards are designed to contribute towards the expenses of education to help parents keep their children at school to obtain the benefits of higher education.

3. *Eligibility.*—Any child coming within the age requirements set out below and whose father or mother served in the Australian forces on full time paid duty between 3rd September, 1939 and 30th June, 1947 is eligible to apply for an Education award.

4. *Age Requirements.*—Education awards commence from the year in which the child turns fifteen. Where there are exceptional circumstances such as a child who would be deprived of a secondary education if financial help is not available to the parents to send the child to school or where a parent's income is derived solely from old age, invalid or war pension, awards will be considered for the year in which the child turns thirteen or fourteen. Orphan children may be considered for awards from the year in which they turn twelve.

5. *Applications.*—Applications for awards for 1961 should be lodged with the Regional Secretary of the Services Canteens Trust Fund in the State of residence of the parent before the 15th October, 1960.

6. *Post-graduate Scholarships.*—One post-graduate Scholarship is awarded each year for study overseas. The value of this scholarship is £1,000 per annum for a maximum of three years. Applications close on 1st November, 1960.

7. *Higher Training Education Awards.*—Higher Training Education awards may be granted for post-graduate courses in auxiliary services to medicine, welfare or science such as Nursing, Occupational Therapy, Speech Therapy, Orthoptic Therapy, Laboratory Technician. Applications close on 1st December, 1960.

8. The addresses of Regional Secretaries are as under—

Queensland	Victoria Barracks, BRISBANE.
New South Wales	84 Pitt Street, SYDNEY.
Victoria	Victoria Barracks, MELBOURNE.
South Australia	22 Grenfell Street, ADELAIDE.
Western Australia	Swan Barracks, PERTH.
Tasmania	Anglesea Barracks, HOBART.
Australian Capital Territory	15 Bremer Street, Griffith, KINGSTON, A.C.T.

9. This order will be reprinted for posting on notice boards.

10. Navy Order 733 of 1959 is hereby cancelled.

(DNES 134/51/4.)

(*Navy Order* 733 *of* 1959.)

UNCLASSIFIED.

800.—Uniform—Reserve Ratings—Cap Ribbons.

Reserve ratings performing continuous service or training for a period of not less than three months may be allowed to take up, on repayment, and wear the cap ribbon of the ship or establishment in which they are serving.

2. Reserve ratings who do not wish to buy the cap ribbon of the ship or establishment will continue to wear the special cap ribbon presented in the relevant Reserve Regulations.

(DNR 917/73/21.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

801.—Radar Type 944 (1) and Type 944 (2)—Loss of Power in Transmitter-Receiver R.T.—194A/UPX-1.

Navy Order 473 of 1960 is to be amended as follows—

Delete paragraph 3.

Insert new paragraph 3 worded as follows—

"3. Ships experiencing this defect are to report the matter immediately on form A.S. 2022 and take temporary remedial action by cleaning V.201 cavity with a soft cloth and Turco-Solv cleaning fluid. Abrasives are not to be used."

(DEE 518/51/299.)

(*Navy Order* 473 *of* 1960.)

UNCLASSIFIED.

802.—H.M.A. Ships—Care of Propellers.

The attention of administrative authorities and Commanding Officers of H.M.A. ships is drawn to the provisions of COR Article 315, and Confidential Navy Order 70 of 1960.

2. The work of cleaning propellers, whether in dock or afloat, is to be considered a normal function of the ship's staff but, when necessary, the assistance of the Port Diving Officer at Sydney may be sought.

3. Navy Order 921 of 1958 is hereby cancelled.

(DTSR 1211/4/16.)

(*Navy Order* 921 *of* 1958 *and Confidential Navy Order* 70 *of* 1960.)

UNCLASSIFIED. Cancelled C N O 600/62

803.—Ammunition—Annual Practice Allowances.

Stocks of Q.F. 40/60 H.E.T. cartridges which are due for withdrawal in 1960, 1961 and 1962 are held in Sydney.

2. In order to ensure that these cartridges are used up before becoming over age, ships which hold cartridges of later withdrawal dates, are to arrange with the Superintending Armament Supply Officer, R.A.N. Armament Depot, Spectacle Island, to exchange sufficient to meet practice requirements.

(DW 726/66/21.)

UNCLASSIFIED.

804.—Weapon Mountings—Auto Testing and Tuning—Supply of Instruments.

Issue of instruments required for testing and tuning weapon mounting auto systems, *vide* B.R. 2034, will be made without demand as supplies become available, in accordance with the allocation shown in the appendix to this order.

2. On receipt, they are to be taken on charge in the Ordnance Engineer's gunnery equipment and underwater weapon store account and are to be returned to the Gunnery Equipment Stores Officer, Sydney on paying off.

3. Care is to be taken to avoid wastage of the special teledeltos charts used with the Duplex Quick Response Recorder and records are only to be taken in the final stages of tuning. Rolls of plain paper are available for initial tuning.

4. Any instruments drawn on loan in excess of allocation, e.g., for overall gunnery control trials, are to be returned in a serviceable condition or with a list of defects attached, immediately the trial is completed.

5. Navy Order 649 of 1959 is hereby cancelled

APPENDIX.

Ship or Establishment.	*Misalignment Meter Type M.A. 47.*	*Portable Dummy Director.*	*Duplex Quick Response Recorder and Amplifier.*	*Remarks.*
H.M.A.S. MELBOURNE ..	2	1	1	
H.M.A.S. WATSON ..	1	1	1	
H.M.A.S. VOYAGER ..	2	1	1	
H.M.A.S. VENDETTA ..	2	1	1	
H.M.A.S. VAMPIRE ..	2	1	1	
H.M.A.S. ANZAC	2	1	1	
H.M.A.S. TOBRUK ..	2	1	1	
H.M.A.S. QUEENBOROUGH	1	1	1	
H.M.A.S. QUICKMATCH ..	1	1	1	
H.M.A.S. QUIBERON ..	1	1	1	
H.M.A.S. YARRA	1	1	1	
H.M.A.S. PARRAMATTA ..	1	1	1	
Type 12 Frigate 0.2	1	1	1	
Type 12 Frigate 0.5	1	1	1	
CST, FND (for "L" School and "G" School) ..	2	2	2	
West Head Gunnery Range ..	1	1	1	
O.E.O. Bendigo	1	1	1	
O.E.O. Maribyrnong ..	1	1	1	
G.M.G.I.	1	4	4	
G.M.W.D.	1	4	4	
G.E.S.O. Sydney	15	3	6	May be drawn on loan for overall gunnery control trials
G.E.S.O. Maribyrnong ..	6	3	3	

APPENDIX—*continued.*

Theodolites, Watts Microptic—				
CST, FND (for " G " School)	..	—	1	
G.E.S.O. Sydney ..	..	—	8	May be drawn on loan for overall gunnery control trials.
G.E.S.O. Maribyrnong	..	—	6	

(DW 736/252/10.)

(*Navy Order* 649 *of* 1959.)

UNCLASSIFIED.

805.—Gun Mountings—4.5-in. Twin R.P. 41 Mark 6 Series Mountings—Dither Motors.

There will be no further manufacture of A.C. dither motors for the above-mentioned gun mountings. When existing stocks of A.C. dither motors are exhausted, D.C. dither motors are to be fitted in lieu, the necessary wiring changes being made generally in accordance with drawings D.E.E. 16230 R/4 and series.

(DW 1215/55/44.)

UNCLASSIFIED.

806.—Guns—Q.F. 40/60 Marks 9, 10, 11, and N1 Series—DT285 Lubricator—Replacement.

(*A.F.O.* 1223/1959.)

Consequent upon the introduction of grease XG 460 for use on breech casing slides, breech ring slides, &c., of Q.F. 40/60 guns (as shown in Appendix 11 of B.R. 292 (Ordnance Engineering Manual)), DT 285 lubricator, with metric thread 10-mm. x 1-mm. is unsuitable for continued use, and is to be replaced at the first opportunity.

2. As from the date of this order, in order that the work of re-drilling and tapping existing holes to take the B.S. type lubricators as detailed in the Combined Schedule of Modifications may be eliminated, DT 285 lubricators still fitted to Q.F. 40/60 guns are to be replaced by AB 223 lubricator which is a special B.S. type lubricator with a B.S. cap and metric thread and can be screwed into the existing DT 285 lubricator holes.

3. The following amendments are to be made to the Combined Schedule of Modifications: Part 1—

Q.F. 40/60 Mark N1 and accessories—Serial No. 31.
Q.F. 40/60 Mark 9 and accessories—Serial No. 22.
Q.F. 40/60 Mark 10 and accessories—Serial No. 32.
Q.F. 40/60 Mark 11 and accessories—Serial No. 24.

Add *Note.*—This modification applied when DT 285 lubricators were exchanged prior to issue of C.N.O. 806/60.

4. The following modification is now approved—

Gun	Q.F. 40/60 Marks 9, 10, 11 and N1 Series fitted with DT 285 lubricators.
Part affected ..	Casings, breech.
Purpose	To improve lubrication.
Nature of Mod. ..	Replace DT 285 lubricator with AB 223 lubricator.
Drawing	—
New parts required ..	AB 223 lubricator.
By whom to be done ..	R.A.N. Armament Depots.
When to be done ..	As soon as possible.

Schedule of Mods. Pt. 1—
Guns Q.F. 40/60 mark N1, &c. Add Serial No. 42.
Guns Q.F. 40/60 mark 9, &c. Add Serial No. 30.
Guns Q.F. 40/60 mark 10, &c. Add Serial No. 41.
Guns Q.F. 40/60 mark 11, &c. Add Serial No. 33.

5. R.A.N.A.D.'s DT 285 Lubricators are to be held in store pending further instructions as to disposal. This modification is to be applied to mark N1/5 guns.

(DW 708/51/42.)

UNCLASSIFIED.

807.—4-in. R.P. 52 Mark 19 Mountings—Tally Plates Modification Number A.N. 1.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted; Gunnery Equipment Depots.
(*b*) *Type of equipments* ..	4-in. R.P. 52 Mk. 19 mountings.
(*c*) *Part of equipment affected*	Tally plate for gunlayers power change-over switch.
(*d*) *Purpose of modification* ..	To bring the lettering on the tally plate into line with standard gun and turret drill.
(*e*) *Nature of modification* ..	The lettering on the tally plate to be altered from Remote-Local to Auto-Joystick.
(*f*) *By whom to be done* ..	Ship's staff.
(*g*) *When to be done* ..	At earliest opportunity.

(DW 736/60/16.)

UNCLASSIFIED.

808.—Naval Stores (Air)—Safety Equipment—Ejection Seats—Test Rig for Time Delay Mechanism.

(*A.F.O.* 3034/1959.)

The following item is hereby introduced—

Reference No.	*Description.*	*Denomination.*	*Classification.*
27L/1341	Test Rig Ejection Seat Time Delay Mechanism	No	Permanent.

2. An allowance of these test rigs has been approved to each of the following—

H.M.A.S. MELBOURNE ..	1 No.
H.M.A.S. ALBATROSS	2 No. (1 No. for S.A.M.(E) ORD).
De Havilland Aircraft Company ..	1 No.

2. These items will be issued without demand by N.S.O. (Air) Sydney, as soon as supplies have been received from the U.K.

3. Instructions for the use of this equipment will be included in AP 4288N, Vol. 1.

4. Relevant publications will be amended.

(DNAS 603/77/225.)

UNCLASSIFIED.

809.—Naval Stores (General)—Stores for A.B.C. Purposes—Usages and Allowances.

The Naval Stores required and allowed for A.B.C. purposes in establishments and ships are shown in Appendixes A and B respectively.

2. Demands for these stores in the quantities authorized are not to be placed until further notice. Reasonable requirements for training may, however, be demanded as necessary since sufficient stocks should be available for this purpose.

APPENDIX A.

NAVAL STORES FOR A.B.C. PURPOSES—USAGE, ETC., AND ALLOWANCES FOR ESTABLISHMENTS.

Class and Group.	*Admiralty Pattern.*	*Description.*	*Naval Store Classification.*	*Remarks on Usage, &c.*	*Denom.*	*Interim Allowances for Establishments.*	
						Quan.	
B.9A	184A	Whistles, mouth, single type, with chain attached	Cons.		No.	—	As required in warden sections
B.10D	Like 5695	Bins, with cover, 22-in. high x 19-in. top diam. x 15-in. bottom diam.	Cons.	For contaminated clothing	No.	1	Per pioneer squad engaged on decontamination
B.10D	C.1032	Buckets, hand	Cons.		No.	2	Per pioneer squad engaged on decontamination
B.10D	3591	Trays, bleach, 3-ft. 2-in. x 2-ft. 2-in. x 4-in.	Cons.	For mixing bleach, &c. ..	No.	—	As required
B.11F	910–5938	Shovels, square mouth 10-in. x 12¼-in.	Perm.		No.	2	Per pioneer squad engaged on decontamination
B.11F	910–5949	Spades, digging or garden, 8-in. x 12-in.	Perm.		No.	2	Per pioneer squad engaged on decontamination
E.2A	Dwg. M.C.D. 019595	Handcarts	Perm.		No.	1	Per pioneer squad
E.2E	5860	Vapour detector kit, complete	Perm.	Distinguishes between mustard and nerve gases when contaminated air is drawn through chemically treated filter papers contained in buttons inserted into the top of a pump	No.	20	Per large establishment—a provisional allowance for planning purposes only. (A large establishment is one of 500 or more men borne or employed)
		Components.					
		1—Hold-all, canvas ..	Perm.				
		1—Pump	Perm.				
		1—Rack for components ..	Perm.				
		1—Water bottle with dripper	Perm.				

Class and Group.	Admiralty Pattern.	Description.	Naval Store Classification.	Remarks on Usage, &c.	Denom.	Interim Allowances for Establishments. Quan.	
		1—Set of instructions ..	Perm.				
		1—Spare valve for pump ..	Cons.				
		7—Holders, white, filled with 10 white buttons	Cons.				
		7—Holders, red, filled with 10 red buttons	Cons.				
		2—Holders, orange, filled with 100 capillary tubes	Cons.				
		2—Filter holders (blue), with 10 filters	Cons.				
		4—Applicators	Cons.				
		2—Tablet tubes, white, filled with 13 tablets A	Cons.				
		2—Tablet tubes, orange, filled with 13 tablets Z	Cons.				
E.6	3562	Powder, gas, detecting, in 1½-lb. tins approx.	Cons.	Distinguishes between mustard and nerve gases by different colour reactions. For sprinkling in places difficult of access	Tins	1	Per warden } plus 50 per cent. spare Per pioneer squad }
E.6	5365	Gas Training Mixture, G.T.M.5D	Cons.	Mustard gas simulant ..	Gal.	—	As required, for training schools only
E.6	5385	Sodium Silicate (Water-glass)	Cons.	For sealing concrete floors and other porous surfaces	Lb.	—	As required
E.7	—	Gas training mixture GTM 6 consisting of—					
	5366A	Odorous Liquid ..	Cons.		Tin	1	As required for training schools only
	5366B	Thickening Powder ..	Cons.		Pkt.	1	
	5366C	Sodium Metaphosphate	Cons.		Tin	1	
E.8	150	Bleach powder, super tropical 30 per cent.	Cons.		Cwt.	20	Per 5 acres of effective area*
E.8	830C	Ointment, anti-gas, No. 6 ..	Cons.		Tins	1	Per member of Naval complement borne
						1	Per member of civilian complement liable to remain exposed during attack
E.8	943-1548	Grease protective PX6 in 7-lb. tin	Cons.	For mixing in the proportion of 1 lb. to 14 lb. of bleach paste for making the latter stick to vertical painted surfaces and deckheads, and also for improving the protective qualities of leather boots	Cwt.	1	Per pioneer squad
E.8	7001	Ointment, eye, British, Anti-Lewisite (B.A.L.)	Cons.		Set	—	War issue only
E.11	C.218	Brooms, bass, 23-oz. ..	Cons.	For removing or spreading bleach paste	No.	2	Per pioneer squad engaged on decontamination
E.11	C.242	Brush, scrub, deck ..	Cons.	For scrubbing decks and wooden floors with bleach paste and sand	No.	2	Per pioneer squad engaged on decontamination
E.11	C.243	Brush, hand, large ..	Cons.	For scrubbing wooden tables, wood-work of vehicles, &c., contaminated by liquid gas	No.	2	Per pioneer squad engaged on decontamination
E.11	943-0402	Brush, painter, distemper, fibre	Cons.	For applying bleach paste to vertical and overhead surfaces	No.	2	Per pioneer squad engaged on decontamination

APPENDIX A—*continued.*

Class and Group.	Admiralty Pattern.	Description.	Naval Store Classification.	Remarks on Usage, &c.	Denom.	Interim Allowances for Establishments.	
						Quan.	
E.12A	5248	Pin, push, route eye ..	Cons.		No.	1	Per warden post
E.12A	5697	Bags, string	Cons.	For carrying contaminated clothing to civil laundries	No.	1	Per member of Naval complement borne plus 50 per cent. of the maximum number of civilians expected to be employed
E.12A	5898	Sacks, paper, gas-proof, 45-in. x 24-in.	Cons.	For carrying contaminated clothing to the decontamination centre of an establishment	No.	—	For 10 per cent. of the maximum numbers expected to be borne or employed
E.12A	5900	Pathway, anti-gas ..	Cons.		Yards	25	Per 5 acres of effective area*. For Naval Air Stations only
E.12A	5901	Paper, differential detector, 12-in. x 18-in. in sets of 100 sheets	Cons.	Distinguishes between mustard and nerve gases by different colour reactions. Pieces 12-in. x 18-in. to be fitted to boards as indicators	Sets	—	As required
E.12A	5903	Indicators contaminated ground	Cons.		No.	6	Per warden post
E.12A	5904	Boards, notice safe-route ..	Cons.		No.	6	Per warden post
E.12A	C.1701	Handles, broom, &c. ..	Cons.		No.	4	Per pioneer squad engaged on decontamination

* Effective area is the total area of the establishment excluding pleasure grounds, waste lands, and water areas. Naval air stations should provide for 25 per cent. only of the airfield exclusive of runways and approaches.

APPENDIX B.

NAVAL STORES FOR A.B.C. PURPOSES—ALLOWANCES TO SHIPS.

Class Group.	Pattern.	Description.	Naval Store Classification.	Denomination.	Classes of Ships.						Remarks.
					1	2	3	4	5	6	
B.10D	Like 5695	Bins, with cover, 22-in. x 19-in. x 15-in.	Cons.	No.	6	3	3	3	1B	1	A = One pair for each suit of protective clothing plus 10 per cent.
B.10D	3591	Tray, bleach	Cons.	No.	6	3	3	3	1B	1	
D.4	—	Protective overmittens, for use with anti-gas gloves	Cons.	No.	A	A	A	A	A	A	B = Not when on harbour service
E.2	5860	Vapour detector kit, complete	Perm.	No.	14	5	4	4	2B	2	C = Number equal to 50 per cent. of wartime complement
E.6	5365	G.T.M. No. 5	Cons.	Gall.	2	2	1	1	—	—	D = Number equal to the wartime complement
E.6	5366	G.T.M. No. 6	Cons.	Gall.	2	2	1	1	—	—	E = Plus additional quantity for landing parties (on basis of 1 tin ointment and 4 eyeshields for each member of landing organization, viz., 50 per cent. of total complement except Wardroom, &c., attendants and native ratings)
E.6	3562	Powder, gas detecting ..	Cons.	Tins	8	4	4	2	2	2	
E.8	150	Bleach powder, super tropical, 30 per cent.	Cons.	Cwt.	20	5	5	5	½B	1	
E.8	830C	Ointment, anti-gas No. 6 ..	Cons.	Tins	CE	CE	CE	CE	BC	C	
E.8	7001	Ointment, British Anti-Lewisite (BAL) (*see* Note (J))	Cons.	Set	GE	GE	GE	GE	3B	G	
E.8	943–1548	Grease protective PX6 ..	Cons.	Lb.	56	14	14	14	3	5	F = If fitted with wooden decks
E.11	C.243	Brush, hand, large ..	Cons.	No.	30	10	10	10	2	3	G = Number equal to 10 per cent. of wartime complement
E.11	C.242	Scrubber, deck	Cons.	No.	30F	10F	10F	10F	3F	5F	
E.11	C.218	Brooms, bass	Cons.	No.	30	10	10	10	2	3	H = Number equal to 25 per cent. of wartime complement
E.11	943–0402	Brush, painter, distemper ..	Cons.	No.	30	10	10	10	2	3	

KEY TO CLASSES OF SHIPS.

1. Carriers.
2. Destroyers.
3. Frigates.
4. Ocean minesweepers, surveying ships.
5. R.A.N. and civilian manned tugs.
6. Boom Working Vessels.

APPENDIX B—*continued.*

Class Group.	Pattern.	Description.	Naval Store Classification.	Denomination.	Classes of Ships. 1	2	3	4	5	6	Remarks.
E.12A	5899	Shield, eye, anti-gas ..	Cons.	No.	DE	DE	DE	DE	D	D	I = As required for brushes and scrubber
E.12A	C.1701	Handles, wooden	Cons.	No.	1	1	1	1	1	1	
E.12A	5901	Paper, differential detector ..	Cons.	Sets	5	2	2	1	1	1	J = Supplied in war only, when specially ordered
E.12A	5898	Sacks, paper gas-proof ..	Cons.	No.	G	G	G	G	G	5	
E.12A	5897	Bags, string	Cons.	No.	H	H	H	H	H	10	
E.12A	5248	Pin push, route eye ..	Cons.	No.	12	4	4	4	—	1	

KEY TO CLASSES OF SHIPS.

1. Carriers.
2. Destroyers.
3. Frigates.
4. Ocean minesweepers, surveying ships.
5. R.A.N. and civilian manned tugs.
6. Boom Working Vessels.

(DNAS 501/51/25.)

UNCLASSIFIED.

810.—Naval Stores (General) (Class B, Group 8, Part C)—CO^2 Cylinder 15-lb.—Introduction.

(*A.F.O.* 1704/1960.)

The following item is being introduced into B.R. 810, the Rate Book and Authorized List of Naval Stores, under class B, group 8, part C, for use with pattern B8C/13701 dry chemical extinguisher fitted on Land Rover Rescue Vehicles—

Pattern No.	*Description.*	*Ship's Accounting Classification.*
B8C/16332	Cylinder CO^2 15-lb.	Permanent.

2. This item which is suitable for use on both long and short wheel based vehicles replaces pattern B8C/13702 cylinder CO^2 20-lb. The latter has been marked "0" in the Rate Book but will be issued for use on short wheel based vehicles only until stocks are expended.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 505/87/223.)

UNCLASSIFIED.

811.—Naval Stores (General) (Class E, Group 11)—Brooms and Brushes—Adoption of Joint Service Catalogue Numbers.

(*A.F.O.* 2000/1960.)

Joint Service Catalogue numbers have been adopted for the range of brooms and Brushes listed in the Appendix to this order.

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812 (*g*) of A.B.R. 4 (Naval Storekeeping Manual).

APPENDIX.

Joint Service Group/Class—7920.

Old Pattern No.	*New Pattern No.*	*Old Pattern No.*	*New Pattern No.*
4529	943–2797	C.238	943–2812
C.218	943–2786	C.242	943–2854
C.202	943–2785	C.243	943–2817
C.204B	943–2790	C.245	943–2816
C.219B	943–2793	C.255	943–2821
C.208 } C.215 }	943–2803	C.260	943–2863
		C.216	943–2853
C.223	943–2806	C.309	943–2849
C.225	943–2855		
C.302	943–2845		

(DNAS 514/56/22.)

Section 4.
DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

812.—Victualling Stores—Provisions—Containers, Polythene for Vinegar—Accountable Packages.

Polythene containers, 1 gallon capacity, have been adopted for the supply of vinegar to H.M.A. ships and establishments.

2. The containers are accountable packages and rated at— *s. d.*

(*a*) Containers, polythene, 1 gallon, complete with screw top .. 4 6 each

(*b*) Containers, polythene, 1 gallon, spare screw tops for .. 0 4 each

(DV 456/51/5.)

Section 5.
BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

813.—Electrical Officers' Reference Library.

The Electrical Officers' Reference Library is intended as a technical reference for the Electrical Officer and senior electrical ratings to supplement specialized information given in B.R.'s and A.P.'s.

2. Books to complete to the allowance as listed in the following table will be supplied without demand. Books held additional to those listed may be retained on charge or returned if not required.

Title.	*Author.*	*Frigates and above.*	*H.M.A.S. ALBATROSS.*	*H.M.A.S. NIRIMBA.*	*Garden Island Dockyard.*	*Williamstown Dockyard.*	*Other Establishments.*
Standard Handbook for Electrical Engineers	Knowlton ..	1	1	1	1	1	1
Raditron Designers Handbook ..	—	1	1	1	1	1	1
Fundamentals of Radio Engineering	Terman ..	1	1	1	1	1	1
Principles of Radar	M.I.T. ..	1	1	1	1	1	1
Servo Mechanism Fundamentals ..	Lauer Leswick and Matson	1	1	1	1	1	1
Applied Electricity	Hirst ..	1	1	1	1	1	1
SAA Wiring Rules, Parts I. and II.	—	—	1	1	1	1	1
Aircraft Electrical Engineering ..	Speadbury ..	—	1	1	—	—	—
General Engineering Workshop Practice	Oldham ..	—	—	1	1	1	—

(DEE 451/51/52.)

N.O. 472/62 is relevant

UNCLASSIFIED.

814.—Form A.S. 2022—Report of Defective Material or Design—Modifications to be Listed.

(*A.F.O.* 1797/1960.)

Manufacturers may incorporate modifications in radio equipment (promulgated in B.R. 1917) and in general electronic equipment (promulgated in B.R. 1870) before issue of the amendments to the relevant books. In consequence ships may find numbers deleted from modification labels in respect to which no supporting information is available and Part B (iv) of form A.S. 2022 cannot be answered accurately.

2. In future ships and authorities rendering forms A.S. 2022 are to list in Part B (iv) all deleted numbers shown on the modification label attached to the sub-unit or parent unit under report.

(DEE 1211/51/161.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

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C.N.O.'s 815-833/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
30th September, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

7582/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

815.—Electrical, and Ordnance Base Staffs, Sydney—Organization and Functions.

The electrical and ordnance base staffs in Sydney have the following functions—

(*a*) They are responsible for the maintenance of certain equipment for which the Commanding Officer, H.M.A.S. KUTTABUL, is directly responsible, and for material assistance, when required, to the vessels under the administration of the Flag Officer-in-Charge, East Australia Area.

(*b*) They are available to act in an advisory capacity to H.M.A. ships requiring their assistance in maintenance problems when the appropriate Squadron or Fleet staffs are not available.

(*c*) As a special case, the base ordnance staff will perform ordnance maintenance of H.M. submarines on loan to the Royal Australian Navy.

2. The base staffs are unable to maintain equipment in ships except as stated in paragraph 1 (*a*) and 1 (*c*).

(DEE 1606/203/18.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

816.—Medical Undergraduates—Conditions of Entry and Service.

Direct entry in the Medical Branch of the Royal Australian Navy in the probationary rank of Sub-Lieutenant (U) is available to university medical undergraduates. The conditions governing entry and service are set out below.

Eligibility.

2. To be eligible for appointment a candidate must satisfy the following conditions—

(*a*) *Academic*—He must be undertaking the 4th, 5th or 6th year of the university medical course.

(*b*) *Age*—Maximum age on entry to be such that he will not be more than 30 years on graduation.

(*c*) *Nationality.*—He must be a natural born or naturalized British subject and be substantially of European descent.

(*d*) *Medical Fitness.*—He must be free from any mental or constitutional disease or weakness, or any other imperfection or disability which may interfere with the most efficient discharge of the duties of a Medical Officer in any climate.

(*e*) *Recommendation.*—He must be recommended by a Registrar or other responsible person of his medical school.

(*f*) *References.*—He must produce two certificates of good character and a recent photograph.

Application, Interview and Selection.

3. Application is to be made on the prescribed form obtainable from the Secretary, Department of the Navy, Navy Office, Canberra, Australian Capital Territory. After being passed as medically fit, the applicant will be interviewed by a selection committee normally towards the end of the calendar year. In such cases, appointment to the R.A.N. and pay and other benefits will date normally from the first day of January next following. However, if an applicant is selected during the currency of a clinical year, his pay and other benefits will be effective from the date of appointment to the R.A.N.

Short Service Commission.

4. An undergraduate in his 4th or 5th year, selected for entry, will be required to serve for a further period of four years after completion of his hospital residency ; if entered in his 6th year, he will be required to serve for a period of at least 2 years after completion of hospital residency. A medical officer may, on application, be granted an extension of his service up to a maximum of 8 years from the completion of his hospital residency, or alternatively, be transferred to the Permanent Naval Forces.

Rank, Pay and Allowances.

5. Undergraduates and Medical Officers entered under these conditions receive pay and allowances according to their rank as shown in Interim Pay Instructions. A Sub-Lieutenant (U) will be promoted to the rank of Surgeon Lieutenant (on probation) on commencement of the hospital residency period. The Medical Officers' special allowance will not commence until completion of the hospital residency period and will be subject to the officer being confirmed in the rank of Surgeon Lieutenant. Medical Officers commencing their residency year after 1st January, 1961, are to draw their pay and allowances solely from Naval sources. The officers concerned may find it convenient to have their Naval pay allotted to their bank accounts. The salaries normally paid to Resident Medical Officers are to be paid periodically by the hospitals to the Receiver of Public Moneys, Department of the Navy, Victoria Barracks, Melbourne. Medical Officers are not to draw any pay from the hospitals.

Promotion Beyond Rank of Surgeon Lieutenant.

6. A Surgeon Lieutenant will be promoted to the rank of Surgeon Lieutenant-Commander, subject to recommendation, 4 years from the day following completion of hospital residency. Promotion to higher rank is by selection and is subject to vacancy in establishment.

Gratuity.

7. (*a*) Qualifying service for the purpose of retiring gratuities in the case of officers entered as undergraduates commences on completion of the 12 months' period of hospital residency. These officers then become eligible for payment of a gratuity as under, on discharge—

£400—on completion of a 2-year short service commission.

£800—on completion of a 4-year short service commission plus gratuity at the rate of £200 per annum pro-rata for each completed month of service beyond the original short service commission up to a total of 8 years.

(*b*) As a general rule, gratuity due in respect of service under short service commission is payable on conclusion of the member's service when only 5 per cent. of the amount paid is assessable for income tax purposes. However, where during the currency of his period of subsequent service, the officer requests payment of gratuity due in respect of a prior completed period of short service, the Naval Board may approve of the payment, which amount would be taxable in full.

(*c*) On transfer to a permanent commission, an officer who has completed at least 2 years of a short service commission will be given the option of being paid the amount of gratuity due in respect of his service and not counting the service as service for pension or of foregoing the gratuity and having the service counted as service for pension. If the officer opts to be paid the gratuity he will be refunded the contributions made to the D.F.R.B. Fund and will recommence contributions to the fund from the date of transfer to a permanent commission at a rate dependent upon rank held and age at date of transfer.

Outfit Gratuity.

8. A Sub-Lieutenant (U) will on entry be provided with an initial outfit gratuity and on promotion to Surgeon Lieutenant (on probation) will be granted a further gratuity for provision of the additional items of essential outfit required. The amounts of gratuities payable are shown in Chapter XI. of Interim Pay Instructions.

Indoctrination Course.

9. The Captain is to arrange for each Sub-Lieutenant (U) to be given an Officer's Indoctrination Course as early as convenient after entry and without interference with the officer's university pregraduate training. A report of the result of this course is to be forwarded to the Naval Board in respect of each Sub-Lieutenant (U).

Hospital Residency Period.

10. The hospital residency period of approximately twelve months will commence on successful completion of the university course. As decided by the Medical Director-General, this period of training will be carried out in a civil or naval hospital (Flinders or Balmoral) which has been approved by the appropriate State Medical Board in relation to residency requirements. The Medical Director-General is to be informed when any hospital tentatively accepts the officer for his residency year.

Tuition Fees.

11. Fees which are essential for the completion of the course and which are listed hereunder will be paid by the Department—

(*a*) Lecture and demonstration fees;
(*b*) Library fees;
(*c*) Examination fees;
(*d*) Supplementary examination fees for one subject only in each year;
(*e*) Tutorial fees (other than those university tutorials included within the course of lectures and covered by lecture fees) to an affiliated college, but only in special cases upon the recommendation of the university;
(*f*) Laboratory and experiment fees, including charges for materials, but only upon the recommendation of the university authorities;
(*g*) Perpetual Attendance fees covering clinical instruction at hospitals and being part of the university course.
(*h*) Course fees for instruction at training hospitals, such courses being part of the university course.

12. University fees which are listed hereunder will not be reimbursed—

(*a*) Compulsory sports fees;
(*b*) Union fees;
(*c*) Students' Representative Council fees;
(*d*) Degree fees and amounts in respect of any item not essential for the completion of the course.

Loan Issues.

13. Instruments, protective clothing and text books may be issued on loan to the officer for the duration of the course and residency year. On completion of this training, or earlier if not required, they are to be returned by the officer. As requirements vary from year to year of the course and with each university and training hospital, it is impracticable to list requirements for loan issue in detail but the guiding principle for supply is that the item is essential for the completion of the university course and/or hospital residency year.

Instruments.

14. The following are examples of the types of instruments that may be required—Large diagnostic set, ophthalmoscope, tuning fork, diagnostic torch, stethoscope, microscope, head mirror. Instruments are to be drawn on demand from the Medical and Dental Store Officer, Sydney.

Protective Clothing.

15. Ward or laboratory gowns may be drawn on demand from the Medical and Dental Store Officer. Some teaching hospitals require students to wear white trousers and shoes. In such a case two pairs of trousers—white drill fly—and one pair of white canvas shoes are to be drawn on demand from a victualling yard and issued on personal loan.

Procurement.

16. Local purchase of items for loan issue which are not readily available from the sources indicated in paragraphs 14 and 15 may be arranged by the Captain in the usual manner, this order being quoted as the authority. In cases where time does not permit an item being obtained from naval sources, or where circumstances preclude local purchase, the Captain may approve of the student purchasing the item and being reimbursed on production of the receipt.

Text Books.

17. Students' requirements for text books should whenever possible be listed in the body of a certificate from a responsible university authority that the items are essential for completion of the course. Alternatively, the Captain should be satisfied that the text books are prescribed for the course, and not books of general reference. This information will be found in a university publication which should be purchased for guidance.

18. Medical items approved for loan, as outlined in paragraphs 13 to 15 inclusive of this order, are to be demanded by the senior medical officer of the establishment concerned. The items are to be taken on charge in the Medical Store account and issued on loan to the officer per form A.S. 1099. Loss or damage to books, instruments, &c., should be dealt with on form A.S. 126 or A.M. 176, as appropriate, in accordance with normal procedure. Items becoming unserviceable, through fair wear and tear should be surveyed and dealt with in accordance with established naval routine, being replaced if circumstances require replacement.

C.R.T.S. Benefits and Commonwealth Scholarships.

19. C.R.T.S. full-time benefits will be terminated on appointment but books and equipment may be retained under the usual C.R.T.S. conditions. Undergraduates are ineligible for assistance under the Commonwealth Scholarship scheme.

Results of Examinations.

20. The Commanding Officer of an establishment in which a Sub-Lieutenant (U) is borne is to arrange to have the results of examinations held during or at the conclusion of the university course forwarded to the Naval Board as soon as results are known.

Failure at Examination—Pre-Graduation.

21. If failure at an examination necessitates repeating a year of the university course, the case will be reviewed to determine whether the officer will be permitted to repeat the year or whether his appointment will be terminated. Approval to repeat the year will be subject to acceptance by the officer of additional fees involved. The daily rate of pay and allowances will not be disturbed.

Completion of University Course.

22. Immediately on completion of final university examination for the course, a Sub-Lieutenant (U) will be required to report to his Commanding Officer, who will inform Navy Office. His Captain is to advise Navy Office if the Sub-Lieutenant has been successful (*see* paragraph 10).

Leave.

23. *Before Graduation*—Leave may be granted to undergraduates during term vacation.

24. *On Completion of Final University Examinations*—Fourteen days' leave may be granted.

25. *On Completion of Residency Year*—Leave may be granted under the conditions appropriate to the Permanent Naval Forces.

Refresher Training.

26. Prior to discharge after having completed 4 years' service on a short service commission, 90 days' leave on full pay may be granted for the purpose of undertaking a full-time approved course of refresher training. If the short service commission is extended to a total of seven years or more the period may be increased to 180 days. Gratuity under paragraph 6 will not be payable in respect of the period of such leave, nor will the Commonwealth be liable for the payment of fees or purchase of books, equipment or instruments involved in the course. Earnings received from civil sources during the period of such leave will be deducted from the officer's naval pay. Officers will not be eligible for promotion whilst undergoing such training.

Accommodation.

27. Undergraduates will be appointed to a naval establishment in the same area as the university for purposes of pay and administration, &c. A Sub-Lieutenant (U) will not be provided with accommodation and victualling, the applicable allowance *vide* Chapter V. of Interim Pay Instruction being paid in lieu.

Medical and Dental Treatment.

28. An officer is entitled to free medical and dental treatment when arranged through naval sources.

Commonwealth Employees Compensation Act.

29. The provisions of this Act apply to all officers of the Royal Australian Navy.

Reference Library.

30. A reference library of current medical text books is carried in each naval hospital and a smaller library of current text books is issued with the medical officers' set of stores carried by H.M.A. ships. In addition, a reference loan library is held at Navy Office comprising volumes not issued on scale but necessary for advanced or specialist study, or for current reading. An accession list and the volumes (on loan) may be obtained from the Medical Director-General.

Discharge for Unsuitability.

31. Officers will be liable to immediate discharge for misconduct or if, for any reason, they are considered by the Naval Board to be unsuitable for retention.

Resignations.

32. Resignations will not be accepted before completion of short service commission, except in special circumstances, e.g. strong compassionate reasons.

Retirement Provisions.

33. The provisions of the Defence Forces Retirement Benefits Act will apply to all officers entered under this scheme.

General.

34. Other conditions of service under this scheme are similar to those for officers of the Permanent Naval Forces.

(MDG 307/51/23.)

UNCLASSIFIED.

817.—Naval Health Benefits Society Report as at 30th June, 1960.

The following report as at 30th June, 1960, together with financial statements as appendices A to D, is published for the information of all members of the Naval Health Benefits Society.

GENERAL NOTICE.

During the past twelve months of operation the Society's membership has grown from 2,576 to 2,705. This total includes 2,324 Naval members and 381 civil members. This figure shows an increase of 144 Naval members and a decrease of 15 civil members over the figures shown in the report for the financial year ended 30th June, 1959. Whilst the increase in numbers is good, still more members would enable the Society to function with more efficiency and perhaps offer greater or additional benefits. There are still many Naval officers and ratings eligible for membership who have not taken the opportunity to join this, their own Society, which was formed essentially to cater for the needs of Naval personnel.

2. The more members in the Society the better will be the benefits offered, and members are therefore urged to act as recruiting agents for the Society by informing intending new members of the advantages of membership. Full information about the Naval Health Benefits Society can be found in Navy Order 217 of 1960.

3. A total of 7,890 medical claims and 1,067 hospital claims, representing an overall average increase of 17½ per cent. on business conducted for the previous financial year were paid with benefits totalling as follows—

	£
Medical Society Benefit	10,702
Medical Commonwealth Benefit	9,157
Total Medical Benefit	19,859
Hospital Society Benefit	8,682
Hospital Commonwealth Benefit	4,591
Total Hospital Benefit	13,273
Grand Total Paid	33,132
Contributions received for this period amounted to—	
Medical Fund	12,071
Hospital Fund	9,656
Total	21,727

4. Half way through the financial year a small increase in contributions was made to enable payment of increased Society benefits to match some Commonwealth benefits which were increased by legislation. These are mainly in the class of major operations and confinements. Of nearly three thousand members only 67 deliberately or by default have not paid the higher contribution.

5. The operation of the Society throughout the year has been satisfactory and many members have received large benefits. Payment of benefits has sometimes been delayed because of the claim form being incorrect or incomplete. Delay and unnecessary correspondence can be eliminated if care is taken in compiling the claim form and and answering all questions that appear on the claim. The doctor's detailed account and receipt must both be attached to the claim and a separate claim made for each member of the family when the accounts cover more than one patient. Form H.B. 21, Certificate of Hospitalization, must also be forwarded when claiming Hospital Benefits.

R. P. NEWEY,
Secretary, Treasurer and Public Officer.

APPENDIX A.

BALANCE SHEET AS AT 30TH JUNE, 1960.

	£	s.	d.		£	s.	d.		£	s.	d.
Reserve Fund	15,976	9	7	Cash at Bank					11,153	16	11
Hospital Benefits Fund	5,000	16	4	Commonwealth Bonds ..					14,000	0	0
Medical Benefits Fund	5,208	5	6	Department of Health—							
				Hospital Benefits Refund ..	352	8	0				
				Medical Benefits Refund ..	672	16	6		1,025	4	6
				Office Equipment ..	8	10	0				
				Less Depreciation ..	2	0	0				
									6	10	0
	26,185	11	5						26,185	11	5

Audited and found correct.

O. E. WILLIAMS (A/Supply Commander).

J. G. SMITH (Supply Commander).

R. P. NEWEY (Commander).

Secretary, Treasurer and Public Officer.

APPENDIX B.

SUMMARY OF SOCIETY AND COMMONWEALTH BENEFITS PAID FOR THE TWELVE MONTHS ENDED 30TH JUNE, 1960.

	Hospital.	*Medical.*	*Total.*
Society Benefits paid	8,682 5 11	10,702 7 7	19,384 13 6
Commonwealth Benefits paid ..	4,591 0 0	9,156 18 0	13,747 18 0
Total Benefits paid ..	13,273 5 11	19,859 5 7	33,132 11 6
Medical Benefits comprising—			
Consultations	15,553		
Other services ..	4,645		
Total services ..	20,198		

APPENDIX C.

HOSPITAL AND MEDICAL BENEFITS FUND ACCOUNTS FOR THE TWELVE MONTHS ENDED 30TH JUNE, 1960.

	Hospital.	*Medical.*	*Total.*
Fund Balance as at 30th June, 1959	4,027 1 4	3,839 19 10	7,867 1 2
Add—			
Contributions received from Members 1st July, 1959 to 30th June, 1960	9,656 0 11	12,070 13 3	21,726 14 2
	13,683 2 3	15,910 13 1	29,593 15 4
Less—			
Society Benefits paid 1st July, 1959 to 30th June, 1960 ..	8,682 5 11	10,702 7 7	19,384 13 6
Fund balance as at 30th June, 1960	5,000 16 4	5,208 5 6	10,209 1 10

APPENDIX D.

COMMONWEALTH BENEFITS PAID BY THE SOCIETY AND RE-IMBURSEMENTS RECEIVED FOR THE TWELVE MONTHS TO 30TH JUNE, 1960.

	Hospital.	*Medical.*	*Total.*
Re-imbursements outstanding 30th June, 1959	503 12 1	796 6 0	1,299 18 1
Add—			
Commonwealth benefits paid by the Society	4,591 0 0	9,156 18 0	13,747 18 0
	5,094 12 1	9,953 4 0	15,047 16 1
Less—			
Re-imbursements received from the Department of Health ..	4,742 4 1	9,280 7 6	14,022 11 7
Re-imbursements outstanding 30th June, 1960	352 8 0	672 16 6	1,025 4 6

(DGS 271/51/13.)

(*Navy Order* 217 *of* 1960.)

UNCLASSIFIED.

818.—Officers' Victualling and Accommodation and Payment of Travelling Allowance During Temporary Duty or Short Courses.

As a matter of appointing policy, officers required to undergo short courses or temporary duty at establishments will normally be lent to those establishments instead of being appointed, where the period will not exceed two months.

2. It should be made clear to officers concerned that, except where an officer of the rank of Commander or above elects not to make use of service victualling and accommodation under Instruction 192/8 of Interim Pay Instructions, where the course or place of temporary duty is in the Sydney area, Travelling Allowances will be paid only where service victualling and accommodation are not available in ships and establishments in the Sydney area. Payment will be subject to certification to that effect by the Flag Officer-in-Charge, East Australia Area.

3. The same principle applies generally and in other places the certificate is to be signed by the local administrative authority.

4. Navy Order 839 of 1958 is hereby cancelled.

(HPB 303/1/14.)

(*Navy Order* 839 *of* 1958.)

UNCLASSIFIED.

819.—Royal Australian Naval College Golf Club.

The R.A.N.C. Golf Club at Jervis Bay is the only Naval Golf Club affiliated with the New South Wales Golf Association.

2. Members of the club therefore have the opportunity of playing in open competitions and at numerous clubs throughout Australia without incurring the comparatively heavy joining fees of other clubs.

3. All members of the R.A.N. are eligible to join the club and applications, accompanied by a remittance of £1 for a year's membership, should be forwarded to—

The Honorary Secretary,
R.A.N.C. Golf Club,
H.M.A.S. CRESWELL,
Jervis Bay, Australian Capital Territory.

4. This order will be reprinted for posting on notice boards.

(HPB 108/1/22.)

UNCLASSIFIED.

820.—Victualling of Other than R.A.N. Personnel—Charges.

The rate at which recovery is to be effected in respect of victualling other than R.A.N. personnel is eight shillings and three pence per diem.

2. Navy Order 1155 of 1958 is hereby cancelled.

(DNA 903/51/37.)

(*Navy Order* 1155 *of* 1958.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

821.—Mark E1 Gyro Compass (Sperry Minor)—Vacuum Indicators.

In future any Vacuum Indicator, Sperry part No. SK8154–22, fitted on Sperry Minor Gyro Compasses is to be replaced by a Rotor Plug, Sperry part No. SK8154–66—as it becomes defective.

2. This rotor plug screws directly into the same hole as the vacuum indicator and, as it is of the same weight, will not disturb the balance of the compass.

3. A notation to this effect is to be made in Publication 529—" Replaceable Parts for the Sperry Gyro Compass Mk. E 1 ".

(DEE 519/53/106.)

UNCLASSIFIED.

822.—Motor Generators—Newton Speed Governors for—Adjustment Procedure.

Navy Order 179 of 1960 is to be amended as follows—

Paragraph 4

Amend the description and pattern numbers of the spares for Newton speed governors to read as follows—

" *Description.*	*Pattern No.*
Brush and spring	F2/59214
Holder, brush	F3/2976
Weight assembly with spring and contact	F3/2021
Contact, adjustable	F3/2022
Contact, rotating	F3/2975 "

(DNAS 1108/52/57.)

(*Navy Order* 179 *of* 1960.)

UNCLASSIFIED.

823.—4.5-in. Mountings—Dither Motors.

Reports have been received of unsatisfactory performance of D.C. and A.C. dither motors fitted in mark 6 and mark 6* mountings respectively.

2. Failures in most cases are attributed to the overloading of dither motors by mechanical misalignment of the motor and bevel gear shafts, introduced by the varying individual motor shaft heights and the different thicknesses of the packing fitted between the bevel gear assembly and the servo unit casing.

3. When fitting dither motors, shaft alignment is to be obtained by inserting shims under the motor mounting feet. Correct alignment is to be checked by measuring the motor working current which should not exceed 0.5 Amps. and 0.2 Amps. for A.C. and D.C. dither motors respectively.

(DEE 736/59/71.)

UNCLASSIFIED.

824.—Steam Pipe Systems.

Failure of a main steam pipe by splitting has occurred in service.

2. Inoperative double type constant load pipe hangers imposed the weight of a large valve on the pipe system causing excessive local overstressing. This was a major contributing cause of the failure.

3. It must be appreciated that the two problems of taking the weight and of allowing for the vertical thermal expansion of steam pipe systems are closely interrelated, e.g., a vertical pipe attached to an auxiliary will expand upwards by virtue both of its own expansion and of that of the auxiliary. Restriction of this movement will seriously increase the bending stress and constant load or spring hangers are fitted for such applications. These hangers must be maintained in a well lubricated condition and all working surfaces kept free from paint and dirt. Six-monthly inspection should be carried out and if there is any doubt as to the hanger's freedom of operation it should be dismantled to permit full lubrication of the inside of the spring barrel, spring cap and leyer plate pivot pins. Grease XG340, pattern No. E8/826, should be used. Temporary arrangements must be made to support the pipe run and associated fittings when a hanger is removed for maintenance.

4. Hangers must be re-assembled with the correct spring and pivot hole combination. This may be checked from information on the ship's drawings and B.R. 1988 (Mechanical Engineering Maintenance Instructions) Article 0433, Tables 1 and 2.

5. A recurring steam joint leak is generally indicative of restraint or movement imposed on the pipe, which has increased the bending stress in the pipe system. Likely contributions to such restraint or movement are as follows—

(*a*) Distortion of anchor points (e.g., due to hull movements).
(*b*) Seizure of sliding feet on fittings.
(*c*) Seized constant load hangers.
(*d*) Hangers incorrectly positioned or adjusted.
(*e*) Insufficient clearance from adjacent pipes or fittings.

6. Recurring joint failure for which no explanation can be found should be reported on form A.S. 2022.

7. Whenever joints are remade in a pipe system, where the ship's drawings indicate " pull-up cold ", the distance between flanges should be checked against the design figures. Incorrect figures should be reported and defect list action taken.

(DME 1211/51/179.)

UNCLASSIFIED.

825.—Aircraft—Pyrotechnics—Flares—Precautions to Prevent Tampering with Parachutes.

Reports have been received of parachutes being stolen from aircraft flares or of attempts being made to steal them. It is imperative that every possible step be taken to safeguard these stores—not only to prevent theft of the parachutes, but because of the danger of flares being ignited by attempts to remove the parachutes.

2. In order to prevent, as far as practicable, access to the flares by anybody other than those directly concerned with their custody, use, or any work connected with them, all stocks of boxes containing 4-in. and 4.5-in. flares at R.A.N. Armament Depots are secured with two bands of steel tape.

3. When flares are required for use, the bands should be cut, using suitable snips. They should not be prised off. The number of boxes from which bands are removed should be limited to the extent of immediate requirements.

4. If boxes have been opened and the flares are not required for use they are to be returned to depot at the first opportunity.

5. Boxes must be checked individually for the presence of the tape bands jointly by ship's (or station) and depot representatives on each occasion of transfer of their custody. If during handover any boxes are found with bands cut or missing, they are to be returned at once to the depot for examination, accompanied by a special report.

6. Boxes or flares returned to R.A.N. Armament Depots in accordance with paragraphs 4 and 5 are to be handed over specially to representatives of the depot and are **not** to be mixed with consignments of stores returned to depot or landed on deposit.

7. In view of the risk of ignition which is inherent in aircraft flares from which the parachutes have been removed or which are defective, every effort should be made to ensure careful packing and handling prior to and during their disposal.

8. Navy Order 845 of 1958 is hereby cancelled.

(DW 727/56/43.)

(*Navy Order* 845 *of* 1958.)

RESTRICTED.

826.—Event Recorders Mark 1—Introduction.

(*A.F.O.* 1592/1960.)

Event Recorders mark 1 have been issued to the Fleet with the object of providing ships with an accurate means of recording events for the analysis of gunnery firings.

2. *Description.*—Recorder Event mark 1 No. 5895-99-943-4150 (Vote 8 III A(7)).
Electrical supplies—24 Volts D.C.
Number of events which can be recorded—6.
Facilities for synchronizing director aim camera with event recorder.
Paper speeds—¼-in.; ½-in.; 1-in. and 5-in. per second.
Spare parts—B.R. 226C Part 16.
Dimensions—13-in. x 6-in. x 5½-in.

3. *Application.*—Events are recorded by solenoid operated pens on a moving strip of sensitized paper. Where a system is working in conjunction with one recorder the following events could be recorded—

Channel.	*Event.*	*How operated and where.*
1	Time marker every ½ second which synchronizes with the operation of the shutter of the Cameflex director aim recorder	Pulse from event Recorder.
2	Target indication (Time)	Push button in T.S.
	Target acquisition (Time)	
3	Range every 500 yards	Push button in T.S.
4	Number of bursts	Push button on bridge.
5	Gun fired (Left)	Gun ready lamp circuits.
6	Gun fired (Right)	Gun ready lamp circuits.

4. If two event recorders were available, such as with F.P.S. 3, it would then be possible to record the instants of loading and firing all six guns.

5. Approval is given to raise a defect item to provide permanent wiring to the event recorder in transmitting stations. Meanwhile ships already in possession of an Event Recorder may employ *ad hoc* wiring as a temporary expedient, but care must be exercised in so doing, in order that the operational circuits in ships junction boxes are not impaired.

6. *Distribution.*—Event recorders will be distributed as follows—

(*a*) To all ships of the active Fleet fitted with medium range guns controlled by Fire Control System—

MRS 3	1 per system.
FPS 3	2 per system.
FPS 2	1 per system.

(*b*) To Westhead .. .. .. 2 No.
FND " G " School .. 1 No.
FND " L " School .. 1 No.

7. Part 16 of B.R. 226 (*c*) will be distributed on receipt from United Kingdom.

(DW 736/71/2.)

UNCLASSIFIED.

827.—Shell/Cartridges, Practice A.A.U.C., Plugged—Measures Taken to Reduce Jamming of Plugs.

(*A.F.O.* 3092/1959.)

In spite of the measures taken to date, Practice A.A.U.C. shell and cartridges are still being found with jammed plugs, firing replacing gaine; plugs fuze-hole and set screws.

2. The corrosion and consequent jamming of these plugs is due, in the main, to the corrosive action of vapour volatilizing from the existing smoke pellet composition. The redesign of these pellets is being investigated as a long term measure, but, in the meantime, in order to overcome the difficulty being experienced by the ships' staff in removing plugs, firing replacing gaine from Practice A.A.U.C. plugged shell/cartridges when fuzing V.T., it has been decided to replace these plugs by wooden spacers.

3. All plugged Practice A.A.U.C. shell/cartridges issued by Armament Depots on and after 1st October, 1960 will incorporate this modification.

4. It should be noted that this wooden spacer is designed solely to take up the space between the pellets and the plug during transport and storage, and in no circumstances must the shell/cartridge be fired so fitted.

5. Practice A.A.U.C. shell/cartridges fuzed T.M. issued to H.M.A. ships will continue to incorporate the plug firing replacing gaine.

6. Measures to prevent the jamming of fuze-hole plugs and set screws are still under investigation. In the meantime, H.M.A. ships should return to the nearest Armament Depot, any shell/cartridges fitted with fuze-hole plugs/set screws which cannot be removed, using authorized tools, without undue force.

7. Spacers wood recovered on fuzing plugged shell/cartridges with V.T. fuzes are to be returned to the nearest R.A.N. Armament Depot.

(DW 725/52/55.)

RESTRICTED.

828.—A/S Mortars, Marks 3, 4 and 10—CK 010 Rammer—Modification.

(*A.F.O.* 1996/1960.)

Weapons	A/S mortars, Marks 3 and 4 (Squid).
Part affected	CK 010 Rammer drawing number UCW 853/461.
Modification	The head is to be made detachable from the handle. After modification the store reference is to be advanced to CK 023 Rammer.
Purpose	To make stowage more convenient.
By whom to be done ..	R.A.N. Armament Depots only.
When to be done	At the earliest opportunity.
R.A.N. Armament Depots only	H.M.A. Ships' outfits of CK 010 Rammer are to be exchanged for those modified at the earliest opportunity. UW(A) 11/60 dated 23.2.60 refers.

2. A similar modification to CJ 002 Brush (A/S Mortar, Mark 10) and CK 042 Brush (Squid) is under consideration.

(DW 707/251/28.)

UNCLASSIFIED.

829.—A/S Mortar, Mark 10—Amplifier Assemblies, Mark 12AA and Mark 15AA—Incorrect Wiring of Fan Motor Armature Limiting Resistor.

(*A.F.O.* 1851/1960.)

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted; Gunnery Equipment Depots.
(*b*) *Equipment affected* ..	Amplifier assemblies, mark 12AA and mark 15AA.
(*c*) *Modification No.* ..	—
(*d*) *Purpose of instruction* ..	It has been brought to notice that the limiting resistor in the fan motor armature circuit has in some cases been incorrectly wired in the fan motor field circuit resulting in damage to the motor after a period of use.
(*e*) *Nature of instruction* ..	Amplifier assemblies, mark 12AA and mark 15AA are to be examined to ensure that the limiting resistor (R30 on MV drawing X1120118 for amplifier assembly, mark 12AA and R10 on MV drawing X1120127 for amplifier assembly, mark 15AA), which is shorted when the appropriate relay is energized by the closing of the centrifugal switch, is connected in accordance with the relevant drawing. If the wiring is found to be faulty it should be corrected.
(*f*) *Supply of modification parts*	Nil.

(*g*) *Drawings concerned* ..	(1) MV X1120118 for amplifier assembly, mark 12AA. (2) MV X1120127 for amplifier assembly, mark 15AA.
(*h*) *By whom to be carried out*	Ships' staff and authorities concerned.
(*j*) *When to be carried out* ..	At the earliest opportunity.
(*k*) *How to be treated* ..	As a defect.
(*l*) *Books affected*	Nil.
(*m*) *Report*	A report is to be forwarded to Director of Weapons, Department of the Navy, Victoria Barracks, Melbourne, if the amplifier assemblies have been incorrectly wired. The maker's name and serial number of the cubicle is to be supplied.

(DW 707/51/40.)

UNCLASSIFIED.

830.—Deck Coverings in H.M.A. Ships—Policy.

The types of deck coverings fitted in H.M.A. ships are constantly under review by the Naval Board in an endeavour to improve their effectiveness and reduce maintenance. The appendix to this order promulgates the current policy for deck coverings. For new construction, conversions, &c., deck covering drawings will be prepared generally in accordance with this order, although some departure may be necessary to meet special circumstances.

2. Deck coverings authorized for individual ships are shown in the relevant deck covering drawings. No departure is to be made from these drawings except when, due to wear, &c., it is necessary to renew the covering over large areas of deck or in a complete compartment. In such cases, the policy contained in this order is to be followed and the deck covering drawings amended accordingly.

3. Where applicable, the colour of linoleum and paint is to be in accordance with the approved colour scheme for the ship.

APPENDIX.

	Location.	*Type of Covering.*
Weatherdecks ..	*Aircraft Carriers:*	
	Flight deck	Paint (A)
	Forecastle and quarterdeck ..	Wood (B)
	Hangars	Paint (A)
	Open compass platform	Paint (A) and wood gratings (C)
	Destroyers and below:	
	Forecastle	Steel treadstrips (D) and paint (A)
	Open compass platform	Paint (A) and wood gratings (C)

APPENDIX—*continued.*

	Location.	*Type of Covering.*
Weatherdecks—*continued.*	*All Ships:*	
	All other weatherdecks including gun sponsons and platforms, open bridges, signal decks, &c.	Abrasive treadstrips (E) and paint (A)
	Enclosed bridge	P.V.C. tiles (F), paint (A) and wood gratings (C)
Accommodation Spaces	Messdecks, dining halls, wardrooms, ante-rooms, cabins, recreation spaces, chapels, lecture rooms, cells, pantries, canteens, &c.	P.V.C. tiles (F) and paint (A)
Offices ..	All offices, including signal, radar, W/T, pay, victualling, stores offices and similar spaces	P.V.C. tiles (F) and paint (A)
Passages and Flats	Outside, over, and leading to accommodation, &c., where reduction of noise is a requirement, and where added weight is acceptable	P.V.C. tiles (F) and paint (A)
	Other passages and flats	Metal treadstrips (D) and paint (A)
Storerooms, &c.	Storerooms and issue rooms normally occupied	P.V.C. tiles in way of desk, serving counter, &c. (F) — elsewhere metal treadstrips (D) and paint (A)
	Storerooms infrequently occupied ..	Paint (A)
	Flour stores, provision rooms, canteen stores, potato and vegetable stores	Metal treadstrips (D) and paint (A) with gratings (H) under stowages

APPENDIX—*continued.*

Location.		Type of Covering.
Medical Spaces	Sick bay generally, including surgeon's examining room, dispensary, ward, surgical dressing room, and medical distributing stations and dental surgeries	P.V.C. tiles (F) and paint (A)
	Operating theatre (when a separate compartment), ablution compartments, bathrooms	*Carriers*—Tiles (J) if weight is acceptable, otherwise a latex composition with a chip filler (K) *Darings and below*—Latex composition with a chip filler (K)
	Heads and W.C.'s in sick bay ..	Metal treadstrips (D) and paint (A)
Galleys, &c. ..	Galleys, bakeries, preparing rooms, serveries, sculleries, enclosed beef screens	Paint (A) under stowages, elsewhere metal treadstrips (D) and bare metal deck
Washplaces, Heads, &c.	Bathrooms, washplaces, decontamination spaces	*Carriers*—Tiles (J) if weight is acceptable, otherwise P.V.C. tiles (G) *Darings and below*—P.V.C. tiles (G)
	Heads, W.C.'s	Metal treadstrip (D) and paint (A)
	Laundries	In working spaces, tiles (J) if weight is acceptable, otherwise metal treadstrips (D) and bare metal deck—elsewhere paint (A)

APPENDIX—*continued.*

Location.		Type of Covering.
Workshops ..	Heavy workshops, including engineers', blacksmiths', ordnance, electrical, &c.	Metal treadstrips (D) and bare metal deck
	Light workshops where delicate instruments or sharpedged tools are used, including optical instrument room, joiners' shop, radar, gyros adjusting rooms, and other workshops where high voltages are used such as aircraft workshops, aircraft W/T test room, &c.	P.V.C. tiles (F) in working spaces where men stand elsewhere paint (A)
Magazines and Shell Rooms	Including handling rooms, bomb rooms, &c.	Metal treadstrips (D), paint (A)
Photographic Rooms	Office and printing room	P.V.C. tiles (F) and paint (A)
	Developing room and chemical mixing room	*Carriers*—Tiles (J) if weight is acceptable otherwise latex composition with chip filler (K) *Darings and below*—Latex composition with chip filler (K)
Machinery Spaces	Enginerooms, boiler rooms and auxiliary machinery spaces Floor plates	Unpainted chequered steel (L)
	Bilges	Paint (A)
Miscellaneous ..	Chart house, wheelhouse, primary steering positions, A.B.C.D. headquarters and section bases, chart and chronometer room, gyro compass room, telephone exchange, switchboard rooms, transmitting stations,	P.V.C. tiles (F) and paint (A)

APPENDIX—*continued.*

Location.		Type of Covering.
Miscellaneous—*continued.*	compartments where deck is lagged such as action information centre, briefing room, ready rooms, aircraft control room, air direction room, operations room, radar display rooms, parachute packing rooms, &c.	
	Drying rooms	Paint (A)
	Metadyne rooms	Paint (A)
	Battery-charging rooms and low power rooms	Bituminous acid-resisting paint (A)

Notes—

A — Paint applied to the various decks is to be in accordance with A.B.R. 19 (Manual of Painting Instructions).

B — Wood decking: Planks are to be of teak or other approved timber 2½-in. thick x 5-in. wide, planed on both faces and seamed on the edges. Seams to be caulked with oakum and payed with an approved marine glue pitch. Treadstrips to be fitted where excessive wear is likely—nickel silver or naval brass on the quarterdeck, galvanized mild steel elsewhere.

C — Fitted, chequered, wood gratings.

D — Treadstrips on steel deck of compartments—galvanized mild steel 1¼-in. wide x $\frac{3}{16}$-in. thick with ⅛-in. ribs. To be secured by full continuous welds to prevent corrosion between strip and deck treadstrip in way of ladders, entrance scuttles, doors, &c., on steel deck is to be of galvanized chequered steel plating $\frac{5}{16}$-in. thick welded to the deck. (*See also* Note K.) They are to extend for 12 inches round the sides of ladder ways, top and bottom. On aluminium deck, rivetted aluminium treadstrips are to be used.

E — The approved material for treadstrips is " Wet-or-Dry Safety Walk ". Safety walk 24 inches wide is to be laid in a continuous strip, or in large cleats butted edge to edge. Detailed instructions for laying are promulgated in Navy Orders.

F — Flexible vinyl tiles of a nominal thickness of ⅛-in. are to be used. They are to be secured with the manufacturers recommended adhesive on an approved latex base underlay. The tiles are to be laid within approximately 6 inches from bulkheads, lockers, &c., to allow access to corners for inspection and maintenance of the structure.

G — Flexible vinyl tiles as in Note " F " are to be fitted to the whole deck area in these compartments. Care is to be taken to ensure that the edges are well sealed.

H — Simple spar gratings of wood or aluminium.

J — Unglazed vitreous tiles, patterns 40, 41 or 42, are to be used and laid on a cement or cork-filled latex underlay.

K — Approved spar chip filled latex compositions are " Semtex " and " Rubbatex ".

L — Chequered steel plating is to be to Admiralty Material Specification D.N.C./S.19/Sept. 1955.

(DNC 1211/51/178.)

UNCLASSIFIED.

831.—Naval Stores (General) (Class E, Group 8)—Allocation of New Pattern Numbers.

(*A.F.O.* 1885/1960.)

To facilitate accounting by eliminating duplicated pattern numbers and to conform with the current practice of accounting separately for the same description of stores in different container sizes, new pattern numbers have been assigned to the items in class E, group 8 of B.R. 810, Rate Book and Authorized List of Naval Stores detailed in the appendix to this order. For information, details of pattern numbers of existing container sizes have been included.

2. These materials will in future be provided only in the container sizes detailed and should be demanded under the appropriate pattern number for the container size required. The introduction of additional container sizes will only be considered if based on the strongest grounds. Remaining stocks of these materials in container sizes not listed are to be accounted for under existing pattern numbers until expended.

3. Records are to be amended accordingly, ships and commissioned establishments adjusting their ledgers in accordance with Article 1812 (*g*) of A.B.R. 4 (Naval Storekeeping Manual).

4. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Description.	Container Size.	New Pattern Number.	Old Pattern Number.
Adhesive, Maclast	5 gal. drum	10040	10040
Adhesive, Maclast	1 gal. tin	10015	—
Anti-seize Compound	1 lb. tin	10084	10084
Anti-seize Compound	5 lb. tin	10201	10084
Barrier Cream, Rozalex No. 1	7 lb. tin	7720	7720
Barrier Cream, Rozalex No. 1	14 lb. tin	7729	7720
Bituminous Compound, Softening Point 70° ..	7 lb. tin	7683	7683
Bituminous Compound, Softening Point 70° ..	28 lb. tin	10195	7683
Bituminous Compound, Softening Point 120° ..	7 lb. tin	7684	7684
Bituminous Compound, Softening Point 120° ..	28 lb. tin	10196	7684
Bleach Powder	7 lb. tin	150	150
Bleach Powder	28 lb. tin	10202	150

APPENDIX—*continued.*

Description.	*Container Size.*	*New Pattern Number.*	*Old Pattern Number.*
Bleach Powder	56 lb. drum	10203	150
Glue	2 lb. tin	381	381
Glue	7 lb. tin	10381	381
Plaster of Paris	7 lb. tin	5501	5501
Plaster of Paris	56 lb. bag	5505	5501
Plaster of Paris	1 cwt. drum	5506	5501
Plaster of Paris, Kaffir D	7 lb. tin	7695	7695
Plaster of Paris, Kaffir D	1 cwt. drum	7698	7695
Polish, grate, Zebo	8 oz. tin (no further purchases being made)	7017	7017
Polish, grate, Zebo	3½ oz. tin	7167	—
Vaseline	4 oz. tube	7011	7011
Vaseline	1 lb. tin	7138	7011
Duplicated Pattern number			
Stones, Hand, Malta		7039	2

(DNAS 512/87/63.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

832.—B.R. 888/1959—Handbook of the Royal Navy Sick Berth Staff.

Reprinted copies of this publication, dated 1959, are now available for issue.

2. Supply Officers of ships and commissioned establishments, are to forward demands to the Superintending Naval and Air Store Officer, Sydney, for the quantity required to make personal issues to all male and female members of the Sick Berth Staff borne on the books.

3. R.A.N.R. Sick Berth Staff under training are to receive a personal copy. These issues are to be recorded on the members' Service Certificates.

4. A copy is to be carried in the Medical Library of ships and establishments where a medical officer is borne, including R.A.N.R. establishments. This copy is to be taken on charge in the Medical Store Account. It is to be demanded from the Medical and Dental Store Officer, Bundock Street, Randwick, New South Wales.

5. Copies may be purchased by interested Medical Officers and Nursing Sisters of the R.A.N. at a cost of 11s. 6d. per volume, through the Supply Officer. This price is to be used for all purposes.

6. In each instance except primary issues an outdated copy is to be surrendered in exchange for the new 1959 edition. The outdated copies are to be dealt with in accordance with A.B.R. 4—Naval Storekeeping Manual, Article 2513 (*b*).

(MDG 465/52/125.)

Section 7.

CANCELLED LIST.

UNCLASSIFIED.

833.—Cancellation of Navy Order.

Navy Order 234 of 1959 is hereby cancelled.

(DMT 303/31/8.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

REGISTRAR

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 834-855/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
10th October, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

7918/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

834.—Bren Machine Gun Found by Victorian Police.

The Victorian Police have reported the finding of a Bren machine gun Reg. No. U6785 (minus the breech block) and three magazines.

2. As the ownership of the weapon cannot be established, all holders of Bren guns are requested to check stocks of these machine guns against the quantities shown in the ledger, and report any deficiencies to Navy Office immediately. Ships and Naval Establishments are further requested to check accounting records to determine whether there has been any transaction with this Bren gun.

3. Nil reports are required.

(DW 709/51/28.)

UNCLASSIFIED.

835.—Her Royal Highness the Princess Margeret—Wedding Present.

(*A.F.O.* 2035/1960.)

The total sum subscribed towards the wedding present for Her Royal Highness The Princess Margaret by officers and men of the Royal Navy, the Royal Marines, the Royal Canadian Navy, the Royal Australian Navy, the Royal New Zealand Navy and the Royal East African Navy, the Women's Royal Naval Service, the Queen Alexandra's Royal Naval Nursing Service and the Voluntary Aid Detachment Royal Navy, the Royal Naval Reserve and other Naval, Royal Marines and Women's Reserve amounted to £1,923 5s. 11d. sterling.

2. Part of the gift took the form of a fine 18th Century two-drawer chest with a moulded top of Escolette marble. The chest was formally presented to Her Royal Highness at a ceremony at Clarence House on 4th May by the Board of Admiralty on behalf of the donors. In subsequently expressing her appreciation by letter, Her Royal Highness said—" We are both truly delighted with the beautiful eighteenth century chest and are greatly looking forward to seeing it occupying a prominent and worthy place in our new home ". Her Royal Highness asked that her most sincere thanks and appreciation should be conveyed to all concerned for their extremely generous gift.

3. In accepting the balance of the subscription, Her Royal Highness has been pleased to request that part of the sum subscribed should be devoted to Naval charities, in recognition of her great pleasure at the extreme goodwill of all the many donors who have contributed to her happiness in her marriage.

4. The First Sea Lord of the Admiralty has, on behalf of the donors, expressed warm appreciation of this generous gesture by Her Royal Highness and has arranged for donations to be made to King George's Fund for Sailors and the British Commonwealth Ex-Services League (for the benefit of Naval personnel).

5. This order will be reprinted for posting on notice boards.

(HPB 75/2/8.)

UNCLASSIFIED.

836.—Senior Australian Trade Commissioner—Hong Kong—Status in Respect of Official Calls.

The Senior Australian Trade Commissioner, Hong Kong, is now placed immediately after Consuls-General in the official Precedence List.

2. Commanding Officers of H.M.A. ships visiting Hong Kong are therefore to treat the Senior Australian Trade Commissioner as a Consul-General for the purposes of Q.R. and A.I., article 1349.

(*Sec* 1NM 12/1/3.)

RESTRICTED.

837.—Signalled References to Classified Documents—Letters and Signals.

(*A.F.O.* 2150/1960.)

As from the date of receipt of this order, the following relaxation is permitted when referring to classified documents and letters—

2. Signals referring to documents, letters, &c., but not signals, classified not higher than RESTRICTED may be sent unclassified provided they make only brief, innocuous reference to the document or letter such as quoting the reference number and date.

3. It is emphasized that a signal referring to any Classified signal must always be classified, regardless of the text.

4. Admiralty has advised that the relevant publications will be amended.

(DSD 1617/206/4.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

838.—ABCD Training Policy.

Naval Board policy on ABCD Training for officers and ratings of the RAN is as follows—

(*a*) The Director of Tactics, Trials and Staff Requirements, Navy Office, is the adviser to the Naval Board on general policy. He also advises DMT and DOA on matters of training. He will consult as necessary the Officer-in-Charge, ABCD School, H.M.A.S. PENGUIN.

(*b*) Courses as listed in Navy Order 270 of 1960 are carried out in the ABCD Schools, H.M.A.S. PENGUIN, and H.M.A.S. CERBERUS, and in the ABCD Section, H.M.A.S. LEEUWIN.

(*c*) Officers' training is carried out as follows—

(i) All cadet entry officers on the General List in the Seaman, Engineer and Supply and Secretariat Specializations will undergo the equivalent of the standard ABC and DC courses during their Phase III. training in the United Kingdom.

(ii) All Engineer Officers on completion of their course at the Royal Naval Engineering College, Manadon, undergo a three weeks' DC(E)O course in the Atomic Defence School, Portsmouth.

(iii) Officers on completion of other courses or on visits to the United Kingdom are given the opportunity to undergo ABCD courses as appropriate.

(iv) Officers of the Seaman (X) and Engineering specializations selected for advanced ABCD training undergo the course in the United Kingdom followed by a period on the staff of the Atomic Defence School, Portsmouth.

(v) Newly promoted Branch Officers qualifying in the United Kingdom undergo the equivalent of the standard ABC and DC courses in England—those qualifying in Australia undergo the standard ABC and DC courses at H.M.A.S. PENGIUN on completion of the Indoctrination Course.

(vi) All direct entry officers undergo the Preliminary Defence Course of one week and are to complete the standard ABC and DC courses during their first commission at sea.

(vii) Whenever possible, officers who will be required to carry out the duties of ABCD Officer, Monitoring Officer or Damage Control Engineer Officer will carry out the appropriate courses as set out in Navy Order 270 of 1960 prior to taking the appointment. Although the Executive Officer is responsible for the co-ordination of the activities of all Departments and overall efficiency of the organization, the duties of ABCD Officer will be carried out by an executive officer either appointed as such or designated by the Captain. Officers of the Electrical specialization will normally be nominated as Monitoring Officer in accordance with Navy Order 533 of 1960. In Aircraft Carriers, the Damage Control Engineer Officer will be an officer selected from the Engineering Department. He will be the Ship's Engineer Officer in destroyers and smaller ships.

(viii) Captains of ships which do not carry an officer specially appointed for ABCD duties are to ensure that the officer selected for such duties undertakes refresher courses at H.M.A.S. PENGIUN as necessary.

(*d*) Ratings training is carried out as follows—

(i) Courses for ABCD Instructor are held in H.M.A.S. PENGUIN.

(ii) All direct entry ERA's and OA's complete the standard ABC and DC source as soon as possible after being confirmed 4th Class. All apprentice entry Artificers and Naval Shipwrights carry out a Junior ABCD Course in H.M.A.S. PENGUIN during their fourth year of training and are drafted for the Standard ABC and DC course either immediately before or after the Petty Officers Leadership course.

(iii) ABCD subjects are included in the professional examination for advancement to higher rate. (A.B.R. 10, Chapter 3 refers.)

(iv) All recruits complete the Preliminary Defence Course before being drafted to sea.

(v) Standard and Advanced ABC and DC courses are available on application at H.M.A.S. PENGUIN, and the Junior ABCD course at both H.M.A.S. PENGUIN and H.M.A.S. CERBERUS. Although successful completion is not in itself a qualification for advancement it is most desirable that as many as possible should undergo these courses to improve their knowledge on this important subject.

(*e*) (i) Reserve officers and ratings are normally instructed by their own officers, every assistance being given by staffs of the ABCD schools.

(ii) To qualify to instruct, Reserve officers have to pass the Standard and Advanced DC or ABC course or both.

(iii) Reserve officers and ratings as decided by DNR may attend any of the courses listed in Navy Order 270 of 1960 appropriate to their rank or rating.

2. Selected ratings who have completed the ABCD Instructors' course will normally be employed as assistant to the ABCD Officer in H.M.A. ships in accordance with Navy Order 989 of 1959.

3. ABCD training in Fleet units is the responsibility of the Flag Officer Commanding Her Majesty's Australian Fleet. However, ships are authorized to deal direct with the ABCD School, PENGIUN, on such matters as practical training, courses and pre-commissioning training, except for new construction and modernized ships, for which arrangements will be made by Navy Office.

(DTSR 311/4/16.)

(*Navy Orders* 989 *of* 1959 *and* 270 *and* 533 *of* 1960.)

UNCLASSIFIED.

839.—Hospital Benefits—Cases in which Hospital Fees are Payable by the Commonwealth.

The Hospital Benefits Act provides for payment to hospitals by the Commonwealth (Department of Health) of hospital benefits in respect of patients. No separate payment is made, however, for a patient, the whole of whose fees, whether directly or indirectly, is paid by the Commonwealth. Commonwealth hospital benefits are therefore not payable to hospitals for treatment of naval personnel.

2. Cases have occurred in which hospitals, when submitting claims for treatment of naval personnel, have deducted the hospital benefits (at present eight shillings per diem). In such cases, the deduction has been disregarded and payment of the gross amount of the claim has been authorized. This procedure should be followed in any similar cases that may arise in future.

3. The possibility exists, however, that hospitals which have allowed such deduction in their original claim, may inadvertently include the period of hospitalization in the statement of daily occupied beds prepared for the purpose of the claim on the Commonwealth for hospital benefits. To provide a check in this regard, the Director-General of Health, Department of Health, Canberra, A.C.T. has requested that advice be furnished to him of any cases in which hospital benefits are deducted by hospitals in claims rendered for treatment of naval personnel. Any such cases that may arise should be reported to the Naval Board and action to advise the Director-General of Health will be taken in Navy Office.

(DNA 271/51/15.)

UNCLASSIFIED.

840.—Ratings—Seaman Branch—Selection and Training of Surveying Recorders.

It has been decided that in future, ratings will be selected for training as Surveying Recorders in the same manner as for other specialist qualifications in the Seaman Branch. A.B.R. 10, Article 1111, clause (2) refers.

2. Ratings who already hold a specialist qualification are no longer eligible for recommendation for S.R. 3. Seamen (other) may be recommended for an S.R. 3 course.

3. In order that ratings with the S.R. specialist qualification may have an opportunity to serve in other than surveying ships, it is intended to build up a small pool of Surveying Recorders.

4. A.B.R. 10. Chapter 11 will be amended.

(HPB 311/4/55.)

UNCLASSIFIED.

841.—Ratings—Medical and Dental Examinations.

Drafts at short notice are occurring due to the need to provide replacements for men who are forecast for service at sea or in a remote area but who unexpectedly become medically unfit. Such cases would be much fewer if the correct procedure for medical examinations were observed.

2. Attention is drawn to Navy Order 229 of 1959, paragraph 24, which states—

> " To ensure fitness for draft, ratings are to be provisionally medically and dentally examined on receipt of the forecast (or notice for " standby ") of a draft and, where found unfit, the Naval Board is to be notified by signal of the duration of the treatment."

(DMT 327/53/24.)

(*Navy Order* 229 *of* 1959.)

UNCLASSIFIED.

842.—Use of Private Motor Vehicles for Travel to Flinders Naval Depot.

It is to be noted that where a member is required in the course of his official duties to travel from Melbourne to Flinders Naval Depot and is permitted to use his private motor vehicle, mileage allowance should be paid to him in accordance with the provisions of Interim Pay Instruction 190/2.

2. For this purpose, the normal means of conveyance between Melbourne and Flinders Naval Depot is to be regarded as rail travel.

3. This order will be incorporated in I.P.I.

(HPB 187/55/14.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

843.—Directors AA/SU Mark 6*—Fitting of Bracket for 20° Throw-Off Prism A.C. 5070 and Sun Hood.

(*a*) *Ships, establishments and authorities concerned*	Daring Class Destroyers, West Head Gunnery Range and Gunnery Equipment Depots.
(*b*) *Type and mark of equipment*	AA/SU Directors Mark 6*.
(*c*) *Purpose of modification* ..	(i) To enable 20° throw-off prism A.C. 5070 to be used with binoculars A.C. 2006. (ii) To protect lenses of binoculars A.C. 2006 from exposure to sun.
(*d*) *Nature of modification* ..	(i) Manufacture and fit brackets and fittings as detailed on Drawing No. W.D.O. 213. (ii) Manufacture and fit sun hood and fittings as detailed on Drawing No. W.D.O. 214.
(*e*) *By whom to be done* ..	Dockyard.
(*f*) *When to be done*	As convenient.
(*g*) *How to be treated* ..	As a defect.

(DW 737/60/18.)

UNCLASSIFIED.

844.—Guns (Other than Aircraft)—Q.F. 4.5-in., Mark 5—Modification to Loading Stop.

(*A.F.O.* 2121/1960.)

The following modification is approved—

Gun	Q.F. 4.5-in., mark 5.
Parts Affected	BP076 Stop, loading, left gun—assembly. BP089 Stop, loading, right gun—assembly. BP434 Pin, axis, long, loading stop, left gun. BP447 Pin, axis, long, loading stop, right gun. BP226 Pin, axis, short, loading stop.
Purpose	To facilitate withdrawal of the axis pins for adjustment of the loading stops.
Nature of Modification ..	Provision of a ¼-in. B.S.F. tapped hole in the long and short axis pins.
New Parts Required ..	Nil.
Drawings	N.O.D. 3175/25, Items 8, 22 and 24.
By whom to be done ..	R.A.N. Armament Depots.
When to be done ..	When convenient.

2. Spare BP076 and BP089 Stop, loading—Assembly, BP434 and BP447 Pin, axis, long, loading stop, and BP226 Pin, axis, short, loading stop, held in store and on board H.M.A. ships are to be modified concurrently.

3. Schedule of Modifications Part 1—

Q.F. 4.5-in., mark 5 gun and accessories.

Delete Serial No. 32.

Add Serial No. 33.

Amend Serials Nos. 28 and 31 by *deleting* remark "Amend/Superseded by Serial No. 32" and *inserting* "Amend/Superseded by Serial No. 33".

4. Navy Orders 805 of 1959 and 411 of 1960 are relevant.

(DW 706/51/27.)

(*Navy Orders* 805 *of* 1959 *and* 411 *of* 1960.)

UNCLASSIFIED.

845.—Guns—Q.F. 40/60, Marks N1/2 and U.S. M1—Amendment to Schedule of Modifications.

(*A.F.O.* 1669/1960.)

As loading light support brackets are not required to be fitted on Q.F. 40/60 guns mounted on hand operated mountings, it has been decided to dispense with the modification to provide holes for the fitting of the bracket and cable clips and the cutting of a slot to accommodate run of cable, to Q.F. 40/60 guns, marks N1, N1/2 and U.S. M1.

2. Schedule of Modification, Part 1—

Guns, 40/60, mark N1 and accessories.

Serial No. 19 (i), (ii) and (iii) under column headed "NOD Drawing" *delete* reference to N1, N1/2 (Hand).

Guns, 40/60 U.S. M1 and accessories.

Serial No. 6 *delete* with all reference.

(DW 708/51/35.)

UNCLASSIFIED.

846.—Losses, Deficiencies and Damage to Stores and Equipment (All Categories) in H.M.A. Ships and Commissioned Establishments.

Navy Order 978 of 1959 is to be amended as follows—

Appendix B, paragraph 1 (*c*) ii (E)—

Amend to read—

"Full particulars of any disciplinary action taken or proposed, or the reasons why such action is not considered appropriate."

(DGS 400/51/27.)

(*Navy Order* 978 *of* 1959.)

UNCLASSIFIED.

847.—Naval Stores—Accounting—Counter Book Form A.S. 149—Revised Procedure.

(*A.F.O.* 1296/1960.)

The procedure for issue of consumable stores on Counter Books, form A.S. 149, as detailed in Article 0806 of A.B.R. 4 is to be varied as shown in the following paragraphs.

2. The forms A.S. 149 are to be prepared in duplicate only, except in Issue Centres, *see* paragraph 3. The forms are to be completed and closed and the ledger posted as detailed in Article 0806 of A.B.R. 4. The copies are to be distributed as follows—

(*a*) *Copy No.* 1.—To be filed as supporting voucher to the Naval Store Account. If preferred, copies No. 1 may be retained in the book for convenience of reference, alternate books if necessary being used to facilitate posting of the account. The certificate on this copy is not required to be completed.

(*b*) *Copy No.* 2.—To be forwarded to the Departmental Officer concerned for retention.

3. In Issue Centres, three copies of the form are to be prepared and dealt with as detailed in Article 0811 of A.B.R. 4, copies No.'s 1 and 2 being distributed as detailed in paragraph 2 above.

4. Occasional test comparisons between copies No.'s 1 and 2 of the form A.S. 149 are to be carried out by the Supply and Departmental Officers, who are to initial pages checked.

5. A.B.R. 4 will be amended.

(DNAS 400/51/60.)

UNCLASSIFIED.

848.—Naval Stores—Accounting—Registration and Bundling of Vouchers—H.M.A. Ships and Commissioned Establishments.

It has been decided that all vouchers in H.M.A. ships and commissioned establishments are, in future, to be bundled in numerical sequence, by type of voucher, as follows—

(*a*) Vouchers registered at Store Depots—to be bundled in numerical sequence of depot registered number. Permanent and consumable vouchers are to be bundled separately.

(*b*) Vouchers used for recording both permanent and consumable items, e.g. A.S. 126, A.S. 148, A.S. 549—to be bundled in order of ship's registered number.

(*c*) Counterbooks—forms A.S. 149 and A.S. 149A—to be bundled in numerical sequence.

(*d*) Forms A.S. 156, A.S. 156Y, A.S. 1091 and A.S. 1091Y—the procedure detailed in A.B.R. 4, Article 1814A (1) is to be followed, except that the requirement at sub-paragraph (*d*) for vouchers to be placed in the relevant monthly bundles is not applicable.

2. Under this procedure, forms A.S. 155Y (Register of Vouchers) are abolished. A check list for the purpose of numbering vouchers is to be maintained where vouchers are not prenumbered, and where a " book " copy, or file copy, is not maintained.

3. The procedure detailed in A.B.R. 4, Article 1814A (2) for cross-referencing of vouchers is to be adopted in lieu of " marrying " vouchers where authorized.

4. A.B.R. 4 will be amended.

(DNAS 400/57/84.)

UNCLASSIFIED.

849.—Naval Stores—General—Accounting—Stores not in the Custody of the Supply Officer.

It has been decided that the procedure set out in Navy Order 272 of 1959 (now incorporated in A.B.R. 4, Article 1501) whereby forms A.S. 156 are used for reporting weekly expenditure of Naval Stores not in the custody of the Supply Officer, is to be brought into operation in all H.M.A. ships and commissioned establishments irrespective of the availability of supplies of the forms previously used for this purpose, i.e., forms A.S. 1100, A.S. 1101 and A.S. 1102. Unused stocks of these forms should be destroyed.

(DNAS 501/51/22.)

(*Navy Order* 272 *of* 1959.)

UNCLASSIFIED.

850.—Naval Stores (General) (Class E, Group 6)—Allocation of New Pattern Numbers.

(*A.F.O.* 2126/1960.)

To facilitate accounting, new Admiralty pattern numbers have been assigned to the items under class E, group 6 of the Rate Book and Authorized List of Naval Stores, B.R. 810, as detailed in the appendix to this order.

2. Records should be amended accordingly. H.M.A. ships and commissioned establishments are to adjust their ledgers in accordance with Article 1812 (*g*) of A.B.R. 4 (Naval Storekeeping Manual).

3. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

Description.	*Old Pattern.*	*New Pattern.*
Caustic soda in 56-lb. drum	53	53
Caustic soda in 10-lb. tin	53	1027
Gold leaf, deep colour, ordinary	28	28
Gold leaf, transfer gold	28	1034
Paste, blue black, for dark grey paint, pattern 507B, in 28-lb. keg	370A	3574
Paste, blue black, for dark grey paint, pattern 507B, in 7-lb. tin	370A	3575
Paste, blue black, for light grey paint, pattern 507C, in 28-lb. keg	371	371
Paste, blue black, for light grey paint, pattern 507C, in 7-lb. tin	371	3577
Thinners, for light buff distemper, pattern 640, in 1-gallon drum	687	687
Thinners, for light buff distemper, pattern 640, in 1-pint container	687	3579

(DNAS 512/76/30.)

UNCLASSIFIED.

851.—Naval Stores (General) (Class E, Group 8)—Grease, Hypermatic Lubricant for Lubricated Plug Valves.

(*A.F.O.* 325/1960.)

To avoid special manufacture, Hypermatic Greases (Newman Hender) in stick form, patterns E8/7862 to 7865 inclusive will in future be supplied in the following sizes—Grease hypermatic lubricant, for lubricated plug valves (Newman Milliken) (except in Avgas and Avcat systems)—

Newman Hender No. 18—
Pattern 7862, size O, $\frac{1}{4}$-in. x $\frac{13}{16}$-in., in boxes of 30 sticks.
Pattern 7863, size B, $\frac{1}{2}$-in. x $2\frac{1}{2}$-in., in boxes of 30 sticks.
Pattern 7864, size C, $\frac{5}{8}$-in. x 3-in., in boxes of 30 sticks.
Pattern 7865, size E, $1\frac{1}{2}$-in. x $4\frac{1}{2}$-in., in boxes of 12 sticks.

2. Daring class destroyers are fitted with Newman Milliken valves in the forced lubrication system and stocks of Newman Hender lubricant No. 16 are held. These stocks will be used until exhausted. Future purchases for these valves will be Newman Hender lubricant No. 18.

3. A/S Frigates type 12 are being fitted with Newman Milliken valves in the furnace fuel oil system for which stocks of Newman Hender lubricant No. 17 are held. These stocks will be used until exhausted. Future purchases for these valves will be Newman Hender lubricant No. 18.

4. H.M.A.S. MELBOURNE is fitted with Audco Valves in Avgas and Avcat systems for which Audley Lubricant No. 631 has been used in the past. Audley lubricant No. 633 now being used for these valves is supplied in the following sizes—Grease hypermatic lubricant for lubricated plug valves (Audco) (in Avgas and Avcat systems)—

Audley No. 633—
Pattern 7725, $\frac{1}{4}$-in. x $1\frac{1}{2}$-in.
Pattern 7726, $\frac{1}{2}$-in. x 2-in.
Pattern 7727, $\frac{5}{8}$-in. x $2\frac{1}{2}$-in.
Pattern 7728, $1\frac{1}{2}$-in. x 6-in.

5. Admiralty has advised that B.R. 1988 and B.R. 810 are being amended.

6. Navy Order 566 of 1959 is hereby cancelled.

(DNAS 512/87/38.)

(*Navy Order* 566 *of* 1959.)

UNCLASSIFIED.

852.—Naval Stores (General) (Class F, Group 3)—Illuminated Fleet Manoeuvring Board—Introduction and Allowances.

During fleet exercises when a large A/S screen is operating, it has been found necessary to have an illuminated manoeuvring board on the bridge in order to keep screening stations up to date.

2. An improved manoeuvring board has been developed to meet this need. It consists of three circular perspex scales mounted on a square shallow box illuminated by four A.P. 6621 light globes as follows—

(*a*) A fixed compass rose etched on the perspex face of the box.
(*b*) A manoeuvring board etched on a circular piece of perspex. Screening stations are plotted on this surface.
(*c*) A formation plate which rotates on the common pivot and is made to the same scale as (*b*).
(*d*) The illumination is controlled by means of an on/off switch and a light dimmer switch, conveniently mounted on the face of the board.
(*e*) State board particulars are etched on the perspex face of the board (*a*) and is viewed by transmitted light.

3. These boards are introduced as Naval Stores as follows—

Class/Group.	*Pattern.*	*Description.*	*Ships Accounting Classification.*
F3	N.P. ..	Board, Fleet Manoeuvring, Illuminated (To G.I. Dwg. No. 2536/57)	P.

4. Issue will be effected without demand by the S.N.S.O., Sydney, in accordance with the following scale of allowances—

H.M.A.S. MELBOURNE	1 No. per ship.
Daring Class	
Battle Class	
Type 12 Frigates	
Type 15 Frigates	
H.M.A.S. SWAN	
H.M.A. Signal School	2 No.
N.D. School	1 No.
S.T.C. Sydney	1 No.

(DNC 1281/51/15.)

RESTRICTED. Cancelled NO 713/62

853.—Naval Stores (General) (Class F, Group 5)—Kodak "Retinette" 35 mm. Still Camera—Amended Allowances.

Allowances of the Kodak "Retinette" 35-mm. still camera, complete in "every-ready" carrying case, suitable for Intelligence purposes are as follows—

Destroyers (all classes)	1 No. each.
Frigates (all classes)	
Ocean Minesweepers	
NOIC, West Australia Area	
NOIC, North Australia Area	
NOIC, New Guinea	
NOIC, Tasmania	
NOIC, South Australia	
NOIC, Queensland	
BIO, East Australia Area	

2. Authorized allowances are limited to services where the requirements cannot be met from existing holdings of cameras.

3. A first outfit quantity of film will be supplied to the above ships and authorities as follows—

Kodak Roll Film 135 x 36, Tri X (TX.135)	4 No.
Kodak Roll Film, 135 x 36 Panatomic (FX.135)	2 No.

4. Demands as necessary to complete to the above allowances should be lodged with appropriate (S)N.S.O. Demands for ships under construction, modernization, &c., will be raised by the storing yards concerned in the normal manner.

5. The above allowances are to be regarded as R.A.N. special allowances of naval stores for the ships concerned.

6. Navy Order 980 of 1958 is hereby cancelled.

(DNAS 519/55/68.)

(*Navy Order* 980 *of* 1958.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

854.—B.R. 3003 (1)—Naval Marine Engineering Practice, Volume 1—Distribution.

B.R. 3003 (1), Naval Marine Engineering Practice, Volume 1, is to be distributed in accordance with the scale given below. This book supersedes B.R. 77—Machinery Handbook; it contains descriptions and methods of operation of typical machinery for which the Engineering Department is responsible.

2. B.R. 3003 (2) which will be published later is a revision of B.R. 2007—Naval Marine Engineering Practice, it will contain more detailed information on marine Engineering equipments, including maintenance practice.

3. Personal loan copies of B.R. 3003 (1) will be issued on the following basis—

(*a*) All ratings of the Engineering Mechanic Branch with more than twelve months of their current engagements to serve.

(*b*) All ratings of the Engineering Mechanics Branch of the R.A.N.R. with more than twelve months of their current engagements to serve.

4. Personal copies may be purchased through the Victualling Store as for other service manuals.

5. The scale of issue to ships and establishments for reference and loan is as follows—

Ships and Authorities—

Flag Officer Commanding H.M.A. Fleet	2 copies.
MELBOURNE	6 copies.
YARRA	3 copies.
PARRAMATTA	3 copies.
VENDETTA	3 copies.
VOYAGER	3 copies.
VAMPIRE	3 copies.
TOBRUK	3 copies.
ANZAC	3 copies.
QUEENBOROUGH	3 copies.
QUICKMATCH	3 copies.
QUIBERON	3 copies.
SWAN	2 copies.
WARREGO	2 copies.
DIAMANTINA	2 copies.
GASCOYNE	2 copies.
BARCOO	2 copies.
WAGGA	2 copies.
PALUMA	1 copy.
KIMBLA	1 copy.
WOOMERA	1 copy.
BANKS	1 copy.
BASS	1 copy.

Shore Establishments and Authorities—

Navy Office (for Director of Marine Engineering)	3 copies.
Flag Officer-in-Charge, E.A.A.	1 copy.
General Manager, Garden Island Dockyard	3 copies.
General Manager, Williamstown Dockyard	2 copies.
Captain of Port, Sydney (Reserve Ships)	1 copy.
ALBATROSS	1 copy.
CERBERUS	10 copies.
LEEUWIN	2 copies.
LONSDALE	2 copies.
MELVILLE	1 copy.
MORETON	1 copy.
NIRIMBA	10 copies.
PENGUIN	2 copies.
WATSON	2 copies.
TARANGAU	1 copy.
HUON	1 copy.
TORRENS	1 copy.

(DNAS 465/52/351.)

UNCLASSIFIED.

855.—Form A.S. 148W—Abstract for Stocktaking.

Consequent on the introduction of new classes and groups in the Rate Book for Naval Stores, B.R. 810, the classes and groups listed in the left hand column of forms A.S. 148W (1), (2) and (3) do not meet requirements.

2. When next reprinted, the left hand column will be left blank and ships and establishments should insert the classes and groups or sections (in correct order) in the columns as necessary. The form will be printed in single sheets in lieu of the current sets of three.

3. Stocks of the existing forms are to be exhausted before the new print is brought into use, the classes and groups printed thereon being amended as necessary by the ship or establishment concerned when the forms are brought into use. All future demands on S.N.S.O. Sydney for requirements of this form are to show the number of single sheets required, not sets as in the past.

4. Article 1607 of A.B.R. 4 will be amended.

(DNAS 464/54/259.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

REGISTRAR

RESTRICTED

FOR OFFICIAL USE ONLY.

C.N.O.'s 856-873/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
27th October, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

8186/60.

CONTENTS.

Section 2.
PERSONNEL.

UNCLASSIFIED.

856.—Conditions Governing Leave Travel and Removal on Appointment or Draft Following Service in H.M.A.S. TARANGAU or H.M.A.S. MELVILLE.

A rating who is drafted following service in H.M.A.S. TARANGAU or H.M.A.S. MELVILLE is subject to the same leave and removal conditions as one drafted from any other establishment on the Australia Station. Such a member is drafted to the next ship or establishment, leave and draft, i.e., he is to be routed in accordance with leave requirements where a leave travel right exists and is to report to his next ship or establishment on completion of leave. He is not to be given an additional preliminary draft to a depot in the home state.

Single and Married Unaccompanied Members.

2. In the case of a single member, he is entitled to duty travel to the next place of duty and the entitlement under Section 4 of Chapter XII. of Interim Pay Instructions will also apply, i.e., the member is entitled to leave and/or travel as the case requires to his " home town " and to his next place of duty. The same conditions apply to a married member whose family was not removed to either H.M.A.S. TARANGAU or H.M.A.S. MELVILLE.

Married Accompanied Members.

3. Where a married member is granted a removal, the place to which his wife is removed is regarded as " the place in Australia in which his wife usually resides ". I.P.I. 201/2 (1.) (*b*) refers. Therefore, where a member is granted a removal of his wife to Darwin or New Guinea, he has no entitlement to leave travel concessions under Section 4 of Chapter XII. of I.P.I.

4. Where such a member is subsequently drafted from H.M.A.S. TARANGAU or H.M.A.S. MELVILLE to another establishment and a removal is granted to the vicinity of that establishment, the member is entitled to duty travel to the place of duty only and an entitlement to leave travel concessions does not arise.

5. Where a married accompanied member is drafted to a sea-going ship from H.M.A.S. TARANGAU or H.M.A.S. MELVILLE, a removal may be granted under normal rules, i.e., to the base port of the ship or to the member's home port. If the removal is to the base port of the ship there is no entitlement to leave travel concessions. Where the removal is to the member's home port, he would be entitled to leave travel to that place and I.P.I. instruction 201/9, paragraph (1.) would apply.

Families.

6. It is to be noted that, in relation to a married accompanied member serving in one of these establishments, on completion of the period of duty there is no approval entitling his family to free leave travel to his home state. The grant of travel for the family is approved under the conditions governing removals.

7. The above provisions also apply to officers.

8. This order will be reprinted for posting on notice boards.

(HPB 187/1/53.)

UNCLASSIFIED.

857.—Engine Room Branch—Courses of Technical Instruction.

The following are the revised instructions regarding technical courses held by the Engine Room Branch.

2. The courses are divided into three groups—

(*a*) *Group* 1.—Courses for which forms A.S. 1303x are required—

Course:

(i) Qualifying Course for Chief Engine Room Artificer and Chief Mechanician.

(ii) Mechanicians Course.

(iii) Engineer Officer's Writers Course.

(iv) Bricklaying and Lagging Course.

(v) Motor Transport Drivers Course.

(*b*) *Group* 2.—Courses for which forms A.S. 1303x are not required—

Course:

(i) Recruits (Engineering Mechanic) Technical Course.

(ii) Mechanical Training Course.

(*c*) *Group* 3.—Courses which are run only when qualified ratings are required for a particular ship or establishment. Forms A.S. 1303x are not required—

Course:

(i) Laundry Operators Course.

(ii) Short Welding Course.

(iii) Engineering Administration Course.

3. Courses (i) and (ii) in Group 3 are to be arranged as required, by ships and establishments direct with the Commodore Superintendent of Training, Flinders Naval Depot, copy to Navy Office.

4. Details of the following courses which are essential for advancement are contained in A.B.R. 10—

(*a*) Recruits (Engineering Mechanic) Technical Course.

(*b*) Mechanical Training Course.

(*c*) Mechanicians Course.

(*d*) Qualifying Course for Chief Engine Room Artificer and Chief Mechanician.

5. The instructions and syllabuses for all other current courses are contained in the appendix to this order, which will be included in the Training Manual in due course.

6. Forms A.S. 1303x are to be forwarded to Navy Office on the last day of February, May, August and November showing all ratings recommended for Group 1 courses. Nil returns are required.

7. Before recommending ratings for courses, Captains are to satisfy themselves that the ratings have the necessary ability and aptitude for the particular specialization for which they are volunteering.

APPENDIX.

1. *Engineer Officer's Writers Course.*

(*a*) *Ratings Eligible*—Engineering Mechanics 1st Class in possession of A.M.W.C. and E.T. 1 Certificate, and Leading Engineering Mechanics.

(*b*) *Duration of Course*—Sixteen weeks.

(*c*) *Object of Course*—To give ratings a good knowledge of office work, touch typing, supply, demand and accounting for Engineering equipment, rendering of all forms, and returns in connection with the Engineering Branch and compiling the Engine Room Master Log.

(*d*) *Where Conducted*—Fifteen weeks at Flinders Naval Depot and one week in Sydney.

(*e*) *Syllabus*—

(i) Regulations, orders and instructions.

(ii) Engine Room Register and Engine Room Master Log.

(iii) Advancements. Service Certificate.

(iv) General correspondence, filing, records (Captain's Ship Book, &c.).

(v) Defects and defect list.

(vi) Alterations and additions.

(vii) Miscellaneous records, records of inspection, confined space allowance, wear and waste test and water test of pressure of boilers, &c.

(viii) Departmental correspondence and returns. Schedule of returns. Forms used in Engine Room Branch.

(ix) Spare gear, accounting, mustering, local purchase, &c.

(x) Fuel—Accounting.

(xi) Practical—one week at Central Machinery and Spares Depot, Sydney.

(xii) Typing.

(xiii) English Expression—letter writing.

(xiv) Mathematics—E.T.1 arithmetic, with particular emphasis on fuel conversion.

2. *Bricklaying and Lagging Course.*

(*a*) *Ratings Eligible*—Engineering Mechanics 1st Class, Leading Engineering Mechanics, Petty Officer Engineering Mechanics. (Leading Engineering Mechanics and Petty Officer Engineering Mechanics are not to be recommended for this course if they have not already undergone the course as Engineering Mechanics 1st Class.)

(*b*) *Duration of Course.*—Four weeks.

(*c*) *Object of Course*—To give ratings a good knowledge of service bricklaying practice and to train them in the application of all types of lagging in use in the Service. (In the case of L.M.(E) and P.O.M.(E), the course will normally only be given as a refresher course.)

(*d*) *Where Conducted*—Flinders Naval Depot.

(*e*) *Syllabus*—

(i) Heat, the transfer of heat, convection, conduction and radiation, function of a furnace, heating surfaces and non-heating surfaces, factors influencing the life of brickwork.

APPENDIX—*continued.*

(ii) Tools and materials used, the cutting, drilling and fitting of bricks.

(iii) Methods of securing brickwork to vertical and horizontal surfaces.

(iv) Brick combustion tubes, pattern numbers used in different classes of ship, the combustion and factors which influence long life and good combustion.

(v) Definitions and recognition of spalling, slagging, iron slagging, the detection of water and causes of brick fracture, protective coatings.

(vi) The ordering, handling and correct stowage of all materials.

(vii) Lagging—materials and methods used.

3. *Short Welding Course.*

(*a*) *Ratings Eligible*—Ratings undergoing Mechanicians course; Naval Shipwrights, E.A.'s and O.A.'s as required.

(*b*) *Duration of Course*—Six weeks.

(*c*) *Object of Course*—The training of artificers to undertake simple non-strength welding and brazing repairs, e.g., tubular furniture, fresh and hot water service fittings, metal guards and screens.

(*d*) *Where Conducted*—Flinders Naval Depot.

(*e*) *Syllabus*—Part 1, Oxy Acetylene—

(i) The gases and equipment used, stowage, handling and precautions.

(ii) Regulator and blow pipes.

(iii) Welding techniques in general.

(iv) Welding of light gauge plating.

(v) Low melting point brazing.

(vi) Bronze welding of cast iron.

(vii) Cutting.

(viii) Leftward and rightward methods.

(ix) Ferrous welding of cast iron.

Part 2, *Electric Welding*—

(i) Types of plants, tests and checks, voltage, current and arc length, maintenance of equipment.

(ii) Safety precautions.

(iii) Manipulation of electrode, lap, butt and fillet welds, corner joint, single run vertical, overhead fillet, multi-run, vertical up, vertical down.

Part 3, *Argon Arc Welding*—

Demonstration of equipment used, its advantages and limitations.

4. *Engineering Administration Course.*

(*a*) *Ratings Eligible*—Chief Engine Room Artificers, Chief Mechanicians and candidates for commissioned rank. (This course will be arranged for C.E.R.A.'s and Chief Mechanicians before first draft to a ship in which no Engineer Officer is borne.)

(*b*) *Duration of Course.*—Four weeks.

APPENDIX—*continued.*

(*c*) *Object of Course*—To give ratings a good knowledge of office work, accounting for spare gear, rendering of all forms in connection with the Engineering Branch and other subject matter in order that they can carry out the duties of the Engineer Officer of a small ship.

(*d*) *Where Conducted*—Three weeks at Flinders Naval Depot and one week in Sydney.

(*e*) *Syllabus*—

At Flinders Naval Depot—

(i) Organization of the R.A.N., the Fleet, and of the Engine Room department.

(ii) Small ship organization and duties of the Engineer Officer.

(iii) Letter writing and reports.

(iv) Engine Room department records and returns.

(v) Divisional duties. Advancement.

(vi) Docking, refits, defect books and lists, alterations and additions.

(vii) Naval storekeeping.

(viii) Engineering equipment, demand, return and accounting.

At Sydney—

(ix) Two days Garden Island Dockyard (Dockyard organization).
One day Central Machinery and Spares Depot.
One day Fleet Engineer's Office.
One day Oil Fuel Section and Installations.

5. *Laundry Operator Course.*

(*a*) Ratings eligible—Able Seamen, Leading Seamen, Engineering Mechanics 1st Class, Leading Engineering Mechanics.

(*b*) *Duration of Course*—Four weeks.

(*c*) *Object of Course*—To give ratings a good knowledge of the correct operation and maintenance of the different types of machinery fitted in H.M.A. ships and establishments.

(*d*) *Where Conducted*—Flinders Naval Depot.

(*e*) *Syllabus*—

(i) Flinders Naval Depot laundry—Two weeks; Operation of laundry machinery, use of soaps and bleaches, receipt, sorting, marking, handling and re-issuing of clothing.

(ii) Flinders Naval Depot "laundromat"—Two days; Operation of domestic automatic washing machinery.

(iii) Engineering School—One day; Economy of operation, maintenance and feed water.

(iv) A.B.C.D. School—Two days; de-contamination processes.

(v) Commercial laundry and manufacturers—One week. Shore side practice and knowledge of other types of laundry machinery.

6. *Motor Transport Drivers Course*—

(*a*) *Ratings Eligible*—Engineering Mechanics 1st Class who are in possession of a civil driving licence (not South Australian).

(*b*) *Duration of Course*—Six weeks.

APPENDIX—*continued.*

(*c*) *Object of Course*—To give ratings a good knowledge of driving and routine maintenance of all types of Service vehicles.

(*d*) *Where Conducted*—Flinders Naval Depot.

(*e*) *Syllabus*—

(i) Preliminary Test, Vehicle M.T. Theory, practical maintenance.
(ii) Road Law and N.M.T. Regulations.
(iii) Accident Report Procedure.
(iv) Practical Driving (night and day) including convoy drill and towing.

(DMT 312/25/12.)

UNCLASSIFIED.

858.—Films and Filmstrips—Instructional—Title—" IFF, Mark 10 (Parts A–K) " (Serial No. MN–6958A–K)—Revised Security Classification

(*A.F.O.* 2229/1960.)

The following United States Navy training film has been downgraded from " Confidential " to " Unclassified ".

Serial No.	*Title.*
MN–6958A–K ..	IFF, Mark 10 (Parts A to K).

2. Ships and establishments holding copies of the above film should take appropriate action to downgrade the security classification of this film.

(DNAS 519/56/125.)

Cancelled vide 447/62

UNCLASSIFIED.

859.—Gowrie Scholarships—1961 Awards.

The Naval Board has been advised that the following awards for the year 1961 will be made from the Gowrie Scholarship Trust Fund—

(*a*) Post-Graduate Research Travelling Scholarships, for two years abroad of £720 sterling per annum.
(*b*) University or similar scholarships, of £75 per annum.
(*c*) Secondary School Scholarships, for one or two years, of £40 per annum.

2. The scholarships are available only to members of the Armed Forces of the Commonwealth who served in a combat area during the War of 1939–45, or to their descendants.

3. Applications must be submitted not later than 30th November, as follows—

(*a*) For Travelling Scholarships—to the Registrar of the University of graduation in Australia.
(*b*) For other Scholarships—to the Secretary, Gowrie Scholarship Trust Fund, Box 2069, G.P.O., Sydney, New South Wales.

4. Forms of application and instructions are obtainable from the Secretary of the Gowrie Scholarship Trust Fund, Legacy House, 144 Castlereagh Street, Sydney, or through schools.

(HPB 134/1/4.)

UNCLASSIFIED.

860.—Living Out and Supplementary Travelling Allowances.

The following instructions will in future govern the payment of Living Out and Supplementary Travelling Allowances.

2. An unmarried member absent overnight on duty or on detached duty from his permanent place of duty involving absence overnight from his residence, may be paid an allowance at the rate of 9s. 6d. per day subject to the following conditions. The allowance payable under this authority is additional to travelling allowance, which may be payable under existing rules.

3. The circumstances in which the allowance is payable and the conditions of payment are—

(*a*) Member living out and in receipt of Living Out Allowance at his normal place of duty and lives out at the new locality—
The allowance is payable during travel and while at the new locality. Payment will be effected by the continuous credit of Living Out Allowance.

(*b*) Member living out and in receipt of Living Out Allowance at his normal place of duty and lives in at the new locality—
The allowance is payable for a total period, not exceeding 30 days, during travel and while living in at the new place of duty. Payment will be effected by the continuous credit of Living Out Allowance subject to the 30 days limit.

(*c*) Member living in at his normal place of duty and lives out at the new locality—
The allowance is payable during travel and while at the new locality. Payment will be effected as Supplementary Travelling Allowance.

4. The allowance will not be payable to a single member who lives in at his permanent location and who proceeds on temporary short term duty to a location where he is provided with rations and quarters.

5. It is to be noted that allowances under this order are payable only in respect of temporary absences from a member's permanent place of duty. The allowance is not payable where a member travels on permanent change of appointment or draft.

6. Where payment of the allowance for part of a day is involved (either as Living Out Allowance or as Supplementary Travelling Allowance) any period of twelve hours or more is to be regarded as a full day and any lesser period is to be disregarded.

7. Payments of Supplementary Travelling Allowance under paragraph 3 (*c*) are to be made on form A.S. 542.

8. In regard to the certificate by the Supply Officer on form A.S. 542—

(*a*) where Living Out Allowance is payable under paragraph 3 (*a*) or (*b*) the word " Not " is to be deleted and initialed by the Supply Officer; and
(*b*) where Supplementary Travelling Allowance is payable under paragraph 3 (*c*) the certificate is to be signed without alteration.

9. Attention is drawn to the necessity for insertion in form A.S. 542 of particulars sufficient to establish to officers examining claims for Supplementary Travelling Allowance without having to refer to the relevant signals or other sources of information, that conditions of the member's absence from his normal place of duty are such as comply with the conditions under which the allowance is payable.

10. The contents of this order will be incorporated in Interim Pay Instructions.

11. Navy Order 798 of 1959 is hereby cancelled.

(HPB 252/6/5.)

(*Navy Order* 798 *of* 1959.)

UNCLASSIFIED.

861.—Notification of Particulars of Next-of-Kin—Procedure.

It is evident that officers and ratings are not fully aware of the necessity of reporting changes of addresses of next-of-kin on forms A.S. 537 and also that forms A.S. 537 are not being forwarded to Navy Office immediately they are prepared.

2. The maintenance of up-to-date records of next-of-kin in Navy Office is essential for, among other reasons, drafting purposes. In order that ratings may, where possible, be drafted to their home port areas it is important that immediately a change to a rating's next-of-kin is effected it be reported.

3. Navy Order 25 of 1960, is to be amended as follows—

Delete existing paragraphs 1, 9 and 11 and *insert* in lieu—

" 1. It is important that the name, relationship and address of a member's next-of-kin should be readily available in his ship or establishment and at Navy Office. For the purpose of this order, next-of-kin means the wife, other relative or close friend whom a member would wish to be informed in the case of his death, serious illness or accident. After considering Home Port for drafting and appointing purposes, the address of a member's next-of-kin is also taken into consideration for moves to establishments within the Home Port area.

9. When forms A.S. 537 have been prepared the details on forms A.S. 224Z and Certificates of Service should be checked and amended as necessary in pencil. On completion of this action forms A.S. 537 are immediately to be forwarded to Navy Office.

11. When forms A.S. 537, prepared on the occasion referred to in paragraph 5 (*b*) are being forwarded to Navy Office. they are to be accompanied by a certificate that all officers and ratings borne have completed the form. The forms are to be arranged alphabetically and despatched as early as practicable in a sealed envelope labelled ' Forms A.S. 537 '."

(HPB 341/4/3.)

(*Navy Order* 25 *of* 1960.)

UNCLASSIFIED.

862.—Passages to Australia of Families of R.A.N. Personnel who Married Abroad Whilst Serving in Malaya.

The cost of passages to Australia of the wives (or widows) and children of members of the Royal Australian Navy who married abroad whilst serving in the Strategic Reserve in Malaya will be borne by the Department, subject in each case to prior compliance with the requirements of the Department of Immigration.

2. All applications for passages are to be forwarded to Navy Office.

3. Navy Order 918 of 1958 is hereby cancelled.

(HPB 187/1/54.)

(*Navy Order* 918 *of* 1958.)

UNCLASSIFIED.

863.—Temporary Rental Allowance—Conditions of Payment.

Cases have occurred recently where on taking up a new appointment or draft members have accepted tenancy of expensive housing accommodation and applied for Temporary Rental Allowance in circumstances where the Naval Board could not approve payment of the allowance.

2. In order that members may avoid financial embarrassment the following principles governing payment of that allowance are re-stated—

(*a*) Eligibility arises following the grant of a removal where a member is unable to obtain unfurnished premises and occupies reasonable furnished premises. (I.P.I. 231/43 (1).)

(*b*) The allowance is not payable if the member would not occupy unfurnished premises if they were available. (I.P.I. 231/43 (1).)

(*c*) The standard of the premises sought should be reasonable having regard to his status and family commitments. (I.P.I. 231/43 Note 2.)

(*d*) The allowance is not a subsidy to enable a member to occupy a better residence than he could afford if the allowance were not payable. (I.P.I. 231/43 Note 2.)

(*e*) The allowance will not normally be payable where a suitable Naval residence is or becomes available and the member declines occupation. Similarly it will not normally be payable if a member vacates a Naval house (not having been appointed or drafted from the area). (I.P.I. 231/43 Note 3.)

(*f*) The allowance will not normally be payable where a member occupies unfurnished premises as these are regarded as " suitable premises ". (I.P.I. 231/43 (2).)

(*g*) The member must not restrict his search to premises at a rental equivalent to the rent he would pay for an official residence. He is expected to seek unfurnished premises at a rental he can afford to pay. (I.P.I. 231/43 (4) Note 1.)

(*h*) The member is expected to accept accommodation consistent with his status in any locality within reasonable proximity to his place of duty. Up to 90 minutes each way (door to door) is not regarded as excessive. (I.P.I. 231/43 (4) Note 2.)

(*j*) There is no exception to the rule in (*h*) above—e.g., a member cannot restrict his search because of a preference for one locality nor can he restrict his search because of his children attending certain schools. (I.P.I. 231/43 (4) Note 2.)

(*k*) In submitting an application for Temporary Rental Allowance a member must provide a statement showing details of his efforts to secure unfurnished premises and, failing success in that direction, the extent of his search for cheaper furnished premises. He must also indicate the localities covered and submit reasons for the rejection of any premises which have been offered to him. (Navy Order 657 of 1960.)

(*l*) Certificates from estate agents in support of applications for Temporary Rental Allowance are no longer necessary unless required by the Naval Board in exceptional circumstances.

(*m*) As this allowance is payable to assist a member temporarily while he searches for unfurnished premises and is only payable where a member occupies reasonable furnished premises while that search is conducted, payment will be refused if the Naval Board considers that the rental paid is excessive or that the conditions are not complied with. In cases where it appears that the rental paid, while not excessive, is more than normal for the particular circumstances, the amount payable will be assessed on the basis of a rental which could be considered reasonable, taking all circumstances into account.

(*n*) A member may accept a lease but this is not favoured generally. The conditions of I.P.I. 231/44 apply to such cases.

3. This order is not to be quoted as an authority. The full conditions governing payment of Temporary Rental Allowance are set out in Interim Pay Instructions 231/41–231/51.

4. This order will be reprinted for posting on notice boards.

(HPB 252/8/20.)

(*Navy Order* 657 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

864.—Alteration and Addition Item—A.S. Frigates (Converted Fleet).

The following alteration and addition item is approved for A.S. Frigates (Converted Fleet)—

Class List Item No. 573. *Classification* " A ".

Item: To replace existing 12½ inch exhaust fans in Gearing Room with 17½ inch exhaust fans in accordance with Garden Island Drawing No. 199/1282.

References:

(*a*) H.M.A.S. QUEENBOROUGH's proposed alteration and addition item, T.D.L. " L ".

(*b*) F.O.C.A.F.'s A.F. 1958/10 (4206) of 7th October, 1959.

(*c*) Navy Office messages Nos. 030603 and 030605, December, 1959.

(DCNTS 1224/264/2.)

UNCLASSIFIED.

865.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 1994/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service, having reached the age limit—

Propellant lots and sub-lots affected.	*Type.*	*Nature of ammunition, &c., which may be involved.*
RNC 3490XL	SC 048	Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 4.5-in. reduced charge.
RNC 977 RNC 1099XA RNC 1119XA	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1544XD RNC 3523XL	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 960 RNC 1104XA	SC 109	Q.F. 4.7-in.
RNC 1116XA	SC 122	Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 974	SC 140	Q.F. 5.25-in.; Impulse torpedo
RNC 973 RNC 2832XJ	SC 150	Impulse torpedo.
RNC 6272 RNP 1517 RNP 1521R	ASN/T 190–054	Q.F. 4.7-in.; Q.F. 4-in.
KA 985 KA 986 KA 988 KA 989 KA 991 KA 992 KA 994	FNHP 022	Q.F. 40/60.
SPDN 5635 SPDN 5641 SPDN 5642 SPDN 5644 SPDN 5720 SPDN 5721	FNHP 020	Q.F. 40/60.
BS 18309 XB	SUK 1.7–0.6	Motor rocket 2-in.

Action to be taken by H.M.A. ships, &c. Return to nearest N.A. Depot as early as practicable; if unable to comply within three months from the date of this order, report specially to Navy Office for instructions.

N.M. and E.R., B.R. 862, Article 211 and N.C.R. B.R. 862A, Article 53, paragraphs 6, 7 and 9 refer.

Action to be taken at R.A.N.A. Depots Separate instructions have been issued.

(DW 729/57/51.)

UNCLASSIFIED. Cancelled. N O. 668/62

866.—Instructions for Hydrogen Balloon Filling.

The following instructions are to be observed in ships which are required to fill hydrogen balloons for purposes of windfinding or radar performance checks.

Cylinders—Stowage and care.

2. Hydrogen cylinders should be stowed in the open and close to the deck; they should be protected from the direct rays of the sun, and the weather generally, with canvas covers.

3. **Cylinders are not to be repainted or scrubbed with wire brushes or any abrasive material. A spark from such an operation could cause a leaking cylinder to explode.**

4. No smoking is to be allowed in the vicinity of the stowage and notices to this effect are to be placed in prominent positions adjacent to the stowage.

5. Caps are to be fitted when cylinders are not in use. The delivery orifice of each cylinder is to be examined and cleaned with a piece of rag before opening the valve, to ensure freedom from rust. Adequate arrangements are to be made for earthing the cylinders.

Balloons.

6. Bad stowage may ruin balloons in the course of a few weeks. They should not be exposed to air, light or extremes of temperature, and cartons should be left unopened until balloons are required for use.

Electro-static charges.

7. Under certain conditions, particularly in a dry atmosphere, a considerable electro-static charge can build up on and around a meteorological balloon during filling and handling. The circumstances and materials used can create types of condensers and a discharge with a spark can cause an explosion.

8. Investigations have shown that some reasons for static charge being induced on a filled balloon are—

(*a*) The passage of a jet of hydrogen into a balloon or through a valve. This is analogous to the build-up of a charge on a motor car in motion in a dry atmosphere.

(*b*) Handling with dry hands.

(*c*) Light brushing contact with silk, cotton or artificial fibre clothing materials.

Balloon filling procedure.

(*a*) " No Smoking—Hydrogen Balloon Filling " notices are to be displayed on all approaches to the filling site.

(*b*) Personnel involved should wear overalls or No. 8's, anti-flash hood and gloves, shoes and socks and goggles. Rubber boots should not be worn.

(*c*) The balloon should be unpacked carefully, examined for pinholes or possible weakness, the french chalk shaken out and the balloon rubbed between the hands to assist even stretching.

(*d*) Preferably the deck in the vicinity should be damp.

(*e*) The balloon should be washed in water before commencing to fill, so that the outside surface is damp and conductive. The cover and balloon should not be thoroughly wet if the balloon is to be balanced for determining upper winds.

(*f*) The filler and the tab of the nylon mesh cover must be earthed by connecting them to a clean metal surface by means of lengths of earthing braid.

(*g*) Balloons should not be filled at a rapid rate. A 100 gram balloon requires a steady inflation time of not less than six minutes.

(*h*) If a balloon develops a pin hole leak, filling should cease and the balloon should be released in the open.

(DNWS 177/51/19.)

UNCLASSIFIED.

867.—Naval Stores (General)—Binoculars, Telescopes and Microscopes—Transfer from Class F, Group IC.

(*A.F.O.* 2187/1960.)

Binoculars, telescopes and microscopes which have hitherto been dealt with under class F, group 1C, will in future be dealt with under class F, group 3 (N.A.T.O. Group 6650). The patterns concerned are listed in the Appendix.

2. Resistances pattern F1C/25509 for microscopes pattern F3/25507 will be dealt with under class F, group 16 (N.A.T.O. Group 5905). Desiccators pattern F1C/12128 and desiccator unions pattern F1C/12119 will be dealt with under class B, group 8B. The pattern numbers will remain unchanged.

3. H.M.A. ships and commissioned establishments are to adjust their ledgers in accordance with Article 1812 (*a*) of A.B.R. 4—Naval Storekeeping Manual.

4. Admiralty has advised that the relevant publications will be amended.

APPENDIX.

BINOCULARS, ETC., TO BE DEALT WITH UNDER CLASS F, GROUP 3.

(*N.A.T.O. Supply Classification Group* 6650.)

Pattern No.	*Description.*
1900A	Binoculars, Barr & Stroud, type C.F.41 fitted with internal light filters, complete with leather case.
1900C	Binoculars, type C.F.30, for submarine use, similar to pattern 1900A, and fitted with rubber projecting jacket, complete with leather case.
1900D	Binoculars, type C.F.30, for submarine use, similar to pattern 1900C, but fitted with a vertical hairline graticule in right eyepiece, complete with leather case.
1949	Binoculars, 7 × 42, Barr & Stroud, type C.F. 25, for use by seamen landing parties.
12464	Binoculars, 5 × 40, fixed focus, for air observers, Air Ministry Ref. 6E/383.
333A	Telescopes, long distance, modified type, with 50° apparent field.
373A	Telescopes, small, later type (with modified focusing device).
373B	Telescopes, small, new light type (with modified focusing device).
373C	Telescopes, small (Canadian version of pattern 373B).
12100	Telescopes, long distance, large.
1132	Telescopes, for signalling projectors.
25507	Microscope, research monocular objective and dark brown illumination, for medical purposes, complete with accessories, and stowage box.

(DNAS 518/56/27.)

UNCLASSIFIED.

868.—Naval Stores (General) (Class E, Group 8)—Grease XG–274—Introduction for Ball and Roller Bearings.

(*A.F.O.* 145/1960.)

Advice has been received from Admiralty that grease XG-274 has been introduced into service and that it is being added to class E, group 8 of B.R. 810, the Rate Book and Authorized List of Naval Stores, as pattern 943-9814.

2. Grease XG–274 is to replace existing grades in various ball and roller bearing application as follows—

(*a*) Energrease R.B.B. (formerly Belmoline R.B.) pattern E8/N12892—in all its existing applications which include all electrical machinery.

(*b*) Grease XG–271 pattern E8/943-1550 and grease LG–280 pattern E8/910-0502—in electrical machinery only.

Note.—XG–274 is not at present approved for any other applications.

3. The only grease so far fulfilling the requirements for grease XG–274 is Regal Starfak Special. It is understood the specification for XG–274 will be more comprehensive, in some respects, than that for XG–271 for which Regal Starfak Special also meets the requirements—Navy Order 758 of 1959 refers. XG–274 is suitable for running temperatures between −40°F. and +220°F. (−40°C. and +105°C.).

4. It is intended that a new specification will eventually be prepared for XG–274 to which all ball and roller bearing grease of this quality and performance level will be purchased so that its supply is not restricted to one manufacturer.

5. Energrease R.B.B., and XG–271 (but not existing R.A.N. stocks of XG–271 manufactured by Shell) are fully compatible with the new grease XG–274 (i.e., Regal Starfak Special). They should, however, be removed before application of the new grease, so far as this is possible without dismantling machinery or removing bearings. Wherever possible, it is advisable to clean out long grease passages or pipes leading to bearing housings and to fill them with the new grease. Complete removal of the old grease, cleaning of bearings and refilling of housings with the new grease should be undertaken as and when bearing removal becomes necessary.

6. LG–280 may not always be compatible with the new grease, XG–274, in this instance the change will involve complete removal of existing grease and washing of bearings before the new grease is applied. This should be done as soon as possible but, where major dismantling is involved, the change may be deferred until the dismantling is necessary for other reasons.

7. For a period of two years from the date of this order, reports should be forwarded on forms A.S. 2022 of any instances of bearing trouble or failure in which XG–274 is considered to be a contributory cause, whether alone or in mixture with the greases previously used. The following data should be included in each instance—

(*a*) Details of the machine.

(*b*) Particulars of bearing(s)—
- Maker.
- Type, size and speed.
- Total running time.
- Type of duty.
- Average ambient temperature.

(*c*) Particulars of any other grease remaining in the bearing.

(*d*) Reasons for which the grease is suspect.

8. If practicable, defective bearings complete with the grease in use should be forwarded to GMGID, together with a copy of the form A.S. 2022.

9. Drawings, Handbooks, Maintenance Schedules, &c., and any machine tally plates are to be amended as necessary.

10. Existing stocks of Energrease R.B.B., patt. E8/N.12892, are to be returned to the nearest Naval Store Depot for disposal as soon as supplies of XG–274 are received.

11. No further purchases of Energrease R.B.B. will be made. Admiralty have advised that it will be deleted from B.R. 810, the Rate Book and authorized List of Naval Stores. (S)NSO's should dispose of all stocks of Energrease in accordance with existing instructions. XG–271 and LG–280 will continue to be available for other applications.

(DNAS 512/87/32.)

(*Navy Order* 758 *of* 1959.)

RESTRICTED.

869.—Naval Stores (General) (Class F)—Audio Frequency Equipment A.F. 100 Series—Allowances of Spares.

(*A.F.O.* 1814/1960.)

The spares allowed for A.F. 100 Series audio frequency equipment used in the systems detailed in Appendix A, have been revised and are now as shown in Appendix C.

2. The allowances and "first outfit" quantities depend upon the major units (which are listed in Appendix B) fitted in individual ships. In order that firm allowances may be determined more easily, a column has been provided in Appendix B for ship's use in indicating whether or not the items are fitted on board.

3. Ships fitted with earlier types of equipments, not included in Appendix B should continue to hold spares on the basis of existing allowances.

4. Certain items are subject to reduction factors (A.B.R. 4, Chapter 3, Article 0314) which are applied to the total allowances for all purposes.

5. Stocks of permanent spares held on board ships in commission and operational reserve should be adjusted as necessary to agree with the revised allowances (after application of reduction factors where applicable), surpluses being returned to, and shortages demanded from the (Superintending) Naval Store Officer. Initially, similar action should be taken in respect of consumable spares, but stock should be adjusted subsequently in the light of actual expenditure. Ships in commission and in operational reserve should demand any additional requirements from storing yards. Forms A.S. 134 should quote this order.

6. Holdings of spares should also be adjusted when this is made necessary as a result of a change in the patterns of major units fitted.

7. Supply to ships under construction, modernization, conversion or re-storing after extended refit should be arranged by warrant yards on the new basis, details of the major units fitted being obtained from the shipbuilding or refitting authorities concerned.

8. To facilitate identification of the plugs and sockets detailed in B.R. 575 (1–6) (A.F. Equipment—Broadcast Systems) and B.R. 472 (1–5 and 11–17) (A.F. Equipment—Sound Reproduction Systems) these are listed in Appendix D with appropriate pattern numbers.

9. Navy Orders 914 of 1959 and 17 of 1960 are hereby cancelled.

Appendix A.

AUDIO FREQUENCY SYSTEMS.

Broadcast	*Intercom*
Main.	T.A.S.
Armament.	Action Information.
Machinery.	Command.
Flight Deck and Hangar.	Signal.
Damage Control.	Conning.
Loud Hailer.	Machinery.
S.R.E., Major, Intermediate and Minor.	Gangway.
	Miscellaneous.

Appendix B.

MAJOR UNITS.

Pattern No.	*Class and Group.*	*Description.*	*Whether Fitted.*
12596	F.1.C3	Control Box	
12597 (ref. a) ..	F.1.C3	Panel	
12597 (ref. b) ..	F.1.C3	Panel	
12597 (ref. c) ..	F.1.C3	Panel	
12597 (ref. d) ..	F.1.C3	Panel	
12597 (ref. e) ..	F.1.C3	Panel	
12597 (Spl.) ..	F.1.C3	Panel	
12598	F.1.C3	Loudspeaker	
12599	F.1.C3	Microphone	
12608A	F.1.C3	Loudspeaker	
12634	F.1.C3	Loudspeaker	
12643	F.1.C3	Framework, 1 Bay	
12644	F.1.C3	Framework, 2 Bay	
12645	F.1.C3	Framework, 3 Bay	
12646	F.1.C3	Mounting	
12654	F.1.C3	Headset	
12679	F.1.C3	Box	
12681	F.1.C3	Microphone	
12939	F.1.C3	Headset	
12940	F.1.C3	Headset	
12941	F.1.C3	Handset	
12947	F.1.C3	Panel	
12948	F.1.C3	Panel	
12949	F.1.C3	Amplifier	
12950	F.1.C3	Amplifier	
32000	F.1.C3	Panel	

Appendix B—*continued.*

Pattern No.	*Class and Group.*	*Description.*	*Whether Fitted.*
32001	F.1.C3	Panel	
32002	F.1.C3	Panel	
32005	F.1.C3	Console	
32018	F.1.C3	Microgram	
32019	F.1.C3	Mounting	
32020	F.1.C3	Amplifier	
32021	F.1.C3	Amplifier	
32022	F.1.C3	Mounting	
32031	F.1.C3	Loudspeaker	
32034	F.1.C3	Console	
32035	F.1.C3	Broadcast Unit	
32036	F.1.C3	Playing Unit	
32041	F.1.C3	Loudspeaker	
32042	F.1.C3	Loudspeaker	
32047	F.1.C3	Amplifier	
32048	F.1.C3	Mounting	
32049	F.1.C3	Mounting	
32050	F.1.C3	Mounting	
32073	F.1.C3	Box	
32089	F.1.C3	Microphone	
32090	F.1.C3	Microphone	
32096	F.1.C3	Microphone	
32104	F.1.C3	Microphone	
32112	F.1.C3	Microgram	
32113	F.1.C3	Playing Unit	
32123	F.1.C3	Control Box	
32135	F.1.C3	Loudspeaker	
32194	F.1.C3	Loudspeaker (Magazine)	
	F.1.C3	P.A. Loudspeaker	
7910A	F.20	Loudspeaker	
12647/A ..	F.20	Amplifier Panel	
12648 (ref. a) ..	F.20	Control Box	
12648 (ref. b) ..	F.20	Control Box	
12648 (ref. c/p)	F.20	Control Box	
12648 (ref. d) ..	F.20	Control Box	
12648 (ref. c/f) ..	F.20	Control Box	
12648 (ref. g/h) ..	F.20	Control Box	
12648 (ref. k) ..	F.20	Control Box	
12648 (ref. j) ..	F.20	Control Box	
12649/A	F.20	Amplifier Panel	
12650 (ref. a) ..	F.20	Control Box	
12650 (ref. b) ..	F.20	Control Box	
12650 (ref. c) ..	F.20	Control Box	
12650 (ref. d) ..	F.20	Control Box	
12650 (ref. e) ..	F.20	Control Box	
12650 (ref. f) ..	F.20	Control Box	
12651	F.20	Panel	

APPENDIX B—*continued.*

Pattern No.	*Class and Group.*	*Description.*	*Whether Fitted.*
12652	F.20	Panel	
12653 (ref. a) ..	F.20	Panel	
12653 (ref. b) ..	F.20	Panel	
12653 (ref. c) ..	F.20	Panel	
12653 (ref. d) ..	F.20	Panel	
12653 (ref. e) ..	F.20	Panel	
12653 (ref. f) ..	F.20	Panel	
12653 (ref. g) ..	F.20	Panel	
12653 (ref. h) ..	F.20	Panel .. } Formerly F.1.C3 ..	
12653 (ref. j) ..	F.20	Panel .. } Formerly F.1.C3 ..	
32025	F.20	Loudspeaker } Formerly F.1.C3 ..	
102369	F.20	Microphone	
198302	F.20	Loudspeaker (Asdic)	
198320	F.20	Microphone (Noise Cancelling) ..	

APPENDIX C.

ALLOWANCES AND FIRST OUTFIT OF SPARES.

Column 4 .. .. Aircraft Carriers.
Column 5 .. .. Destroyers, Frigates.
Column 6 .. .. Other ships.

Note 1.—The item is allowed only if the ship is fitted with the equipment, &c., listed under Column 3. The symbol (M) in that column indicates that the item is itself a Major Unit.

Note 2.—Class/Groups, Classification, &c., under which items were formerly shown are detailed in brackets in column 2 for information.

Pattern No.	*Description.*	*Equipment or Major Item for which intended.*	*Allowance or "First Outfit" (see note).*		
1	2	3	4	5	6
	Permanent Stores F.1.C3.				
12562	Box	S.R.E., Loud Hailers, Armament Broadcast	1	1	1
12563	Plug	S.R.E., Loud Hailers, Armament Broadcast	1	1	1
12598	Loudspeaker ..	(M) Main Broadcast, Loud Hailers	3	1	1
12599	Microphone ..	(M) Main Broadcast, Loud Hailer, Intercom., &c.	5	4	1

APPENDIX "C"—*continued.*

Pattern No.	*Description.*	*Equipment or Major Item for which intended.*	*Allowance or "First Outfit" (see note).*		
1	2	3	4	5	6
	Permanent Stores —continued. *F.1.C3.*—contd.				
12608A	Loudspeaker ..	(M) Main Broadcast, S.R.E. Intercom., &c.	3	4	1
12634	Loudspeaker ..	(M) Main Broadcast	2	1	—
12649/A	Amplifier Panels	(M) Main Broadcast	1	1	1
12651	Alarm Panel ..	(M) Main Broadcast	1	1	1
12652	Control Panel ..	(M) Main Broadcast	1	1	—
12654	Headset ..	(M) Main and Armament Broadcast	1	1	—
12679	Box	(M) Main and Armament Broadcast, Intercom.	1	2	—
12681	Microphone ..	(M) Main Broadcast, Intercom, &c.	1	1	—
12682	Box	Armament Broadcast	—	1	—
12684	Horn	P.A. Loudspeaker	1	—	—
12926	Box	Pattern 7910A, Loudspeaker ..	2	1	1
12928	Plug	Pattern 7910A, Loudspeaker ..	2	1	—
12936	Microphone ..	S.R.E.	1	1	1
12939	Headset ..	(M) Armament Broadcast ..	—	1	—
12940	Headset ..	(M) Armament Broadcast ..	—	1	—
12941	Handset ..	(M) Intercom, Armament Broadcast	1	1	—
32011	Fader	Pattern 12948, Panel	1	1	—
32020	Amplifier ..	(M) Loud Hailers, S.R.E., Intercom, Armament Broadcast, &c.	1	1	—
32021	Amplifier ..	(M) Loud Hailers	1	1	—
32031	Loudspeaker ..	(M) Main and Armament Broadcast, Intercom, &c.	5	4	1
32041	Loudspeaker ..	(M) S.R.E.	5	—	—
32042	Loudspeaker ..	(M) S.R.E.	—	2	1
32047	Amplifier ..	(M) Intercom, Armament Broadcast, &c.	3	1	—
32066	Contactor ..	Pattern 32021, Amplifier ..	1	1	1
32069	Noise Injector ..	Armament Broadcast	—	1	—
32081	Loudspeaker Unit	Pattern 32042, Loudspeaker ..	—	2	2
32082	Transformer ..	Patterns 32041/2, Loudspeaker ..	3	1	1
32089	Microphone ..	(M) Main Broadcast, Intercom, &c.	1	1	—
32194	Loudspeaker (Magazine)	(M) Main and Armament Broadcast	1	1	1
197865	Fader	Pattern 32035, Broadcast Unit ..	1	—	—
	F.19.				
12655	Meter (F.1.C3) ..	Patterns 12648 (refs. a, b, c/p, d, c/f, g/h/k, j) Patterns 12650 (refs. a–d) Control Boxes Pattern 32073, Box	3	1	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Permanent Stores —continued. *F.19.*—contd.				
12676	Meter (F.1.C3) ..	Patterns 12597 (refs. a–c and spl.), 12651/2 and 12650 (refs. a–j), Panels Patterns 12647/A, 12649/A, Amplifiers and Patterns 32028 and 32112, Micrograms	2	1	1
32010	Meter (F.1.C3) ..	Patterns 12947 and 12948, Panel ..	1	1	—
	F.20.				
7910A	Loudspeaker ..	(M) Main Broadcast, S.R.E. ..	1	1	1
12647/A	Amplifier Panels (F.1.C3)	(M) Main Broadcast, S.R.E., Intercom	2	1	1
198302	Loudspeaker ..	(M) Asdic Installations	2	1	1
198320	Microphone (Noise Cancelling)	(M) Machinery Intercom, &c. ..	2	1	1
972–6181	Microphone (F.1.C3)	(M) Main Broadcast, Intercom, &c.	1	1	—
	Consumable Stores. F.1A.1.				
W.2996A	Switch ..	Pattern 32021, Amplifier ..	1	1	—
W.3669A	Switch ..	Pattern 32036, Playing Unit ..	1	1	—
W.5388A	Switch ..	Patterns 12949/50, Amplifiers ..	1	1	—
W.5964	Switch ..	Pattern 32000, Panel	2	1	—
W.6213	Plug	Patterns 32018 and 32112, Micrograms	1	1	1
W.6216	Socket	Pattern 32019, Mounting ..	1	1	1
W.6727	Plug	Patterns 12597 and 12653, Panels	1	1	1
52579A	Key	Pattern 32035, Broadcast Unit ..	1	1	—
55570A	Socket	Patterns 32048/49/50, Mountings ..	1	1	—
55571A	Plug	Pattern 32047 Amplifier	1	1	—
57473	Socket ..	Patterns 12597 and 12653, Panels	1	1	1
57439A	Plug	Patterns 12949/50, Amplifiers and Patterns 32001/2, Panels	1	1	—
57629	Plug	Patterns 12647/A, 12649/A, Amplifiers and Patterns 12651/2, Panels ..	7	2	1
59892	Transformer (Permanent)	Patterns 12649/A, Amplifiers, Patterns 12651/2, Panels and Pattern 12948, Panel	1	1	—
60066	Socket	Patterns 12643/4/5 Frameworks and Pattern 12646, Mounting	2	2	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.1.A.1*—contd.				
62084	Plug (F31/207601 Permanent)	Pattern 32047, Amplifier ..	1	1	—
62085	Socket	Pattern 32047, Amplifier ..	1	1	—
63441	Switch	Patterns 12947/8, Panels ..	1	1	—
64986	Test Jack ..	Patterns 12647/A, 12649/A, Amplifiers, Patterns 12651/2, Panels and Pattern 32031, Loudspeaker	13	2	1
65362	Lamp Cap ..	Pattern 32002, Panel	1	1	—
65553	Socket	Patterns 12643/4/5, Frameworks and Pattern 12646 Mounting	2	2	—
67705	Plug (F31/207606 Permanent)	Pattern 32019, Mounting ..	1	1	1
67706	Socket	Patterns 32018, 32112, Micrograms	1	1	1
68455	Plug	Patterns 12647/A, 12649/A, Amplifiers and Patterns 12651/2, Panels	2	2	—
	F.1.B.				
10552	Bullseye (Permanent)	Pattern 32073, Box	1	1	—
	F.1.C.3.				
12518	Buzzer (Permanent)	Pattern 12648 (refs. a, b, c/p, d, c/f, g/h, k, j) Pattern 12650 (refs. a–d) Control Boxes and Pattern 32073, Box	2	1	—
12604	Loudspeaker Unit	P.A. Loudspeaker	1	—	—
12621	Loudspeaker Unit	Pattern 12608A, Loudspeaker ..	30	10	10
12639	Transformer ..	Pattern 12634, Loudspeaker and P.A. Loudspeaker	1	1	—
12659	Transformer ..	Patterns 12647/A, Amplifiers and Pattern 12652, Panel	1	1	1
12660	Transformer ..	Patterns 12647/A, 12649/A, Amplifiers and Pattern 12652, Panel	1	1	1
12661	Transformer ..	Patterns 12647/A, Amplifiers ..	1	1	1
12662	Choke	Patterns 12647/A, 12649/A, Amplifiers	1	1	1
12663	Choke	Patterns 12647/A, Amplifiers ..	1	1	1
12664	Transformer ..	Patterns 12647/A, Amplifiers and Patterns 12651/2, Panels	1	1	1
12665	Transformer ..	Patterns 12647/A, Amplifiers and Patterns 12651/2, Panels	3	1	1
12666	Choke	Patterns 12649/A, Amplifiers ..	1	1	1
12667	Transformer ..	Patterns 12649/A, Amplifiers ..	1	1	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.1.C.3*—contd.				
12668	Transformer ..	Pattern 12649, Amplifier ..	1	1	1
12669	Transformer ..	Pattern 12649, Amplifier ..	1	1	1
12670	Transformer ..	Pattern 12649, Amplifier ..	1	1	1
12671	Choke	Patterns 12651/2, Panels ..	1	1	—
12672	Transformer ..	Patterns 12597 (Refs. a–e, spl.) and 12653 (refs. a–j) Panels	1	1	—
12674	Switch (Permanent)	Patterns 12647/9, Amplifiers and Patterns 12651/2, Panels	4	1	1
12675	Switch (Permanent)	Patterns 12597 (refs. c and e), 12651, 12653 (refs. a, c, e and g) Panels, and Patterns 12648 (refs. a, b, c/p, and j) and 32123, Control Boxes	6	1	—
12678	Key (Permanent)	Patterns 12648 (refs. a, b, c/p, d, c/f, g/h, j) 12650 (refs. a–d) and 32073, Control Boxes	20	2	—
12680	Transformer ..	Pattern 12679, Box	1	3	—
32006	Choke	Patterns 12949/50, Amplifiers ..	1	1	—
32007	Transformer ..	Patterns 12949, 32020, 32021, 32047, Amplifiers and Patterns 32112, 32018, Micrograms	1	1	1
32008	Transformer ..	Patterns 12949/50, Amplifiers and Pattern 32000, Panel	1	1	—
32009	Transformer ..	Patterns 12949/50, Amplifiers ..	1	1	—
32016	Stylus	Patterns 32018, 32112, Micrograms and Patterns 32036, 32113, Playing Units	1	1	—
32051	Transformer (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
32052	Transformer (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
32053	Transformer (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
32054	Transformer (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
32055	Transformer (Permanent)	Patterns 32020/1, Amplifiers ..	2	2	—
32056	Transformer (Permanent)	Patterns 32020/1, Amplifiers ..	2	2	—
32057	Choke (Permanent)	Pattern 32002, Panel and Pattern 32112, Microgram	1	1	1
32060	Pick-up head (Permanent)	Patterns 32018, 32112 Micrograms and Patterns 32036, 32113, Playing Units	1	1	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.1.C.3*—contd.				
32061	Pick-up head (Permanent)	Patterns 32018, 32112, Micrograms and Patterns 32036, 32113, Playing Units	1	1	1
32062	Stylus	Patterns 32018, 32112, Micrograms and Patterns 32036, 32113, Playing Units	1	1	1
32065	Transformer ..	Pattern 32021, Amplifier ..	1	1	—
32067	Choke ..	Patterns, 32018, 32112, Micrograms and Pattern 32020, Amplifier	1	1	1
32080	Loudspeaker Unit	Pattern 32041, Loudspeaker ..	7	—	—
32083	Diaphragm ..	Patterns 32031, 32135, Loudspeakers	27	5	1
32084	Transformer ..	Patterns 32031, 32135, Loudspeakers	13	3	1
32085	Switch (Permanent)	Pattern 12599, Microphone ..	12	8	4
32097	Switch (Permanent)	Patterns 32090, 32096, Microphones	6	1	—
32115	Choke ..	Pattern 32000, Panel and Pattern 32073, Box	1	1	—
32116	Transformer ..	Pattern 32000, Panel and Pattern 32047, Amplifier	1	1	—
32117	Transformer ..	Pattern 32047, Amplifier ..	1	1	—
32120	Inset	Patterns 12939/40, 12654, Headsets and Pattern 12941, Handset	1	3	—
32121	Switch (Permanent)	Pattern 32041, Loudspeaker ..	9	—	—
32122	Switch (Permanent)	Patterns 32041/2, Loudspeakers ..	9	3	2
32139	Pressure Unit (Permanent)	Pattern 12598, Loudspeaker and Pattern 12634, Column Loudspeaker	3	1	—
32143	Diaphragm ..	Pattern 12634, Loudspeaker ..	1	1	—
	F.2.B.3.				
8803	Lampholder ..	Patterns 32073, 32123, Control Boxes	—	—	—
	F.2.B.4.				
19349	Fuze wire ..	Pattern 12653 (ref. b–j), Panels ..	3 lb.	—	—
	F.4.				
000–0187	Valve	Pattern 12649, Amplifier ..	4	1	1
000–4024	Valve (supersedes 000–0455)	Patterns 32018, 32112, Micrograms, and Patterns 32020/1, Amplifiers	3	2	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.4*—continued.				
000–4003	Valve (supersedes 000–0491)	Pattern 32000, Panel and Patterns 12940/50, Amplifiers	1	1	—
000–4004	Valve (supersedes 000–0492)	Patterns 12949/50, 32047, Amplifiers	3	1	—
000–0593	Valve	Pattern 32020, Amplifier and Patterns 32018, 32112, Micrograms	3	2	1
000–1053	Valve	Pattern 12652, Panel	1	—	1
000–1056	Valve	Patterns 12647/A, Amplifiers, 12652 Panel	10	3	1
000–1067	Valve	Patterns 12647/A, Amplifiers and Patterns 12651/2, Panels	17	6	1
000–1071	Valve	Patterns 12651/2, Panels and Patterns 12647/A, Amplifiers	11	4	1
000–1075	Valve	Patterns 12647/A, 12649/A, Amplifiers	26	10	2
000–1076	Valve	Patterns 12649/A, Amplifiers ..	4	1	1
000–4043	Valve (supersedes 000–2136)	Patterns 32000, Panel and Pattern 32047, Amplifier	3	1	—
000–2310	Crystal Diode ..	Patterns 12647/A, 12649/A, Amplifiers	2	1	—
000–2901	Valve	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	5	4	1
011–3576	Valve retainer ..	Patterns 12647/A, 12649/A, Amplifiers and Patterns 12651/2, Panels	2	1	—
011–3584	Valve retainer ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	4	3	1
011–3588	Valve retainer ..	Patterns 12647/A, Amplifiers and Patterns 12651/2, Panels	4	1	1
011–3589	Valve retainer ..	Patterns 12647/A, 12649/A, 32020/1, Amplifiers and Patterns 12651/2, Panels	6	4	2
056–3007	Valve screen ..	Patterns 12949/50, 32020/1, 32047, Amplifiers, Pattern 32000, Panel and Patterns 32018, 32112, Micrograms	6	4	2
056–3009	Valve screen ..	Patterns 32020/1, Amplifiers and Patterns 32018, 32112, Micrograms	4	2	1
097–0291	Valve retainer ..	Pattern 32047, Amplifier and Pattern 32000, Panel	4	2	1
972–9750	Valve retainer (Permanent)	Patterns 12647/A, Amplifiers and Patterns 12651 and 12652 Panels	4	2	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.12.*				
972–9758	Choke, 2.6 MH	Pattern 7910A, Loudspeaker ..	1	—	—
972–9759	Choke, 1.5 MH	Pattern 7910A, Loudspeaker ..	1	—	—
972–9760	Transformer ..	Pattern 32000, Panel	1	—	—
972–9761	Transformer ..	Pattern 12949A, Amplifier ..	1	—	—
972–9762	Transformer ..	Pattern 12949A, Amplifier ..	1	—	—
972–9763	Transformer ..	Pattern 12949A, Amplifier ..	1	—	—
972–9796	Transformer ..	Pattern 12608A, Loudspeaker ..	10	3	1
972–9797	Transformer ..	Pattern 7910A, Loudspeaker ..	1	—	—
	F.15.				
19452	Capacitor ..	Pattern 32021, Amplifier ..	1	1	—
63674	Capacitor ..	Patterns 12647/A, 12649/A, Amplifiers, Pattern 12651, Panel, and Patterns 32123, Control Box	5	1	1
011–1459	Capacitor ..	Patterns 12647/A, 12649/A, Amplifiers	1	1	1
011–2825	Capacitor ..	Patterns 12649/50, Amplifiers ..	1	1	1
011–2880	Capacitor ..	Pattern 7910A, Loudspeaker, Pattern 12948, Panel and Pattern 12950, Amplifier	1	1	—
011–2884	Capacitor ..	Pattern 7910A, Loudspeaker and Patterns 12649/A, Amplifiers	1	1	—
011–2905	Capacitor ..	Patterns 12651/2, Panels ..	1	1	—
011–2915	Capacitor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
011–2916	Capacitor ..	Patterns 12651/2, 32000, Panels and Patterns 12649/A, 32047, Amplifiers	1	1	—
011–2925	Capacitor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	2	1	1
011–2927	Capacitor ..	Patterns 12647/A, 12649/A, Amplifiers and Patterns 12651/2, Panels	6	2	1
011–2929	Capacitor ..	Patterns 12649/A, Amplifiers ..	1	1	1
011–2934	Capacitor ..	Pattern 32000, Panel and Patterns 32020/1, Amplifiers	1	1	—
011–2940	Capacitor ..	Patterns 32018, 32112, Micrograms and Pattern 32047, Amplifier	1	1	1
011–5516	Capacitor ..	Pattern 12950, Amplifier ..	1	1	—
011–5525	Capacitor ..	Patterns 32020/1, Amplifiers ..	1	1	1
011–5554	Capacitor ..	Pattern 32000, Panel	1	—	—
011–7820	Capacitor ..	Patterns 12949/50, 32020/1, 32047, Amplifiers and Patterns 32018, 32112, Micrograms	3	1	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.15*—continued.				
011–7822	Capacitor ..	Patterns 12949/50, 32020/1, Amplifiers and Patterns 32018, 32112, Micrograms	2	1	1
011–7824	Capacitor ..	Patterns 12647/A, Amplifiers and Patterns 12651/2, Panels	1	1	1
011–7827	Capacitor ..	Pattern 12950, Amplifier ..	1	1	—
011–7828	Capacitor ..	Patterns 12647/A, 12649/A, 32047, Amplifiers	3	1	1
011–7829	Capacitor ..	Patterns 12647/A, 12649/A, Amplifiers	3	1	1
012–3292	Capacitor ..	Pattern 12950, Amplifier ..	1	1	—
012–3412	Capacitor ..	Patterns 32018, 32112, Micrograms	1	1	1
012–3912	Capacitor ..	Pattern 12651, Panel	1	1	—
012–3932	Capacitor ..	Pattern 12651, Panel	1	1	—
012–3944	Capacitor ..	Pattern 12651, Panel	1	1	—
012–4005	Capacitor ..	Pattern 12651, Panel	1	1	—
012–4251	Capacitor ..	Pattern 12651, Panel	1	1	—
012–4288	Capacitor ..	Pattern 12651, Panel	1	1	—
012–4301	Capacitor ..	Patterns 32020/1, Amplifiers ..	1	1	—
012–4372	Capacitor ..	Pattern 12651, Panel	1	1	—
012–4379	Capacitor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
012–4700	Capacitor ..	Pattern 12651, Panel	1	1	—
911–4641	Capacitor ..	Patterns 32018, 32112, Micrograms	1	1	1
911–4987	Capacitor ..	Patterns 32018, 32112, Micrograms	1	1	1
911–5664	Capacitor ..	Patterns 32018, 32112, Micrograms	1	1	1
	F.16.				
12677	Resistor ..	Patterns 12647/A, 12649/A, Amplifiers	2	1	1
50568A	Potentiometer ..	Patterns 12950, 32020/1, Amplifiers	2	1	—
61759	Resistor ..	Pattern 32047, Amplifier ..	1	1	—
63217	Resistor ..	Patterns 32020/1, Amplifiers ..	1	2	—
011–9488	Resistor ..	Pattern 32073, Box	1	—	—
011–1428	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
011–3106	Resistor ..	Pattern 12653 (refs. d, f, h) Relay Panel	1	—	—
011–3113	Resistor ..	Pattern 12653 (refs. a, c, d–h) Relay Panel	1	—	—
011–3134	Resistor ..	Pattern 12653 (ref. h) Relay Panel	—	—	—
011–3154	Resistor ..	Pattern 12647/A, Amplifiers ..	1	1	1
011–3207	Resistor ..	Pattern 7910A, Loudspeaker ..	1	—	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.16*—continued.				
011–3283	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
011–3300	Resistor ..	Pattern 12653 (ref. h) Relay Panel	—	—	—
011–3379	Resistor ..	Pattern 12653 (ref. b), 12597 (ref. a) Panel	1	—	—
011–3382	Resistor ..	Patterns 12647/A, Amplifiers ..	2	1	1
011–3383	Resistor ..	Pattern 12653 (ref. b, d) Relay Panel	1	—	—
011–3421	Resistor ..	Patterns 12649/A, Amplifiers and Pattern 12651, Alarm Panel	1	1	—
011–3432	Resistor ..	Pattern 12950, Amplifier ..	1	1	—
011–3443	Resistor ..	Pattern 7910A, Loudspeaker ..	1	—	—
011–3446	Resistor ..	Patterns 32020/1, Amplifiers ..	1	1	—
011–3456	Resistor ..	Patterns 32020/1, Amplifiers ..	1	1	—
011–3463	Resistor ..	Patterns 12647/A, 12649/A, Amplifiers	4	1	1
011–3511	Resistor ..	Patterns 12647/A, Amplifiers and Pattern 12652, Control Panel	1	1	1
011–3518	Resistor ..	Pattern 12652, Control Panel ..	1	1	—
011–4684	Resistor ..	Patterns 12649/A, Amplifiers ..	1	1	1
021–3009	Resistor ..	Pattern 12652, Panel	1	1	—
021–5641	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
021–5642	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
021–6213	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
021–9135	Resistor ..	Pattern 32000, Panel	1	—	—
022–1003	Resistor ..	Patterns 12597 (refs. a, b, spl.) 12651/2, 12653 (refs. a, b, e, g) Panels and 12647/A, Amplifiers	4	1	1
022–1024	Resistor† ..	Pattern 12651, Panel	1	1	—
022–1064	Resistor† ..	Pattern 32000, Panel and Pattern 32047, Amplifier	1	1	—
022–1066	Resistor† ..	Patterns 12647/A, 12649/A, Amplifiers	1	1	1
022–1106	Resistor† ..	Pattern 32000, Panel	1	—	—
022–1108	Resistor† ..	Patterns, 12647/A, 12649/A, Amplifiers	4	1	1
022–1145	Resistor ..	Pattern 12948, Panel	1	1	—
022–1211	Resistor† ..	Pattern 12949, Amplifier and Pattern 32000, Panel	1	1	—
022–1243	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	—
022–2001	Resistor† ..	Patterns 12949/50, Amplifiers ..	1	1	—
022–2003	Resistor† ..	Patterns 12647/A, Amplifiers ..	1	1	1

† Preferred spares—B.R. 1923 (1)—Substitute Guide for Electronic Components, Resistors and Capacitors.

APPENDIX C—*continued.*

Pattern No.	*Description.*	*Equipment or Major Item for which intended.*	*Allowance or "First Outfit" (see note).*		
1	2	3	4	5	6
	Consumable Stores —continued. *F.16*—continued.				
022–2022	Resistor† ..	Pattern 32000, Panel and Pattern 12949, Amplifier	1	1	—
022–2024	Resistor† ..	Patterns 12647/A, Amplifiers ..	1	2	1
022–2043	Resistor† ..	Pattern 32000, Panel and Pattern 32047, Amplifier	1	1	—
022–2045	Resistor† ..	Patterns 12653 (refs. a, e, f, g, h) Panels	1	1	1
022–2055	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2064	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2066	Resistor† ..	Pattern 12597 (refs. c, e), Panels ..	1	1	—
022–2076	Resistor† ..	Pattern 32000, Panel	1	—	—
022–2085	Resistor† ..	Patterns 12950, 30247, Amplifiers and Patterns 32018, 32112, Micrograms	1	1	1
022–2097	Resistor ..	Patterns 12647/A, Amplifiers ..	1	1	1
022–2106	Resistor† ..	Patterns 32018, 32112, Micrograms and Pattern 32047, Amplifiers	1	1	1
022–2118	Resistor† ..	Pattern 32000, Panel	1	—	—
022–2127	Resistor† ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
022–2129	Resistor† ..	Patterns 12647/A, Amplifiers, Pattern 32073, Box, and Patterns 12949/50, Amplifiers	2	1	1
022–2148	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2160	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2169	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2171	Resistor† ..	Patterns 12649/A, Amplifiers ..	1	1	1
022–2190	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2192	Resistor† ..	Pattern 12652, Panel	1	1	—
022–2211	Resistor† ..	Patterns 12949/50, Amplifiers and Patterns 32018, 32112, Micrograms	1	1	1
022–2222	Resistor ..	Pattern 12652, Panel, Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	2	1	1
022–2229	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, 12649/A, Amplifiers	1	1	1
022–2233	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
022–2235	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1

† Preferred spares—B.R. 1923 (1)—Substitute Guide for Electronic Components, Resistors and Capacitors.

APPENDIX C—*continued.*

Pattern No.	*Description.*	*Equipment or Major Item for which intended.*	*Allowance or "First Outfit" (see note).*		
1	2	3	4	5	6
	Consumable Stores —continued. *F.16*—continued.				
022–2241	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 12647/A, 12649/A, Amplifiers	5	2	1
022–2243	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
022–2247	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
022–3013	Resistor† ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
022–3027	Resistor† ..	Patterns 12647/A, 12649/A, Amplifiers, Pattern 12651, Panel and Patterns 32112, Microgram	2	1	1
022–3034	Resistor† ..	Patterns 12949, 32047, Amplifiers, Pattern 32000, Panel and Patterns 32018, 32112, Micrograms	2	1	1
022–3036	Resistor† ..	Patterns 12597 (refs. a, b, c, e, spl.) 12653 (refs. a, b, c, e–j) Pattern 12651, Panel and Patterns 12647/A, Amplifiers	3	1	1
022–3055	Resistor† ..	Patterns 12949/50, Amplifiers and Patterns 32018, 32112, Micrograms	1	1	1
022–3057	Resistor† ..	Pattern 12651, Panel	1	1	—
022–3067	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–3076	Resistor† ..	Patterns 12950, 32020/1, 32047, Amplifiers, Patterns 32018, 32112, Micrograms and Pattern 32000, Panel	2	1	—
022–3078	Resistor† ..	Patterns 12647/A, Amplifiers and Patterns 32018, 32112, Micrograms	2	1	1
022–3118	Resistor† ..	Patterns 12649/A, 32047, Amplifiers, Pattern 32000, Panel and Patterns 32018, 32112, Micrograms	1	1	1
022–3120	Resistor† ..	Pattern 12651, Panel	1	1	—
022–3140	Resistor† ..	Patterns 32018, 32112, Micrograms	1	1	1
022–3141	Resistor† ..	Patterns 12747/A, Amplifiers and Pattern 12651, Alarm Panel	1	1	—
022–3160	Resistor† ..	Pattern 32047, Amplifier ..	1	1	—
022–3161	Resistor† ..	Patterns 12651/2, 12653 (refs. a, b, c, e, g) Panels	1	1	—

† Preferred spares—B.R. 1923 (1)—Substitute Guide for Electronic Components, Resistors and Capacitors.

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.16*—continued.				
022–3203	Resistor† ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
022–3245	Resistor† ..	Pattern 32047, Amplifier and Pattern 32000, Panel	1	1	—
022–3296	Resistor ..	Patterns 12647/A, 12649/A, 32020/1, Amplifiers, Patterns 12651/2, Panels and Patterns 32018, 32112, Micrograms	4	2	1
022–3306	Resistor ..	Pattern 12652, Panel	1	1	—
022–3311	Resistor ..	Pattern 32020/1, Amplifiers and Pattern 12651, Alarm Panel	1	1	—
022–3315	Resistor ..	Patterns 32018, 32112, Micrograms and Patterns 32020/1, Amplifiers	1	1	1
024–1146	Resistor ..	Pattern 7910A, Loudspeaker ..	1	—	—
024–1170	Resistor ..	Pattern 12653, Relay Panel ..	1	—	—
024–2105	Resistor ..	Patterns 12647/A, Amplifiers ..	1	1	1
024–2108	Resistor ..	Patterns 12649/A, Amplifiers ..	1	1	1
024–3462	Resistor ..	Pattern 12652, Panel	1	1	—
024–5209	Resistor ..	Patterns 32018, 32112, Micrograms	1	1	1
026–2178	Resistor ..	Patterns 12949/50, Amplifiers ..	1	1	—
027–1306	Resistor ..	Pattern 12679, Box	1	1	—
027–1313	Resistor ..	Pattern 7910A, Loudspeaker ..	6	2	1
027–1314	Resistor ..	Pattern 7910A, Loudspeaker ..	6	2	—
027–2142	Resistor ..	Pattern 12596, Control Box ..	3	1	—
918–9040	Resistor 1K ..	Pattern 12653 (ref. g) Panel ..	1	—	—
918–9041	Resistor 2K ..	Pattern 12653 (ref. g) Panel ..	1	—	—
	F.19.				
12673	Potentiometer (F.1.C3)	Patterns 12647/A, Amplifiers and Patterns 12651/2 Panels	3	1	1
	F.20.				
197863	Cone Unit ..	Pattern 7910A, Loudspeaker ..	1	—	—
197864	Horn (Permanent)	Pattern 7910A, Loudspeaker ..	1	—	—
197866	Pick-up Arm (Permanent)	Patterns 32036/32113, Record Players and Patterns 32018, 32112, Micrograms	1	1	1
197867	Pressure Unit ..	Pattern 7910A, Loudspeaker ..	1	1	—
197868	Pulley (Permanent)	Pattern 32112, Microgram and Pattern 32113, Playing Unit	1	1	1

† Preferred spares—B.R. 1923 (1)—Substitute Guide for Electronic Components, Resistors and Capacitors.

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.20*—continued.				
197869	Pulley (Permanent)	Pattern 32112, Microgram and Pattern 32113, Playing Unit	1	1	1
197874	Volume Control (Permanent)	Patterns 32108, 32112, Micrograms	1	1	1
198315	Element N.C. ..	Pattern 198320, Microphone ..	2	2	—
972–8325	Inset (F.1.C3/32037)	Patterns 12599, 12681, 32089, 32090, 32096, 32104, Microphones	20	12	5
	F.21.				
012–0201	Cap Valve ..	Patterns 12647/A, Amplifiers and Pattern 12652, Panel	2	1	—
059–0100	Fuze	Pattern 32002, Panel and Pattern 32112, Microgram	1	1	1
059–0108	Fuze	Pattern 32047, Amplifier ..	2	1	—
059–0109	Fuze	Pattern 12653 (refs, c, e, f, g, h, j) 32000, Panels and Patterns 12949/50, 32047, Amplifiers and Pattern 32112, Microgram	5	2	1
059–0110	Fuze	Patterns 12597 (refs. a, b, d) 32000 Panels, Patterns, 12949, 12950, 32020, 32047, Amplifiers and Pattern 32018, Microgram	7	3	1
059–0111	Fuze	Patterns 12651/2, 12653 (refs. e–j), Panels	2	1	—
059–0112	Fuze	Patterns 12647/A, 32020, Amplifiers	7	3	1
059–0113	Fuze	Patterns 12649/A, Amplifiers ..	3	1	1
940–1811	Fuze Unit ..	Pattern 32021, Amplifier ..	1	1	—
940–2215	Fuze	Pattern 32020, Amplifier ..	2	2	—
940–8053	Cap Valve (Permanent)	Patterns 12649/A, Amplifiers ..	1	1	1
972–9751	Cap Valve (Permanent)	Patterns 12649/A, Amplifiers ..	1	1	1
	F.22.				
053–0046	Relay	Patterns 12597 (refs. c, e) 12653 (refs. a, b, c, e, g), Panels	1	1	—
053–0058	Relay	Patterns 12597 (refs. a, b, c, e, spl.) 12653 (refs. a–j), Panels	3	1	—
053–0060	Relay	Patterns 12597 (ref. spl) 12653 (refs. d–j), Panels	2	—	—
053–0145	Relay	Patterns 12597 (ref. a) 12653 (refs. a, b, e, g), Panels	1	1	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued.				
	F.22—continued.				
053–0217	Relay	Pattern 32000, Panel	1	—	—
920–1041	Relay	Patterns 12651/2, Panels and Pattern 12647, Amplifier	1	1	—
920–1042	Relay (920–1047)	Patterns 12651/2, Panels and Patterns 12647A, 12649/A, Amplifiers	1	1	—
	F.25.				
68551	Lamp Jack (F.1A1)	Patterns 12947, 32002, 12948, Panels and Patterns 12949/50, Amplifiers	1	1	—
972–9448	Cap, Lampholder, red	Patterns 12947, 32002, Panels ..	1	1	—
972–9449	Cap, Lampholder, colourless	Patterns 12950, 32002, Panels ..	1	1	—
995–1230	Lamp	Pattern 32035, Broadcast Unit ..	1	1	—
995–9101	Lamp	Patterns 12647/9, 32047, Amplifiers, Patterns 12651/2, Panels and Patterns 32018, 32112, Micrograms and Pattern 32123, Control Box	16	3	1
995–9213	Lamp	Patterns 12949/50, 32020/1, Amplifiers, Patterns 12947, 12948, 32000, Panels	6	3	1
995–9220	Lamp	Pattern 32073, Box	1	—	—
	F.26.				
60516	Rectifier ..	Patterns 12647/9, Amplifiers, Pattern 12652, Panel and Pattern 12651, Alarm Panel	1	1	1
204127	Rectifier ..	Patterns 12647A, 12649A, Amplifiers	1	1	1
972–6334	Rectifier (204128)	Patterns 12649/50, Amplifiers ..	1	1	—
972–6335	Rectifier (204130)	Pattern 32000, Panel	1	—	—
972–9961	Rectifier (204125)	Patterns 12597, 12653, Relay Panels	1	1	—
972–9964	Rectifier (204129)	Patterns 12649/50, Amplifiers ..	2	1	—
972–9965	Rectifier (204131)	Patterns 32018, 32112, Micrograms	1	1	1
972–9966	Rectifier (204132)	Patterns 32018, 32112, Micrograms	1	1	1
972–9967	Rectifier (204133)	Pattern 32000, Panel and Pattern 32047, Amplifier	6	1	—
972–9968	Rectifier (204134)	Pattern 12652, Panel	1	—	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores continued.				
	F.30.				
205600	Switch (Permanent)	Pattern 32089, Microphone ..	1	1	—
205603	Switch (Permanent)	Patterns 12597 (refs. a–e, spl.), Panels	1	1	—
205604	Switch (Permanent)	Patterns 12947, 12948, 32000, Panels	1	1	—
205606	Switch (Permanent)	Pattern 12950, Amplifier ..	1	1	—
205609	Switch (Permanent)	Patterns 12653 (refs. a–j), Panels and Pattern 32112, Microgram	1	1	1
205610	Switch (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
205611	Switch, Treble Tone Control (Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
205664	Switch	Patterns 12647A, 12649A, Amplifiers	4	1	1
205680	Switch Base Tone Control	Patterns 32018, 32112, Micrograms	1	1	1
012–0174	Key (972–8273) ..	Pattern 32002, Panel and Pattern 12596, Control Box	2	1	—
051–0501	Switch (051–0300)	Patterns 12653 (refs. a, b, c, d, e, f, g, h, j) 12597 (refs. a, b, c, e, spl.) Panels	6	1	—
940–1887	Knob (972–8273)	Pattern 32002, Panel and Pattern 12596, Control Box	2	1	—
	F.31.				
208600	Plug (056–0050 Permanent)	Pattern 32035, Broadcast Unit ..	1	1	—
208606	Plug (056–0060 Permanent)	Pattern 32035, Broadcast Unit ..	1	1	—
208608	Plug (056–0070 Permanent)	Pattern 32035, Broadcast Unit ..	1	1	—
208620	Socket	Pattern 32035, Broadcast Unit ..	1	—	—
208626	Socket	Pattern 32035, Broadcast Unit ..	1	—	—
208628	Socket	Pattern 32035, Broadcast Unit ..	1	—	—
208700	Socket (056–0230 Permanent)	Pattern 32035, Broadcast Unit ..	1	1	—
208720	Plug	Pattern 32035, Broadcast Unit ..	1	—	—
056–0015	Valve Holder (Permanent)	Pattern 12649/A, Amplifier ..	1	—	—
056–0031	Valve Holder (Permanent)	Patterns 12647/A, 12649/A, 32020/1, Amplifiers, Patterns 12651/2, Panels and Patterns 32018, 32112, Micrograms	6	4	1
056–0111	Valve Holder ..	Pattern 12649/A, Amplifier ..	1	1	—

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.31*—continued.				
056–0131	Valve Holder (Permanent)	Patterns 32020/1, 12949/50, 32047, Amplifiers, Patterns 32018, 32112, Micrograms, and Pattern 32000, Panel	4	2	1
911–5709	Plug (F.30/205608 Permanent)	Pattern 32000, Panel	1	1	—
940–2287	Socket	Patterns 32005, 32034, Consoles ..	1	1	—
972–6820	Socket	Patterns 12643/4/5, Frameworks and Pattern 12646, Mounting	2	1	—
972–6829	Plug (972–8227 Permanent)	Patterns 12653 (refs. a–j), 12597 (refs. a–e) and spl., 12948, 12947 and 32000, Panels	2	1	—
972–6830	Socket	Patterns 12643/4/5, Frameworks and Patterns 32005, 32034, Consoles	2	1	—
972–8183	Plug	Pattern 32019, Mounting ..	1	1	—
972–8187	Socket	Patterns 32018, 32112, Micrograms and Pattern 32019, Mounting	1	1	—
972–8188	Socket	Patterns 32005, 32034, Consoles ..	1	1	—
972–8189	Socket	Patterns 32005, 32034, Consoles ..	1	1	—
972–8206	Cover	Patterns 32005, 32034, Consoles ..	1	1	—
972–8213	Cover (Permanent)	Patterns 32018, 32112, Micrograms and Pattern 32019, Mounting	1	1	1
972–8214	Cover (Permanent)	Pattern 32019, Mounting ..	1	1	1
972–8217	Cover	Patterns 32005, 32034, Consoles ..	1	1	—
972–8221	Plug (207602 Permanent)	Patterns 32018, 32112, Micrograms	1	1	1
972–8222	Plug (Permanent)	Patterns 12949/50, Amplifiers, Patterns 32001/2, Panels	1	1	—
972–8225	Plug (Permanent)	Pattern 32002, Panel	1	1	—
972–8229	Socket	Patterns 32018, 32112, Micrograms	1	1	1
972–8230	Socket	Patterns 32018, 32112, Micrograms	1	1	1
972–8279	Socket	Patterns 32048/49/50, 32022, Mountings	1	1	—
972–8280	Plug (207608 Permanent)	Patterns 12647/A, 12649/A, 32020/1, 32047, Amplifiers, Patterns 12597, 12651/2/3, Panels	2	1	—
972–8784	Clip	Pattern 32019, Mounting ..	1	1	—
	F.32.				
209601	Knob	Pattern 32112, Microgram ..	1	1	1
209602	Knob	Pattern 32112, Microgram ..	1	1	1
209603	Knob	Pattern 32112, Microgram ..	1	1	1
209604	Knob	Patterns 32018, 32112, Micrograms	1	1	1

APPENDIX C—*continued.*

Pattern No.	Description.	Equipment or Major Item for which intended.	Allowance or "First Outfit" (see note).		
1	2	3	4	5	6
	Consumable Stores —continued. *F.32*—continued.				
209605	Knob	Patterns 12947/8, Panels, Pattern 12950, Amplifier	1	1	—
209606	Knob	Pattern 32000, Panel	1	1	—
209607	Knob	Pattern 32000, Panel	1	1	—
209608	Knob	Patterns 12647/A, 12649/A, Amplifiers and Patterns 12651/2, Panels	2	1	1
209609	Knob	Patterns 12947/8, Panels ..	1	1	—
209610	Knob	Patterns 32018, 32112, Micrograms	1	1	1

APPENDIX D.

Plugs and Sockets—B.R.'s 575 and 472.

B.R. 575.

Amplifiers, Patterns F1C3/12649, 12649A, F20/12647 and 12647A.

Alarm Panel, Pattern F1C3/12651. A.C.G. Panel, Pattern F1C3/12652.

B.R. Designation.	Description.			Maker's Cat. No.	Pattern No.
PL "O"—Z.560114	Plug	..	6-way	F and E JP–6–LAB	F.1A/57629
PL "I"—Z.560116	Plug	..	8-way	F and E JP–8–LAB	F.1A/68455
PL "C"—Z.560118	Plug	..	10-way	F and E JP–10–LAB	F.31/972–8280
SK "O"—Z.560115	Socket	..	6-way	F and E JS–6–CCE	F.1A/60066
SK "I"—Z.560117	Socket	..	8-way	F and E JS–8–CCE	F.1A/65553
SK "C"—Z.560119	Socket	..	10-way	F and E JS–10–CCE	F.31/972–6820

Relay Panels, Patterns F1C3/12597 and F20/12653 all refs.

B.R. Designation.	Description.			Maker's Cat. No.	Pattern No.
PL "C"—Z.560118	Plug	..	10-way	F and E JP–10–LAB	F.31/972–8280
PL "D"—W.7921	Plug	..	4-way	F and E JP–4–LAB	F.1A/W6727
Plugs A–E	Plug	..	24-way	Painton 500489	F.31/972–6829
SK "C"—Z.560119	Socket	..	10-way	F and E JS–10–CCE	F.31/972–6820
SK "D"—57473 ..	Socket	..	4-way	F and E JS–4–CCE	F.1A/57473
Sockets A–E ..	Socket	..	24-way	Painton 500491	F.31/972–6830

Amplifiers, Patterns F1C3/32020 and 32021.

B.R. Designation.	Description.			Maker's Cat. No.	Pattern No.
PL.1.—Z.560118 ..	Plug	..	10-way	F and E JP–10–LAB	F.31/972–8280
SK.1—Z.560119 ..	Socket	..	10-way	F and E JS–10–AB	F.31/972–8279

APPENDIX D—*continued.*

Amplifier, Pattern F1C3/32047.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
PL.1	Plug ..	10-way	F and E JP–10–AB	F31/972–8280
PL.2	Plug ..	8-way	F and E JP–8–AB	F.1A/55571A
PL.3–4–5	Plug ..	6-way	Painton 500347	F.1A/62084
SK.1	Socket ..	10-way	F and E JS–10–AB	F.31/972–8279
SK.2	Socket ..	8-way	F and E JS–8–AB	F.1A/55570A
SK.3	Socket ..	6-way	Painton 500348	F.1A/62085

B.R. 472.

Line Selector Panels, Patterns F1C3/12947 and 12948.
Monitor Selector Panel, Pattern F1C3/32000.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
PL. A and B ..	Plug ..	24-way	Painton 500489	F.31/972–6829
SK. A and B ..	Socket ..	24-way	Painton 500491	F.31/972–6830

Microphone Amplifier, Pattern F1C3/12949.
Gram-Amplifier, Pattern F1C3/12950.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
PL.1	Plug ..	4-way	Painton 500464	F.31/972–8222
PL.2	Plug ..	12-way	F and E JP–12–AB	F.1A/57439A
SK.1	Socket ..	4-way	Painton 500466	F.31/972–8188 (Socket) and F.31/972–8206 (Cover)
SK.2	Socket ..	12-way	F and E JS–12–CCE	F.31/940–2287

Cueing Panel, Pattern F1C3/32002.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
Plug A	Plug ..	4-way	Painton 500464	F.31/972–8222
Plug B	Plug ..	12-way	Painton 500479	F.31/972–8225

O.B. Unit, Pattern F1C3/32035.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
Microphone.. ..	Socket ..	2-way	—	F.31/208700
Mains and E ..	Plug ..	3-way	—	F.31/208606
Output	Plug ..	2-way	—	F.31/208600
Cueing/Control ..	Plug ..	4-way	—	F.31/208608
Microphone.. ..	Plug ..	2-way	—	F.31/208720
Mains and E ..	Socket ..	3-way	—	F.31/208626
Output	Socket ..	2-way	—	F.31/208620
Cueing/Control ..	Socket ..	4-way	—	F.31/208628

APPENDIX D—*continued.*

Micrograms, Patterns F1C3/32018 and 32112.

B.R. Designation.	*Description.*		*Maker's Cat. No.*	*Pattern No.*
Cine Input	Socket ..	4-pole	Painton 500467	F.31/972–8230
Radio Input.. ..	Socket ..	2-pole	Painton 500462	F.31/972–8229
Miscellaneous Input	Plug ..	2-pole	Painton 500460	F.31/972–8221
Output	Socket ..	6-pole	Painton 500472	F.1A/67706
Mains	Plug ..	4-pole	F and E JP–4–CB	F.1A/W6213
Cine Input	Plug ..	4-pole	Painton 500207	F.31/972–8183 (Plug) and F.31/972–8214 (Cover)
Radio Input.. ..	Plug ..	2-pole	Painton 501041 ..	F.31/972–8784 (Plug) and F.31/972–8213 (Cover)
Miscellaneous Input	Socket ..	2-pole	Painton 500461	F.31/972–8187 (Plug) and F.31/972–8213 (Cover)
Output	Plug ..	6-pole	Painton 500198	F.1A/67705
Mains	Socket ..	4-pole	F and E JS–4–CCT	F.1A/W6216

(DNAS 517/51/149.)

(*Navy Orders* 914 *of* 1959 *and* 17 *of* 1960.)

UNCLASSIFIED.

870.—Naval Stores (General) (Class E, Groups 7b and 12)—Renovator Web Equipment—Transfer from E12 to E7b.

(*A.F.O.* 1866/1960.)

Renovator web equipment, pattern E12/5487, is an inflammable item, and, with effect from the date of this order, is to be accounted for under class E, group 7b.

2. Stocks are to be transferred and records amended accordingly. H.M.A. ships and commissioned establishments are to adjust their ledgers in accordance with Article 1812 (*a*) of A.B.R. 4 (Naval Storekeeping Manual).

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 512/80/67.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

871.—Abolition of Form A.S. 104—Numbers and Contents Book.

The use of form A.S. 104—Numbers and Contents Book, in H.M.A. ships and establishments is to be discontinued and in lieu thereof the following instructions are to be observed—

(*a*) Where considered necessary, a pencil note of location is to be made on the relevant stock ledger sheet, form A.S. 71;

(*b*) Stores are to be stowed so that issues can readily be made in order of age;

(*c*) An additional column is to be included in form 1053—Record of Stock-takings—to record the date of inspection of storerooms by the Supply Officer. Should the condition of any item on inspection be other than good, action for immediate issue or survey is to be taken.

(DV 464/54/119.)

UNCLASSIFIED.

872.—Amendment in Manuscript of Books of Reference and Other Publications.

When amendments in manuscript to Books of Reference and other publications are necessary they are generally to be made by using a pen preferably with a fine nib and ordinary ink. Ball point pens are not to be used except when the publication requiring amendment is composed of paper of a too-absorbent type for the use of ordinary pen and ink.

(O & M 465/51/31.)

RESTRICTED.

873.—Books—Libraries—Central Reference Libraries—Additions.

A list of books added to the Central Reference Libraries in H.M.A. ships ALBATROSS, CERBERUS and WATSON during the quarter ended 30th September, 1960, is shown in the appendix to this order.

2. Officers and ratings who wish to borrow books from the Central Reference Library should apply to the Instructor Officer or Education Officer of the ship or establishment in which they are serving. This officer holds a complete catalogue of the libraries.

3. This order will be reprinted for posting on notice boards.

APPENDIX.

Classification and Reference Number.	*Author.*	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Philosophy—Psychology.			
100/11	Joad	Guide to Modern Thought	C.
150/22	Packard	The Status Seekers—An Exploration of Class Behaviour	A.
Social Sciences.			
311.2/7	Paradine and Rivett	Statistics for Technologists	C.
311.2/8	Fisher and Yates	Statistical Tables	C.
311.2/9	Tippett	The Methods of Statistics	C.
320/20	Mallory (Ed.)	Political Handbook of the World—1960	W.

APPENDIX—*continued.*

Classification and Reference Number.	*Author.*	*Title.*	*Where Held ALBATROSS, CERBERUS or WATSON.*
Social Sciences—continued.			
330/24	Benham	Economics—A General Introduction (5th Edition)	W.
355.5/1	Nesbitt, Pond, Allen	The Survival Book	A.
359.09/39	Lewis	A Social History of the Navy 1793–1815	C.
Mathematics.			
510/35	Pipes	Applied Mathematics for Engineers and Physicists	A.C.W.
514/10	Brown	A Concise Trigonometry	C.(2)
516/2	Rutherford	Vector Methods	C.
516/3	Bell	Co-ordinate Solid Geometry	C.
516/4	Powell	Projection Methods and Co-ordinate Geometry	C.(2)
516/5	Somerville	Analytical Conics	C.
517/9	Gibson	Elementary Treatise on the Calculus	C.
517/11	Jaeger	An Introduction to the Laplace Transformation	C.
517/12	Phillips	Functions of a Complex Variable	C.
517/13	Jeffreys	Methods of Mathematical Physics	C.
517/14	Courant	Differential and Integral Calculus, Vol. I.	C.
517/15	Courant	Differential and Integral Calculus, Vol. II.	C.
531/19	Lamb	Dynamics	C.
531/20	Lamb	Statics	C.
531/21	Rutherford	Classical Mechanics	C.
Physics.			
537/10	Coulson	Electricity	C.
539/6	Various	From Nucleus to Universe	W.
Biological Science—Botany.			
572.9/1	Peterson	The Far East—A Social Geography	W.
584.15/2	Moulen	Orchids in Australia	W.
Engineering.			
621.3/118	M.I.T.	Principles of Electrical Engineering Series—Electric Circuits	C.W.
621.3/119	M.I.T.	Principles of Electrical Engineering Series—Applied Electronics	C.W.
621.3/120	M.I.T.	Principles of Electrical Engineering Series — Magnetic Circuits and Transformers	C.W.
623.8/7	Rogers	The Marine Corrosion Handbook	W.
623.821/3	Fenwick	H.M.S. VICTORY	A.

APPENDIX—*continued.*

Classification and Reference Number.	*Author.*	*Title.*	*Where Held ALBATROSS, CERBERUS, or WATSON.*
Building Construction.			
694/11	—	Sunset Outdoor Building Book	W.
Recreation.			
796.352/10	Rees	Dai Rees on Golf	C.
796.4/5	Cerutty	Athletics—How to Become a Champion	C.
797.2/9	Cousteau and Dugan	Captain Cousteau's Underwater Treasury	W.
797.1/2	Illingworth	Offshore — Ocean Racing, Yacht Handling and Equipment	A.
Literature.			
809/4	Priestley	Literature and Western Man	A.
Geography–History.			
911/7	Stamp	Our Developing World	C.
911.2/3	East and Spate	The Changing Map of Asia—A Political Geography	W.
923/125	Agar	Footprints in the Sea	A.C.W.
923/126	Vian	Action This Day	A.C.W.
923/127	Pack	Admiral Lord Anson	A.C.W.
923/128	Morison	John Paul Jones	A.C.W.
923/129	Paloczi-Horvath	Krushchev—The Road to Power	A.
923/130	Sosabowski	Freely I Served	W.
930/3	Lissner	The Living Past—The Great Civilizations of Man	C.
932/1	Velikovsky	Oedipus and Akhnaton — Royal House of Thebes	A.C.W.
937/4	Lissner	Power and Folly. The Story of the Caesars	W.
940.3/1	Terraine	Mons—The Retreat to Victory	A.
940.53/10	De Gaulle	War Memoirs — Salvation — 1944–1946	C.
940.53/11	De Gaulle	War Memoirs — Salvation — 1944–1946—Documents	C.
940.531/3	Broad	The War That Churchill Waged	W.
940.54/7	Flower and Reeves (Eds.)	The War 1939–1945	A.C.W.
940.542/12	Glenn	Tobruk to Tarakan	A.C.W.
940.542/13	Owen	The Fall of Singapore	A.C.W.
940.545/77	Seth	Two Fleets Surprised (Matapan)	A.C.W.
940.545/78	Morison	History of U.S. Naval Operations in World War II., Vol. IX.—Sicily, Salerno, Anzio	A.
940.545/79	Morison	History of U.S. Naval Operations in World War II., Vol. VI.—Breaking the Bismarcks Barrier	A.

APPENDIX—*continued.*

Classification and Reference Number.	*Author.*	*Title.*	*Where Held ALBATROSS, CERBERUS, or WATSON.*
Geography-History—continued.			
940.545/80	Morison	History of U.S. Naval Operations in World War II., Vol. VII.—Aleutians, Gilberts and Marshalls	A.
940.545/81	Morison	History of U.S. Naval Operations in World War II., Vol. VIII.—New Guinea and the Marianas	A.
940.545/82	Morison	History of U.S. Naval Operations in World War II., Vol. XIII.—Liberation of the Philippines	A.C.W.
942.05/3	Unwin	The Defeat of John Hawkins	A.
942.06/4	Pearson	Charles II.—His Life and Likeness	A.
942.08/3	Trevelyan	British History in the 19th Century (1782–1919)	C.
942.08/4	Fulford	Hanover to Windsor—British Monarchs 1830–1936	A.
942.084/3	Southall	Softly Tread the Brave	A.C.W.
945/7	Kubly	Stranger in Italy	W.
954.2/1	Eskelund	The Forgotten Valley—Travels in Nepal	C.
968/4	Bjerre	Kalahari—The Danish Expedition	W.
972/1	t'Serstevens	Mexico, Three-Storied Land	A.
981/1	Cowell	The Heart of the Forest—Expedition Through Innermost Brazil	A.

(DNES 451/51/1.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

C.N.O.'s 874-884/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
28th October, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

CONTENTS.

Section 1.

ADMINISTRATIVE AND GENERAL.

RESTRICTED. Cancelled vide C. N. O. 584/62.

874.—Rear Link Address Procedure.

(*A.F.O.* 1795/1960.)

There are occasions when the Flag Officer Commanding, Her Majesty's Australian Fleet, or other naval authority requires to be absent from his main administrative office, and still receive certain signals and correspondence of immediate concern. The following procedure has been evolved to meet this requirement and is known as " Rear Link Address Procedure ".

2. When brought into force it provides for the following—

(*a*) The main administrative office (and staff remaining) is addressed by the normal designation of Flag Officer Commanding, Her Majesty's Australian Fleet, followed by the words " Rear Link ", e.g., " F.O.C.A.F. (Rear Link) ".

(*b*) The Flag Officer himself (and staff accompanying him) is addressed by his normal designation followed by the word " Flag ", e.g., " F.O.C.A.F. (Flag)."

(*c*) Unless otherwise stated in the General Message bringing the procedure into force, only messages and correspondence concerning the current operation or exercise of immediate interest to the Flag Officer or his staff, or those requiring the immediate personal attention of the Flag Officer, should be addressed to the " Flag " as decribed in sub-paragraph (*b*) above.

(*d*) All other messages or correspondence should be addressed to the main administrative office as described in sub-paragraph (*a*) above.

(*e*) In the event, however, of the message or correspondence being required by both the " Flag " and the " Rear Link " both must be included in the address.

3. The responsibility for determining which address is appropriate rests with originators.

4. Messages and correspondence are to be routed as follows—

(*a*) Those addressed to the Rear Link—to the main administrative office as normal.

(*b*) Those addressed to Flag—to the ship or other temporary location as indicated in the general message. (*See* paragraph 6 below regarding cryptographic systems available.)

(*c*) Those addressed to the normal designation of the Flag Officer without amplification (i.e., in error)—to the main administrative office as normal. (*See* paragraph 5 below.)

(*d*) The appropriate location should be included in address for correspondence as shown in the following examples—

F.O.C.A.F. (Flag).	F.O.C.A.F. (Rear Link).
H.M.A.S. VAMPIRE.	H.M.A.S. MELBOURNE.
C/o G.P.O., Sydney.	C/o G.P.O., Sydney.

5. Messages addressed in error as described in sub-paragraph 4 (*c*) above and routed to the main administrative office must be reviewed by the operational staff or secretariat, and if considered to come under sub-paragraph 2 (*c*) above, retransmitted with the necessary indication in the Transmitting Instructions (e.g., operating signal " ZFH ").

6. Unless otherwise indicated the " Flag " will hold all publications and crypto-material proper to the Flag Officer's normal establishment (naviset).

7. The introduction of this procedure will be promulgated by Station General Message.

Example.

" The Flag of F.O.C.A.F. will be transferred from MELBOURNE (Ship) to VAMPIRE at 0800z 21st March, and back again at 1200z 29th March. During this period Rear Link Address Procedure will be in force.

2. (Any further instructions) ".

8. The necessary address groups are promulgated in A.C.P. 103.

(DSD 18/203/2.)

RESTRICTED.

875.—Secrecy and Security—Attachment of Label Holders to Brief Cases, &c., Used for Conveying Official Classified Information Outside H.M.A. Ships and Establishments.

In order to facilitate recovery, all brief cases or pouches used for carrying classified papers (e.g., when attending meetings) are to have attached to them a leather label holder containing a special label (form S.561). One side of the label will read—

" If found, please see instructions on the reverse side of this label."

The other side of the label will read—

" Anyone finding this case is asked to telephone (space for inserting official address and/or official telephone number) or to hand it to the nearest police station with a request that they should take that action."

2. The holder of the pouch or brief case should fill in his official address and/or his official telephone number in the space provided.

3. Form S.561 and associated leather label holders will be supplied on demand from S.N.S.O., Sydney, but the stock held is small and ships and establishments concerned are requested to limit their demands to their minimum requirements for immediate use.

(DNAS 464/54/266.)

UNCLASSIFIED.

876.—Warrants for the Arrest of Absentees and Deserters in the R.A.N.

In order to meet the requirements of Section 49 (1) of the Naval Discipline Act, disciplinary action in respect of a recovered deserter or absentee from another ship is not to begin until the rating has been appropriated to the ship in which the offence is to be investigated.

2. Navy Order 901 of 1959 is to be amended as follows—

Delete paragraph 7 and *insert* in lieu—

" 7. Immediately a deserter is recovered, a signal is to be sent to the Naval Board (information H.M.A.S. KUTTABUL and H.M.A.S. LONSDALE). This signal is to include the name of the ship or establishment to which the rating is being despatched for disciplinary action. Covering drafting action will then be taken. Warrants for arrest will be cancelled from Navy Office."

(DMT 321/6/7.)

(*Navy Order* 901 *of* 1959.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

877.—Medical—Auditory Acuity, Quantitative Measurement of.

In view of the increasing prevalence of sources of high intensity noise in the Royal Australian Navy the Naval Board desire that the hearing standards of personnel likely to be affected shall be measured and recorded on their medical history documents. This is required in order that any subsequent hearing changes will be apparent.

2. Item 46/0—" Apparatus, Auditory, for quantitative measurement " has been supplied to or is in course of supply to Flinders Naval Hospital, Balmoral Naval Hospital, H.M.A.S. MELBOURNE, H.M.A.S. ALBATROSS, H.M.A.S. NIRIMBA, H.M.A.S. LEEUWIN and Williamstown Dockyard. These will be issued without demand, upon receipt of stock. Full instructions accompany each instrument which will operate on A.C. or D.C. Mains from 100 to 250 volts by means of a voltage selector, which is easily accessible.

3. *Measurement of Auditory Acuity.*—The requirements are—

(*a*) Gunnery and Aviation personnel, primary test as soon as possible and follow-up test every two years thereafter.

(*b*) All male personnel shortly after entry.

(*c*) At any time for any member as necessity demands.

(*d*) All personnel occupied in " noise dangerous " positions, primary test as soon as possible and follow-up every two years thereafter. (The provisions of Navy Order 507 of 1960 are to be used as a guide.)

4. Senior Sick Berth ratings are to be selected by the Medical Officer-in-Charge and instructed in operation of the apparatus in order to assist the examining medical officer.

5. Calibration or re-calibration of the machines is only to be carried out by the Department of Health—Commonwealth Acoustic Laboratories, but maintenance, such as replacement of valves, is to be carried out by the makers or their agents. Payment of the accounts will be made by the Medical and Dental Store Officer, Sydney who is to be suitably advised. This officer will also maintain a history card for each machine. Agents for the " AMPLIVOX " are the Audiphone Co. (Western Electrics) in all States.

6. A sound-proof room is not necessary, but a quiet location should be selected in which to conduct the examinations.

7. A permanent record of the results of each examination is to be made in the member's medical History documents.

8. Confidential Navy Order 74 of 1960 is relevant.

9. Navy Order 889 of 1958 is hereby cancelled.

(MDG 327/251/1.)

(*Navy Orders* 889 *of* 1958, 507 *of* 1960 *and Confidential Navy Order* 74 *of* 1960.)

UNCLASSIFIED. Cancelled C N O 622/62

878.—Medical Expenses—Specialist Investigation of Recruits and Candidates for Officer Entry.

Specialist opinion, or special medical investigations (as distinct from medical treatment) may be obtained at Departmental expense when considered essential by an examining medical officer to determine medical fitness for entry into the Royal Australian Navy of an otherwise suitable candidate. The procedure for obtaining the reports and paying the accounts is set out in Navy Orders 311 and 470 of 1960.

2. A copy of the report is to be permanently attached to the original and duplicate of form A.M. 6.

(MDG 327/53/27.)

(*Navy Orders* 311 *and* 470 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

879.—Aircraft—Drill for Aircraft Movements—Steering Orders.

(*A.F.O.* 2311/1960.)

With the almost universal introduction of Nose Wheel type aircraft into service, the orders given by Aircraft Directors to Steering Arm Numbers are in future to be given relative to the nose of the aircraft (i.e., " Nose to Port/Stbd.", " Nose Midships ").

2. In order to achieve standardization, this order will apply to both Nose Wheel and Tail Wheel type aircraft both ashore and afloat.

3. In the case of Aircraft Carriers, where the procedure of giving orders relative to the tail of the aircraft is in use, that method should continue for the duration of the current commission, but on re-commissioning this order is to be followed.

(DAWOT 1311/3/8.)

UNCLASSIFIED.

880.—Wireless Tape Recorder Type T.P.R.–1 Modification.

Reports have been received which indicate that under Service conditions in hot and tropical climates the R.A.N. Tape Recorder Type T.P.R.–1 becomes excessively hot after prolonged periods of operation (three hours or more).

2. It has therefore been decided to modify all Tape Recorders Type T.P.R.–1 held in the R.A.N. to provide more efficient ventilation of the unit.

3. As stocks of modified Tape Recorders Type T.P.R.–1 become available they will be issued without demand as follows—

N.S.O. Port Melbourne—

Type 12 Frigates H.M.A.S. YARRA and R.A.N. 05.
Flinders Naval Depot.
H.M.A.S. HUON.
H.M.A.S. LONSDALE.
H.M.A.S. LEEUWIN.
H.M.A.S. TORRENS.

S.N.S.O. Sydney—

Remaining Services.

4. On receipt of modified recorders those at present held are to be returned to the S.N.S.O. as early as practicable.

(DEE 519/70/12.)

UNCLASSIFIED.

881.—Electric Motors—Oil Seals—Precautions to be Taken in Fitting.

(*A.F.O.* 1369/1960.)

An undue number of defects has occurred in A.C. motors for the distilling plants on R.N. Frigates due to failure of the oil seals fitted on the motors, allowing water or brine from the pump glands to (*a*) damage the motor bearings, and (*b*) enter the motor carcase resulting in insulation breakdown. It was confirmed by the seal manufacturer that the seals in use were suitable for the duties involved.

2. The failure of oil seals may have been due to incorrect seals being used or insufficient care being taken during replacement or renewal. To prevent similar failures in the R.A.N., the following precautions should be taken—

(*a*) In demanding replacement seals ensure that correct seals are specified, e.g., if seals with phosphor bronze springs and brass inserts are required, this should be stated, otherwise standard seals having steel springs and inserts would be provided. A description of the type of seal fitted is usually given on the " as made " drawings.

(*b*) The bearing surface, shaft to seal, must be highly polished. If this surface has deteriorated to the extent that its re-conditioning cannot be satisfied by the facilities available on board, e.g., buffing and the use of Crocus Paper the motor should be defected as soon as practicable and the shaft/seal bearing surface restored by grinding and polishing.

(*c*) Before fitting, a new seal should carefully be examined and all traces of dirt or grit removed by cleaning in cold paraffin or light lubricating oil, finally wiping with a cloth moistened with clean oil.

(*d*) Smear the sealing lips with clean grease.

(*e*) Fill the cavity between the seal and the retaining plate with clean grease.

(*f*) Smear the outside diameter of the seal with clean grease to facilitate fitting.

(*g*) Ensure that the spring is correctly located.

(*h*) Use a fitting sleeve with a " lead-on " taper and a few thousands of an inch greater diameter than the shaft.

N.B.—Action is being taken to provide fitting sleeves for this purpose.

Pending provision of fitting sleeves, commensurate care should be taken when fitting oil seals as the slightest scratch on the sealing edge of the seal may cause leakage and failure.

(*j*) Ensure that the seal is placed over the shaft in the correct " sense " as shown on the relevant drawings.

(*k*) Ensure that the seal is properly pressed home into the housing recess and that it does not enter the housing in a tilted position.

(DEE 1107/51/6.)

UNCLASSIFIED.

882.—Jointing Material for Use in Steam Valve Covers.

An increasing number of reports of leakage of steam valve cover joints are being received due to the higher steam pressures and temperatures of later ships of the Fleet.

2. The following procedure is to be adopted in future for steam valve cover joints in systems of 300 pounds per square inch and above.

3. When it becomes necessary to renew steam valve cover joints reinforced C.A.F. jointing material is to be used. Normally 1/64 inch thickness should be used but $\frac{1}{32}$ inch thickness may be used when necessary due to the condition of the joint faces. In this latter case the life of the joint can be expected to be reduced.

4. In cases where reinforced C.A.F. jointing has proved unsatisfactory spiral wound gaskets are to be used, the valve cover and body being modified as necessary to accommodate these gaskets. If these modifications cannot be carried out at the time the joint is remade, a dockyard defect may be raised for the work to be done at the next refit.

(DME 1211/51/184.)

UNCLASSIFIED.

883.—Naval Stores (General) (Class E, Group 2C)—Rubber Seals, Pattern 2157, for Hummers, Pattern F.2B/19137 and F.2B/19138—Introduction.

(*A.F.O.* 61/1960.)

Experience at sea has indicated that the external rubber seals fitted over the pushes in Hummers, patterns F.2B/19137 and F.2B/19138, have a relatively short life, especially when installed on weather decks.

2. When these seals become defective they are to be replaced by new seals manufactured from P.C.P. rubber compound to BS.2752/56. The new seals have been allocated pattern number 2157 and added to the Rate Book and Authorized List of Naval Stores under class E, group 2C.

3. Replacement seals should be demanded from the S.N.S.O., Sydney, as necessary.

4. Admiralty has advised that the relevant publications will be amended.

(DNAS 512/56/45.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

884.—Sealing Wax.

H.M.A. ships and establishments are to destroy all existing stocks of old (unbranded) supplies of sealing wax on receipt of new stock which is available on demand from S.N.S.O., Sydney.

(DNAS 462/251/1.)

With reference to Navy Order 1094 of 1959, Navy Orders 770 to 853 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

8290/60.—2

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
31st October, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

885.—Books—Distribution of Non-Accountable Publications During August, 1960.

The non-accountable publications, amendments to A.P.'s, and B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C. " Series contained in the appendix to this order, have been distributed to ships and services during August, 1960. Article 2518 of A.B.R. 4 is relevant.

2. Copies of A.F.O. " P " Series amendments and A.P. amendments, referred to in the appendix to this order, are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Article 2518 (7) of A.B.R. 4.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	10th June, 1960.
Aeroplane	17th June, 1960.
Aircraft	Volume 39, No. 11, August, 1960.
Australian Joint Service Catalogue of Telecommunications, Components, and Valves	Serial No. 44 (June, 1960).
Australian Joint Service Catalogue of Telecommunications, Components, and Valves	Serial No. 45 (June, 1960).
Australian Joint Service Catalogue of Telecommunications, Components, and Valves	Serial No. 46 (June, 1960).
Australian Joint Service Catalogue of Telecommunications, Components, and Valves	Serial No. 47 (June, 1960).
Flight	27th May, 1960.
Flight	3rd June, 1960.
Flight	10th June, 1960.
Flight	17th June, 1960.
A Guide to Optimum Frequencies	August, September, and October, 1960.
Instructions for the Fleet Air Arm	Amendment No. 2
Joint Services Recognition Journal	Volume 15, No. 4, April, 1960.
List of Propellant Lots Accepted for Naval Service, 1958	Amendment No. 9.
Manual of the Audit Act and Treasury Regulations	Issue No. 30 (Pages 1–3), dated 20th May, 1960.
Manual of the Audit Act and Treasury Regulations	Issue No. 31 (Pages 1–2), dated 16th June, 1960.
Manual of the Audit Act and Treasury Regulations	Issue No. 32 (Pages 1–2), dated 7th June, 1960.
Manual of the Audit Act and Treasury Regulations	Issue No. 33 (Pages 1–2), dated 28th June, 1960.

APPENDIX—*continued.*

BOOKS, MAGAZINES, PAMPHLETS, ETC.—*continued.*

Publication.	*Date.*
N.A.M.A.N.	N.2103–N.2113, dated 30th July, 1960.
The Navy List (R.N.)	January, 1960.
Regulations and Instructions (Provisional) for the R.A.N.R.	Amendment No. 3.
United States Naval Institute Proceedings	Volume 86, No. 6, June, 1960.
United States Naval Institute Proceedings	Volume 86, No. 7, July, 1960.
United Nations Review	Volume 6, No. 12, June, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.L.P. 4	New Pages and List of Effective Pages dated 20th January, 1960.
N.Z.B.R. 30	2.
B.R. 70/1959	Supplement, April, 1960.
B.R. 291/45	Amendment No. 29.
B.R. 632 (1) 1954	20.
B.R. 1043 (2)	6.
B.R. 1126A	1.
B.R. 1168 (1)	4.
B.R. 1257	21.
B.R. 1492B	Amendment No. 18.
B.R. 1554	24.
B.R. 1617	6.
B.R. 1661 (1)	4.
B.R. 1671 (3)	5.
B.R. 1787	7.
B.R. 1831	2.
B.R. 1834	16.
B.R. 1917 (1)	43.
B.R. 1917 (2A)	32.
B.R. 1921 (49)	59.
B.R. 1928	49.
B.R. 1981	14.
B.R. 1982, Vol. I.	List of Effective Pages, dated 27th May, 1959.
B.R. 2101 (1)	Amendments Nos. 10 and 11.
B.R. 2101 (2)	Amendments Nos. 7 and 8.
B.R. 2101 (3)	Amendment No. 9.
B.R. 2102 (4)	7.
B.R. 2101 (5)	11.
B.R. 2110 (2)	11.
B.R. 2050 (532)	1.

DISTRIBUTION OF A.F.O: " S.C." SERIES.

Publication.	*" S.C." No.*
B.R. 1971	S.C. 13/60 Correction No. 10.
B.R. 1978/58	S.C. 11/60 Correction No. 10.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
957C, Vol. 4, Part 6	A.L. 5.
1086, Book 3, Part 1 (2nd Edition)	A.L. 76.
1086, Book 6 (2nd Edition)	A.L. 102.
1086, Book 7 (2nd Edition)	A.L. 111, 112, 113 and 114.
1086, Book 9 (2nd Edition)	A.L. 132 and 132 (Erratum).
1086, Book 11 (2nd Edition)	A.L. 152, 153, 155 and 156.
1086, Book 12, Part 2 (2nd Edition)	A.L. 11.
1086, Book 13 (2nd Edition)	A.L. 136, 137, 139, 140, 141, 142 and 143.
1086, Book 14 (2nd Edition)	A.L. 38.
1086, Book 15 (2nd Edition)	A.L. 161 and 162.
1181, Vol. 2	(A.L. 110)–B.91
	(A.L. 111)–B.92.
1181C, Vol. 1 and Vol. 6, Part 1	A.L. 35.
1182 (N), Vol 2	(A.L. 82)–E.18
	(A.L. 83)–E.19.
1182A, Vol. 2, Part 1	C.46
	E.17 (A.L. 2 inc.)
	E.24
	G.12
	J.5.
1182C, Vol. 1	A.L. 145, 146 and 147.
1182C, Vol. 2	(A.L. 83)–F.20.
1182E, Vol. 1	A.I.L. 1/60
	A.L. 81.
1182E, Vol. 2	(A.L. 82)–D.23
	(A.L. 78)–E.3
	(A.L. 79)–E.4
	(A.L. 80)–E.5
	(A.L. 81)–E.6.
1182E (N), Vol. 1	A.I.L. 1/60
	A.I.L. 2/60.
1275A, Vol. 1, Section 13	A.L. 28.
1275A, Vol. 1, Section 16	A.L. 35, 39, 40 and 42.
1275A, Vol. 1, Section 17	A.L. 30.
1275A, Vol. 1, Section 18	A.L. 31.
1275A, Vol. 1, Section 21	A.L. 31.
1275A, Vol. 1, Section 22	A.L. 24.
1275A, Vol. 1, Section 24	A.L. 47, 48 and 48 (Corrigendum).
1275A, Vol. 1, Section 26	A.L. 26.
1275B, Vol. 2	(A.L. 51)–Z.5.
1275E, Vol. 2, Part 1	(A.L. 206)–H.69.
1275G, Vol. 1	A.L. 61, 66 and 67.
1275T, Vol. 1	A.L. 87 and 88.
1355, Vol. 2, Part 1	(A.L. 134)–G.131.
1355A, Vol. 1	A.L. 73, 74 and 75.
1355C, Vol. 4, Part 6 (Issue 1)	A.L. 22 and 23.
1355F, Vol. 1	A.L. 14.
1355G, Vol. 1	A.L. 16.
1355H, Vol. 1	A.L. 12.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.V.P. 1455	(A.L. 267)–P.20 (Issue 3)
	(A.L. 273)–O.6 (Issue 1).
1464C, Vol. 2, Part 1	No. 15 (A.L. 2 inc.).
1464D, Vol. 2, Part 1	No. 38 (Canc.).
1464G, Vol. 2	No. 105.
1492A, Vol. 2	(A.L. 41)–C.3.
1538, Vol. 1	A.L. 54.
1538P, Vol. 3, Part 1	A.L. 3.
1538P, Vol. 6, Part 3	A.L. 10.
1661B, Vol. 1 (2nd Edition)	A.L. 97.
1661E, Vol. 1 (2nd Edition)	A.L. 90.
1664A (2nd Edition), Vol. 1, Book 2	A.L. 13.
1664A (2nd Edition), Vol. 2, Part 3, Book 2	A.L. 22, 23 and 24.
1664D (2nd Edition), Vol. 1, Parts 1 and 3	A.I.L. 1/60
	A.L. 45.
1803, Vol. 2, Part 1	D.136 (A.L. 4 inc.)
	D.160
	D.170
	E.133
	E.134
	F.98
	S.56 (A.L. 1)
	S.59
	S.60
	S.61.
1803A, Vol. 1	A.L. 64.
1803B, Vol. 1	A.L. 176.
1803B, Vol. 2, Part 2	A.L. 97 and 99.
1803D, Vol. 1, Book 1	A.L. 61 and 62.
1803D, Vol. 2, Part 2	A.L. 223 and 224.
1803E, Vol. 1	A.L. 119, 120, 121 and 122.
1803E, Vol. 2, Part 3	A.L. 90.
1803F, Vol. 1, Book 1	A.L. 26.
1803F, Vol. 1, Book 2	A.L. 23.
1803F, Vol. 2, Part 2	A.L. 55.
1803N, Vol. 1, Book 1	A.I.L. 1/60.
1803N, Vol. 1, Book 2	A.L. 18.
1803S, Vol. 1, Book 2	A.L. 19 and 20.
1803T, Vol. 1	A.L. 86, 87 and 88.
2240A, Vol. 2, Part 1	No. 118.
2276F, Vol. 1	A.L. 85.
2306B, Vol. 5	A.L. 10.
2306M, Vol. 1 and Vol. 6	A.L. 24.
2337, Vol. 1, Book 2	A.I.L. 1/60
	A.L. 45.
2531J, Vol. 3	A.L. 2.
2531L, Vol. 1	A.L. 10.
2544G.A., Vol. 1	A.L. 3.
2550B, Vol. 1 (3rd Edition)	A.L. 5.
2552L, Vol. 2	(A.L. 25)–B.12 (Alt. 1).
2568F & F.A., Vol. 3, Parts 3 and 4	A.L. 5.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2656A, Vol. 1 (2nd Edition)	A.L. 10.
2802A (2nd Edition), Vol. 1, Parts 1 and 3	A.L. 45.
2876E, Vol. 2	(A.L. 12)–B.8 (A.L. 13)–B.9.
2887N, Vol. 1 and Vol. 6	A.L. 9, 12, 13, 13 (Corrigenda), 14 and 15.
2887 (N), Vol. 2	(A.L. 29)–B.22.
2887S, Vol. 2	(A.L. 5)–A.1.
2892F, Vol. 2	(A.L. 93)–B.52 (Canc.) (A.L. 91)–B.76.
3042A, Book 2	A.L. 8.
3158, Vol. 1 (2nd Edition)	A.L. 16.
3158, Vol. 2	(A.L. 516)–A.20 (Alt. 1).
3158, Vol. 2	(A.L. 509)–B.23 (Alt. 3 inc.) (A.L. 510)–B.34 (Alt. 1) (A.L. 508)–C.5 (Alt. 7 inc.) (A.L. 517)–D.10 (A.L. 512)–F.3 (Alt. 15) (A.L. 507)–K.3 (Alt. 1 inc.).
3278	A.L. 22 and 23.
3358	A.L. 6.
4099J, Vol. 2	(A.L. 337)–D.17 (Alt. 1 inc.) (A.L. 343)–D.18 (Alt. 2 inc.) (A.L. 344)–D.20 (A.L. 345)–D.21 (A.L. 340)–K.17 (Alt. 1) (A.L. 342)–M.17.
4099 and 4269, Vol. 2, Parts 3 and 4	A.L. 31.
4117B, Vol. 1 and Vol. 6	A.L. 27.
4146B, Vol. 1	A.L. 65.
4269C, Vol. 1	A.L. 69 and 70.
4282C, Vol. 1	A.L. 40.
4288, Vol. 1, Part 2 and Vol. 5	A.L. 78.
4288, Vol. 2	(A.L. 373)–B.207 (Alt. 1) (A.L. 359)–B.226 (Alt. 1) (A.L. 372)–B.254 (Alt. 1) (A.L. 360)–B.265 (A.L. 361)–B.266 (A.L. 362)–B.267 (A.L. 363)–B.268 (A.L. 364)–B.269 (A.L. 366)–B.270 (A.L. 368)–B.272 (A.L. 369)–B.273 (A.L. 370)–B.274 (A.L. 374)–B.275.
4288, Vol. 4, Part 6 (N), Issue 2	A.L. 4.
4288 (N), Vol. 1, Parts 1 and 2	A.L. 41.
4303B, Vol. 1, Book 1	A.L. 32, 33 and 34.
4303B, Vol. 1, Book 2	A.L. 20.
4303Z, Vol. 1	A.L. 56.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4340, Vol. 1, Book 2	A.L. 44 and 45.
4343, Vol. 1	A.L. 162, 164 and 165.
4343, Vol. 2	(A.L. 8)–D.1 (Canc.).
4343A, Vol. 1	A.L. 85, 86, 87, 88, 89 and 90.
4343A, Vol. 2	(A.L. 71)–B.8.
4343A, Vol. 6	A.L. 13.
4343B, Vol. 1, Book 2	A.L. 24 and 26.
4343B, Vol. 1, Book 3	A.L. 24.
4343B, Vol. 2	(A.L. 136)–H.5.
4343C, Vol. 1, Book 1	A.L. 21.
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4685, Vol. 1	A.L. 4.
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N.A.M.O. Engines	E(RR) 59 (2.5.60) E(N) Napier Engines X.97 (Issue 2) (10.5.60) STI/Napier Engines SI/Napier Engines.

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N.A.M.O. Miscellaneous	STI/Devon/27 (6.5.60).
N.A.M.O. Sea Venom	STI/179 (Issue 2) (29.4.60).
R.A.N.A.M.O. Ejection Seat	SI/RAN.6 (May, 1960) SI/RAN.7 (June, 1960) SI/RAN.8 (June, 1960).
R.A.N.A.M.O. Gannet	A.L. 7 A.27 (April, 1960) STI/RAN.82 (June, 1960) SI/RAN.33 (Issue 3) (July, 1960).
R.A.N.A.M.O. General	A.L. 16 A.35 (June, 1960) R.74 (July, 1960) STI/Elect./RAN.40 (Issue 2) (June, 1960).
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Smiths Field Service Bulletins	No. 65 (16.2.60) No. 66 (28.3.60) No. 67 (20.4.60).
Smiths Field Service Modification Leaflets	No. 380 (Issue 2) (April, 1960) No. 441 (Issue 2) (January, 1960) No. 467 (Issue 2) (January, 1960) No. 486 (March, 1960) No. 518.
Sperry Publication " Sperryscope " ..	4th Quarter, 1959 1st Quarter, 1960.
Sperry Review..	Winter 1959–60.
Standardization Design Memoranda ..	No. 12 Section 1 (Issue 4) No. 15 Section 1 (A.L. 1) (Issue 4) No. 18 (Issue 4) No. 36 (A.L. 1) (Issue 6) No. 82 (Issue 4) No. 192 (Issue 3) No. 262 (Issue 3) No. 272 (Issue 2) (Canc.)

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A.A.P. No. 2, A.B.C.S.C. Class 5820 (2nd Edition)	Sub A.L. 5 (A.L. 11219).
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A.A.P. No. 2, A.B.C.S.C. Class 5960 (2nd Edition)	Sub A.L. 6 (A.L. 11155).
A.A.P. No. 2, Group E, Section 7R (3rd Edition)	Sub A.L. 24 (A.L. 11184).
A.A.P. No. 2, Group F, Section 14A (12th Edition)	Sub A.L. 57 (A.L. 11275).
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A.A.P. No. 2, Group G, Section 6A (13th Edition)	Sub A.L. 48 (A.L. 11207).
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R.A.A.F. Summary of Aircraft Accidents	January–March, 1960.
R.A.A.F. Summary of Defects	Electrical 1/60—Period 1st January to 31st March, 1960.
	Engines and Accessories—Serial No. 22—Period February, 1960 to May, 1960.
R.A.A.F. Twin Wasp Orders	A.L. 58.
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	S.R. 1483/N.B.

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Lloyds Shipping Index	8th August, 1960.
Lloyds Shipping Index	15th August, 1960.
Lloyds Shipping Index	22nd August, 1960.
Lloyds Shipping Index	29th August, 1960.

(DNAS 465/57/215.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

REGISTRAR.

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C.N.O.'s 887-910/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
1st November, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

8461/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

887.—Accounting Instructions for H.M.A. Ships Proceeding Overseas from Australia.

Arrangements have been made for the Australian High Commissioner, Wellington, New Zealand, to settle accounts incurred by H.M.A. ships in New Zealand waters which cannot be paid before the ships' departure.

2. When substantial expenditure is incurred and is to be settled by the High Commissioner, advice is to be forwarded to Navy Office, by signal, of the amount involved in order that arrangements may be made for necessary transfer of funds.

3. Paragraph 15 of Navy Order 915 of 1959 is to be noted accordingly.

(DNA 201/53/5.)

(*Navy Order* 915 *of* 1959.)

RESTRICTED.

888.—ACNB General Messages.

In accordance with Navy Order 336 of 1959, the state of ACNB general messages as at the 1st October, 1960, is shown in the appendix to this order.

APPENDIX.

The following F messages may now be withdrawn—

1959—	1960—
134 *see* I.P.I. (A.S. 31)	003 *see* I.P.I. (A.S. 31).
141 *see* I.P.I. (A.S. 31)	020 *see* I.P.I. (A.S. 31).
168 *see* I.P.I. (A.S. 31)	063 *see* I.P.I. (A.S. 31).
182 *see* I.P.I. (A.S. 31)	065 *see* I.P.I. (A.S. 31).
202 *see* I.P.I. (A.S. 31)	156 *see* C.N.O. 730/60.
	170 *see* C.N.O. 775/60.

2. As at 0001Z, 1st October, 1960, the following F messages are still in force—

1959—
176

1960—

016	034	040	051	056	064	068	070	071	094
102	103	104	107	112	122	145	148	160	168
175	178	184	188	194	195	199	200	201	203
206	207	208	209	211	215	216	217	218	219
220	221.								

3. The following RF messages may now be withdrawn—

1960—

014	023 *see* RANAMO.
018	024.
020	025 *see* RANAMO.
	028 *see* S.T.I.

4. As at 0001Z, 1st April, 1960, the following RF messages are still in force—

1960—

019	026
021	027
022	029.

(HNB 77/5/8.)

(*Navy Order* 336 *of* 1959.)

UNCLASSIFIED.

889.—Regulations and Instructions for the Royal Australian Navy.

Navy Order 791 of 1960 is to be amended as follows—

Appendix D

Delete the entry " 253.....1783 "

(Sec. 47/8/3.)

(*Navy Order* 791 *of* 1960.)

UNCLASSIFIED.

890.—Scientific Policy Committee.

The Scientific Policy Committee at Navy Office has the following terms—

(*a*) To recommend to the Naval Board the allocation and priority of scientific effort in the R.A.N.

(*b*) To co-ordinate scientific effort on projects approved by the Naval Board.

(*c*) To initiate any follow-up action required as a result of scientific investigation.

2. The committee consists of the following members—

Deputy Chief of Naval Staff
Deputy Chief of Naval Technical Services
Director of Plans
Director of Weapons
Director of Tactics, Trials and Staff Requirements
Director of Scientific Services
Assistant Secretary (Materiel)
Technical Directors and others may be co-opted as necessary.

3. In fulfilling its terms of reference as outlined above, the Scientific Policy Committee will recommend any matter required to be processed through the Defence Research and Development Policy Committee and will co-ordinate all naval scientific activity through the appropriate agencies both in Australia and overseas.

4. The Naval Board attaches importance to the support of a vigorous Research and Development Programme and desires that all proposals affecting the use of research and development facilities should be channelled through the Scientific Policy Committee. Naval Authorities outside the Navy Office should address such matters to the Naval Board in the normal course.

(HNB 8/202/2.)

UNCLASSIFIED.

891.—Security of Enclosures to Correspondence—Non-use of Glider Clips.

Cases have occurred from time to time of enclosures becoming detached from, or foreign papers being inadvertently attached to correspondence due to the use of glider clips. These fasteners are no longer to be used.

2. As a general rule, where it is necessary to combine papers, a paper fastener or binder is to be used. This instruction, however, does not preclude the use of pins when the papers to be put together are reasonably uniform in size and where there is no risk of their becoming separated. Pins are not to be used to attach wills or photographs, nor when damage to personal documents might result.

3. In order to ensure the safe handling of small enclosures to files, letters, &c., they are to be placed in a 4½-in. x 10¼-in. envelope of the end-flap type and secured to the parent document by a paper fastener or binder.

(HNB 1617/206/30.)

UNCLASSIFIED.

892.—Use of Duplicating Machines for Reproduction of Classified Information.

There is a risk of compromise when duplicating machines are used for the reproduction of classified information. A case occurred recently where the imprint of classified information appeared on the back of an unclassified document due to an impression of the former having been left on the roller of the machine from a previous duplicating job.

2. There is also the possibility of an image being transferred from a roneoed reproduction which has not been dried off for at least one hour, to a paper surface with which it has been in very close contact and which has been contaminated with an alkali. Photographic paper which is in use in the R.A.N. is so contaminated.

3. When a classified document is reproduced on a duplicating machine care should be taken to ensure that no impression of classified information remains on the roller after completion of the job and that roneoed reproductions are allowed to dry off for at least one hour before being brought into contact with photographic or other alkali-contaminated papers.

4. Navy Order 337 of 1960 is hereby cancelled.

(DNI 1617/201/2.)

(*Navy Order* 337 *of* 1960.)

Par. 10 inserted in accordance with C.N.O. 446/62

Section 2.

PERSONNEL.

UNCLASSIFIED.

893.—Conditions of Service in H.M.A.S. TARANGAU.

It is the policy of the Naval Board that the ship's company of H.M.A.S. TARANGAU shall, subject to the requirements of the service, be comprised of volunteers.

2. The present requirement is—

Officers (accompanied)	13
Ratings (accompanied	33
Ratings (unaccompanied)	24

3. (*a*) Unaccompanied ratings will be required to serve only one year at TARANGAU.

(*b*) Ratings drafted as P.N.G. Division Instructors will be required to serve for a period of two years at TARANGAU whether accompanied or unaccompanied.

(*c*) Should the requirements of the service necessitate the appointment of single or unaccompanied officers, such officers will be required to serve only one year at TARANGAU. They will occupy the house they would have occupied had they been accompanied, rental charges being waived and will be regarded as living-in.

4. Furnished married quarters are available for all accompanied personnel who will be required to serve in the area for two years.

5. A member volunteering for accompanied service must, at the time of application present a signed assurance from his wife that she is prepared to go to TARANGAU with him and sign a statement himself that to the best of his knowledge each member of his family whom he proposes to take with him is physically fit for such transfer, having regard to the climate and the limited medical facilities available.

6. A welfare report may be called for in cases where previous compassionate history suggests either that a man's proposal to take his family to TARANGAU or a married member's offer of unaccompanied service may cause difficulties likely to affect his service.

7. If service requirements necessitate the appointment or draft of a member who is not a volunteer he will be required to serve only one year if he does not wish to take his wife and family. If granted a removal, which will be dependent on the statement required in paragraph 5 above, he will be required to serve two years. If, for medical reasons it is not possible to transfer his wife and family, he will be required to serve only one year.

8. Return removals from the New Guinea area will not, except for approved compassionate reasons, be granted before the member has completed his period of service in the area, unless he is appointed or drafted from the area otherwise than at his own request. The conditions governing leave travel and removal on appointment or draft following service in TARANGAU are as laid down in Navy Order 856 of 1960.

9. When a member's family leaves the area before completion of his period of service in the area, a draft not having been approved, a return removal will not normally be granted except as indicated in paragraph 8. The member will be required, subject to the exigencies of the service, to complete his period of service in the area.

(Inserted in accordance with C N O 446/62)

"10. As all service residences in New Guinea are furnished, privately owned refrigerators, dryind cupboards and other furniture included in the approved scale of furniture for service residences in that area will not be transported at the expense of the Department. However, until such time as all residences are provided with washing machines in accordance with approved scales, married accompanied members may transport private washing machines to New Guinea at Departmental expence, provided they accept the risk of deterioration."

14. I.P.I. 231/29, paragraph 11, defines the policy regarding private motor vehicles at TARANGAU.

15. These conditions should be brought to the attention of all officers and ratings. Names of volunteers for service at TARANGAU should be forwarded in accordance with Navy Order 229 of 1959, paragraph 11. Volunteers should state whether they wish to be considered for accompanied or unaccompanied drafting.

16. I.P.I. Article 231/5 is to be annotated "This article refers only to Darwin Area *vide* Navy Order 893 of 1960."

17. I.P.I. will be amended in due course.

18. This order will be reprinted for posting on notice boards.

19. Navy Order 254 of 1960 is hereby cancelled.

(HPB 302/2/1.)

(*Navy Orders* 229, 404, 571, 830 *and* 1054 of 1959 *and* 254 *and* 856 *of* 1960.)

UNCLASSIFIED.

894.—Effect of Sick Leave Occurring During Recreation Leave or Furlough and the Effect of Sick Leave on Recreation Leave.

In future, where a member becomes ill during the course of either recreation leave or furlough, the period of any leave so affected may now be recredited to him subject to the following conditions—

(*a*) *Recreation Leave* .. Where such leave is interrupted by a sickness of at least 4 days' duration.

(*b*) *Furlough* .. .. Provided that the period of sickness is of not less than two weeks' duration.

2. However, for a member to receive the recrediting of either recreation leave or furlough, it is essential that medical evidence of unfitness for duty is submitted at the time of falling ill.

3. In addition, it has been decided that no deduction should be made from a member's accruing recreation leave credits on account of any absence through sick leave.

4. The provisions of paragraph (23) of Article 555 of Consolidated Orders and Regulations are hereby cancelled.

5. This order will be incorporated in R.I. in due course and is being reprinted for posting on notice boards.

(HPB 319/1/13.)

RESTRICTED.

895.—Films and Filmstrips, Instructional—S.A. 1078, "Distress, Search and Rescue and Submiss/Subsunk Communication Organization"—Distribution.

(*A.F.O.* 1645/1960.)

Copies of the Admiralty instructional filmstrip "Distress, Search and Rescue and Submiss/Subsunk Communication Organization" (Serial No. SA. 1078) are being obtained and the initial distribution will be made without demand by S.N.S.O., Sydney, on the following scale—

Establishment.	*No. of copies.*
Flinders Naval Depot (for Signal School)	1
R.A.N. Film Library, Sydney	1

4. Furnished married quarters are available for all accompanied personnel who will be required to serve in the area for two years.

5. A member volunteering for accompanied service must, at the time of application present a signed assurance from his wife that she is prepared to go to TARANGAU with him and sign a statement himself that to the best of his knowledge each member of his family whom he proposes to take with him is physically fit for such transfer, having regard to the climate and the limited medical facilities available.

6. A welfare report may be called for in cases where previous compassionate history suggests either that a man's proposal to take his family to TARANGAU or a married member's offer of unaccompanied service may cause difficulties likely to affect his service.

7. If service requirements necessitate the appointment or draft of a member who is not a volunteer he will be required to serve only one year if he does not wish to take his wife and family. If granted a removal, which will be dependent on the statement required in paragraph 5 above, he will be required to serve two years. If, for medical reasons it is not possible to transfer his wife and family, he will be required to serve only one year.

8. Return removals from the New Guinea area will not, except for approved compassionate reasons, be granted before the member has completed his period of service in the area, unless he is appointed or drafted from the area otherwise than at his own request. The conditions governing leave travel and removal on appointment or draft following service in TARANGAU are as laid down in Navy Order 856 of 1960.

9. When a member's family leaves the area before completion of his period of service in the area, a draft not having been approved, a return removal will not normally be granted except as indicated in paragraph 8. The member will be required, subject to the exigencies of the service, to complete his period of service in the area.

10. As all service residences in the New Guinea area are fully furnished, privately-owned refrigerators and other furniture included in the approved scale of furniture for service residences in that area will not be transported to that area at the expense of the Department.

11. Supplementary items which are not included in the approved scale of furniture for service residences in the New Guinea area, e.g., radios, prams, sewing machines, lawn mowers, vacuum cleaners, floor polishers, &c., will be transported at the expense of the Department. *See* Navy Order 1054 of 1959.

12. The position regarding waiver of percentage charges on furniture, &c., in tropical married quarters is shown in Navy Orders 571 of 1959 and 830 of 1959. *See also* Navy Order 1054 of 1959.

13. Provision for leave travel to Goroka during service at TARANGAU is set out in Navy Order 404 of 1959.

14. I.P.I. 231/29, paragraph 11, defines the policy regarding private motor vehicles at TARANGAU.

15. These conditions should be brought to the attention of all officers and ratings. Names of volunteers for service at TARANGAU should be forwarded in accordance with Navy Order 229 of 1959, paragraph 11. Volunteers should state whether they wish to be considered for accompanied or unaccompanied drafting.

16. I.P.I. Article 231/5 is to be annotated "This article refers only to Darwin Area *vide* Navy Order 893 of 1960."

17. I.P.I. will be amended in due course.

18. This order will be reprinted for posting on notice boards.

19. Navy Order 254 of 1960 is hereby cancelled.

(HPB 302/2/1.)

(*Navy Orders* 229, 404, 571, 830 *and* 1054 of 1959 *and* 254 *and* 856 *of* 1960.)

UNCLASSIFIED.

894.—Effect of Sick Leave Occurring During Recreation Leave or Furlough and the Effect of Sick Leave on Recreation Leave.

In future, where a member becomes ill during the course of either recreation leave or furlough, the period of any leave so affected may now be recredited to him subject to the following conditions—

(*a*) *Recreation Leave* .. Where such leave is interrupted by a sickness of at least 4 days' duration.

(*b*) *Furlough* .. .. Provided that the period of sickness is of not less than two weeks' duration.

2. However, for a member to receive the recrediting of either recreation leave or furlough, it is essential that medical evidence of unfitness for duty is submitted **at the time** of falling ill.

3. In addition, it has been decided that no deduction should be made from a member's accruing recreation leave credits on account of any absence through sick leave.

4. The provisions of paragraph (23) of Article 555 of Consolidated Orders and Regulations are hereby cancelled.

5. This order will be incorporated in R.I. in due course and is being reprinted for posting on notice boards.

(HPB 319/1/13.)

RESTRICTED.

895.—Films and Filmstrips, Instructional—S.A. 1078, "Distress, Search and Rescue and Submiss/Subsunk Communication Organization"—Distribution.

(*A.F.O.* 1645/1960.)

Copies of the Admiralty instructional filmstrip "Distress, Search and Rescue and Submiss/Subsunk Communication Organization" (Serial No. SA. 1078) are being obtained and the initial distribution will be made without demand by S.N.S.O., Sydney, on the following scale—

Establishment.	*No. of copies.*
Flinders Naval Depot (for Signal School)	1
R.A.N. Film Library, Sydney	1

2. The filmstrip shows the communication organizations and procedures for Distress, Search and Rescue, and Submiss/Subsunk operations.

3. The strip which consists of 42 frames is classified Restricted.

4. A printed training guide will be issued with each copy of the strip.

(DNAS 519/56/109.)

UNCLASSIFIED.

896.—Instructional Films—A.519, "Protection in Atomic Warfare"—Depiction of Incorrect Procedures.

(*A.F.O.* 1575/1960.)

Holders of Part 3 of the A.B.C.D. instructional film "Protection in Atomic Warfare" (Serial No. A.519) should note that the details of monitoring procedure depicted are incorrect, and that the procedure laid down in Navy Order 329 of 1960 (A.B.C.D.—Radiological Monitoring Organization and Techniques) is to be followed.

(DNAS 519/56/108.)

(*Navy Order* 329 *of* 1960.)

UNCLASSIFIED.

897.—Method of Leave or Duty Travel From and Through Melbourne to R.A.N. Air Station, Nowra, and from Nowra to the Same Areas. Duty Travel Between Nowra and R.A.A.F. Station, East Sale.

Members of the Royal Australian Navy travelling either on leave or duty from or through Melbourne to the Royal Australian Naval Air Station, Nowra, may in future travel by rail as far as Moss Vale, and from Moss Vale by bus to Nowra. Service transport will then convey members to the establishment. Similar arrangements will apply to such personnel proceeding from Nowra to or through Melbourne.

2. It has been ascertained from the bus company that no limit or charge will be imposed for the conveyance of any luggage, &c. Attention is drawn to the fact that the bus service operates from Mondays to Saturdays only.

3. For the information of ships and establishments, a time table relative to both rail and bus travel is given in the appendix to this order.

4. Where members are required to travel on appointment or draft from and to R.A.N. Air Station, Nowra, and R.A.A.F. Station, East Sale, Victoria, bus travel via the Princes Highway may be utilized. However, bus travel direct to either Melbourne or Nowra via this route is not be be used.

5. The existing conditions governing air travel on duty or leave will still continue to apply.

6. The contents of this order will be incorporated in I.P.I.

7. This order will be reprinted for posting on notice boards.

APPENDIX.

	Trains.		Buses.	
	Dep. Melbourne.	*Arr. Moss Vale.*	*Dep. Moss Vale.*	*Arr. Nowra.*
Mon.–Sat.	8 a.m.	7.27 p.m.	—	—
Mon.–Sat.	4.15 p.m.	6.59 a.m.	9 a.m.	11.10 a.m.
Mon.–Sat.	6.30 p.m.	8.47 a.m.	9 a.m.	11.10 a.m.
Sunday ..	5 p.m.	6.42 a.m.	—	—
Sunday ..	6.30 p.m.	8.07 a.m.	—	—

	Buses.		Trains.	
	Dep. Nowra.	*Arr. Moss Vale.*	*Dep. Moss Vale.*	*Arr. Melbourne.*
Mon.–Sat.	—	—	9.51 a.m.	8.55 p.m.
Mon.–Sat.	2 p.m.	4.30 p.m.	10.56 p.m.	1.15 p.m.
Mon.–Sat.	2 p.m.	4.30 p.m.	10.05 p.m.	11.30 a.m.

(HPB 187/1/1.)

UNCLASSIFIED.

898.—Punishments for Leave-Breaking—Revised Regulations.

Navy Order 1112 of 1959 is to be amended as follows—

Delete paragraph 9 of Appendix and *insert* in its stead—

"9. One day's pay for the purpose of computing a mulct of pay is the daily rate of Active Pay, excluding pence, payable to the offender according to his rating and pay seniority at the date of his conviction."

(HPB 321/6/9.)

(*Navy Order* 1112 *of* 1959.)

UNCLASSIFIED.

899.—Vaccination and Immunization.

The following paragraph is to be added to Navy Order 358 of 1960 in lieu of present paragraph 49—

"*Age of Person Vaccinated.* One year and over. Personnel over the age of 35 need not be re-immunized annually unless a medical officer considers that there is a special risk which would justify its use. A person over the age of 35 years is not to be refused T.A.B. immunization or a booster dose if it is requested."

(MDG 327/54/19.)

(*Navy Order* 358 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

900.—Illumination of Ships on Ceremonial Occasions.

A new design of standard floodlighting equipment developed by the Admiralty to replace existing outline circuits held by most ships is being adopted for use in the R.A.N.

2. The policy is to fit ceremonial floodlighting in all new construction ships where applicable and in place of outline circuits in existing ships as an alteration and addition to be carried out on modernization or when the outline circuits become defective and beyond economical repair.

3. Arrangements have been made to install the new equipment in Type 12 Frigates now building. Installation drawings for the various classes of existing ships will be prepared at Navy Office after experience has been obtained on installation and operation of this equipment on Type 12 Frigates.

(DEE 1211/51/39.)

UNCLASSIFIED.

901.—H.M.A. Ships—Main Refrigeration and Air Conditioning Plants—Piping Connections.

Cases have frequently been reported of the fracture of the copper pipe connections of refrigerating compressors in H.M.A. ships leading to the loss of the gas charge and occasionally to the spoiling of refrigerated stores.

2. In order to reduce the risk of such failures, arrangements are to be made to fit vibration eliminators in the suction and delivery connections of all main refrigerating and air conditioning compressors at the first available opportunity, the work being treated as a defect.

3. A suitable type of vibration eliminator is marketed under the brand name "American" and can be obtained by local purchase from refrigeration equipment suppliers. These fittings are normally hard soldered to the lines and should be ordered to suit the O.D. of existing copper lines.

4. Vibration eliminators should be accounted for as Naval Stores, class B, group 8, part E.

(DEE 1112/51/37.)

RESTRICTED.

902.—Replenishment at Sea—6-in. Fuelling Equipment, Shut-Off Valve, Pattern 6054 for Hose—Damage to Pump and Pipe Lines.

(*A.F.O.* 902/1960.)

Damage to the relief valves and pipe lines of Replenishment at Sea tankers which has been occurring recently is attributed to the incorrect use of the pattern 6054 shut-off valve.

2. The valve was designed as a means of preventing spillage of oil in the event of an emergency breakaway involving the breaking of the pattern 6051 coupling. There is no authority for the use of the valve as a means of stopping the flow of oil quickly under normal conditions, although there is no objection to its being used, *after the tanker has ceased pumping*, to avoid the necessity of draining hoses.

3. Ships while being re-fuelled are not to shut off against the pumps of Replenishment at Sea tankers except in an emergency, otherwise irreparable damage to pumps, relief valves and pipe lines may be caused.

4. Further, damage has occurred to the pattern 6054 valves due to incorrect operation, and to avoid this it should be ensured that these valves are not opened against pressure in the hose line. The hoses may be full but unpressurized. If, however, with pressure released, the valve is jammed in the shut position, due to stickiness of rubber facings, it may be released by tapping with a light hammer, but undue force is to be avoided in order to obviate damage to the valve.

5. If damage is known to have occurred to the valve in hauling aboard or for any other reason this fact should be reported immediately to the supplying ship so that the necessary remedial action can be taken, it being noted that an unreported damaged valve can prejudice the replenishment of other ships in the programme.

6. Navy Order 181 of 1960 is hereby cancelled.

(DNC 1211/51/135.)

(*Navy Order* 181 *of* 1960.)

UNCLASSIFIED.

903.—4.5-in. Twin R.P. 41 Mountings, Marks 6 and 6*—Modification No. AN. 101, Mark 6*, Mod. 1—Modification AN. 3. Access Door in Gunhouse.

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted; Gunnery Equipment Depots.
(*b*) *Type of equipment* ..	4.5 R.P. 41 mountings mark 6 series.
(*c*) *Part of equipment affected*	Rear wall of gunhouse.
(*d*) *Purpose of modification* ..	To assist passage through the access door.
(*e*) *Nature of modification* ..	To provide a handrail above the access door at the right hand side of the rear of the gunhouse.
(*f*) *Drawings*	N37311.F. dated (14.9.60).
(*g*) *By whom to be done* ..	Dockyards.
(*h*) *When to be done* ..	At the earliest opportunity.

2. Navy Order 406 of 1960 and B.R. 2014B are relevant.

(DW 736/259/14.)

(*Navy Order* 406 *of* 1960.)

UNCLASSIFIED.

904.—Naval Stores (General)—"Larne" Targets—Use as Splash Targets in Lieu of Pattern B5b/8824 Floats.

(*A.F.O.* 1553/1960.)

The use of Pattern B5b/8824 floats as splash targets is to be discontinued and "Larne" targets are to be used for the purpose instead.

2. The " Larne " target is of wooden construction and details are given on Plate 9 of B.R. 1596—Handbook on Targets. A metal scoop fitted to the after end produces a splash comparable to that of the Pattern B5b/8824 float. The target is suitable for use with close range weapons, and can be towed on a 1-in. flexible steel wire rope (300 fms.) up to a maximum speed of 28 knots.

3. " Larne " targets are to be manufactured by ship's staff and carried by aircraft carriers, destroyers and frigates. Stocks of the metal scoops will be held by S.N.S.O., Sydney, under class B, group 10, part C, and demands should be forwarded accordingly.

(DNAS 458/51/2.)

UNCLASSIFIED. Cancelled NO 669/62

905.—Lifting Appliances—Ropes—Examination.

(*A.F.O.* 2404/1960.)

An accident occurred involving the lifting rope of the 5-ton auxiliary hoist of a 20-ton electric crane. The rope failed in service due to rusting of the wire, and perishing of the splice serving inside the ponder-ball.

2. Where the hoisting ropes of lifting appliances are enclosed for any part of their length by a ponder-ball, guard or similar covering, this covering is to be removed on each occasion that an examination of the rope is carried out, in order that the whole length of the rope may be exposed for inspection and preservation, as necessary.

3. Navy Order 971 of 1958 is hereby cancelled.

(DNC 177/51/31.)

(*Navy Order* 971 *of* 1958.)

UNCLASSIFIED.

906.—Naval Stores (General)—ZX28—Anti-Sieze Compound Extension of Use.

Grease ZX28, molybdenum disulphide anti-sieze compound in 2-oz. tubes was introduced by Navy Order 217 of 1959 for air purposes. This grease has now been included in the period contract for lubricating oils, greases, &c., for Service Departments and is available in 1-lb. and 5-lb. tins.

2. This compound is intended for use prior to assembling fasteners and threaded connections in services where high temperatures are likely to be encountered, e.g., steam systems, gas turbine applications and I.C. engine exhaust pipe joints, and thus to minimize their liability to seizure after subjection to prolonged high temperature. It can also be used on aircraft engine parts—e.g., screw threads, bolts, couplings, &c., to minimize fretting corrosion in areas where slight relative movement occurs between highly loaded surfaces. The mating surfaces must first be thoroughly degreased. The compound, which is in the form of a thick paste, should then be smeared on lightly.

3. The compound is not to be used for I.C. engine cylinder head studs.

4. Due to the high proportion of molybdenum disulphide in the compound its cost is high and its use should therefore be restricted to the purposes referred to in paragraph 2 above.

5. The initial quantities required by the various classes of ships are shown in the appendix to this order. Commanding Officers of ships concerned in commission should forward demands to the nearest Naval Store Depot accordingly. Supply of First Outfit quantities to ships under construction and re-storing after refit should be arranged by (S)Naval Store Officers in the normal manner.

6. Grease ZX28 for air purposes if not already stocked will be supplied in the following first outfit quantities—

Ref.	*Denom.*	*N.A.S. Nowra.*	*H.M.A.S. MELBOURNE.*
9428473	Tube 2-oz.	30	10

6. Navy Order 217 of 1959 is hereby cancelled.

APPENDIX.

Class of Ship.	*First Outfit Quantities.*
Aircraft Carriers (H.M.A.S. MELBOURNE)	8 lb.
Daring Class Destroyers	2 lb.
Other Destroyers, Frigates	1 lb.

(DNAS 512/87/73.)

(*Navy Order* 217 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

907.—Magazine—" The Communicator "—Distribution.

The following is the revised distribution for the magazine " The Communicator " which will be brought into force with the Christmas Edition.

2. There will be at least 2 spare copies which may be demanded by ship's requiring an extra copy.

Navy Office (Canberra)	2 No. (DSD).
Victoria Barracks (Melbourne)	1 No. (D/DSD).
C.S.T.F.N.D. (Signal School)	3 No.
S.T.C. Sydney (Kuttabul)	2 No.
HARMAN (for Canberra Naval Radio Station)	3 No.
MELVILLE (for Darwin Naval Radio Station)	2 No.
WATSON	1 No.
LONSDALE (and R.A.N.R.)	1 No.
RUSHCUTTER (and R.A.N.R.)	1 No.
LEEUWIN (and R.A.N.R.)	2 No.
TARANGAU	1 No.
N.A.S. Nowra	1 No.
A.J.A.S.S.	1 No.
F.O.C.A.F.	1 No.
ANZAC	2 No.
BARCOO	2 No.
DIAMANTINA	1 No.
GASCOYNE	1 No.
MELBOURNE	2 No.
PARRAMATTA	2 No. (when commissioned).

QUEENBOROUGH	2 No.
QUIBERON	2 No.
QUICKMATCH	2 No.
SWAN	1 No.
TOBRUK	2 No.
VAMPIRE	2 No.
VENDETTA	2 No.
VOYAGER	2 No.
WARREGO	1 No.
YARRA	2 No. (when commissioned).
Spares	2 No.

(DSD 465/58/263.)

UNCLASSIFIED.

908.—Standardization of Tool Store Loan Chits.

It has been decided to introduce a standardized tool store loan chit, to be known as form A.S. 3112Z/A.D. 1262Z, for general use where tools are issued on loan to workmen and ratings.

2. Forms A.S. 3112Z/A.D. 1262Z, in pads of 100 each, are available on demand from S.N.S.O., Sydney.

3. Stocks of existing local forms should be used to exhaustion.

(DNAS 464/54/281.)

UNCLASSIFIED.

909.—Telegraphic Typewriters—Double Case.

It has been decided to introduce double case telegraphic typewriters, with the keyboard modified to standardize with teletype keyboards, for use in the R.A.N.

2. Small stocks only are held at present, and an initial distribution, without demand has been arranged to ships and establishments for use in Wireless and/or Main Signal Offices.

3. On receipt of supplies of double case machines, ships and establishments are to return an equivalent number of single case machines to S.N.S.O., Sydney.

(DNAS 462/53/8.)

Section 6.
ESTABLISHMENTS.

RESTRICTED.

910.—Armament and Gunnery Equipment Depots, Maribyrnong and Byford—Reduction of Activities.

Activities at the Armament and Gunnery Equipment Store Depots, Maribyrnong and Byford are being curtailed. Henceforth it will be necessary for H.M.A. ships to obtain, as normal procedure, all requirements of ammunition and ordnance stores from the appropriate establishment at Sydney.

2. It has been decided also that pending further instructions, ships are to land ammunition in accordance with B.R. 862, Chapter VI., at Sydney prior to refitting at Williamstown.

3. In exceptional circumstances, limited supplies and services may be arranged through the Officer-in-Charge, Armament Depot, Maribyrnong, subject to a minimum of two weeks' notice.

4. Armament Depot, Maribyrnong, will continue to supply to ships building at Williamstown, the outfit of gunwharf stores and gunnery equipment, stores for trials, and a navigational set of armament stores, but it will be necessary for the ammunition outfit to be drawn at Sydney.

(DW 700/255/66.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

REGISTRAR

FOR OFFICIAL USE ONLY. C.N.O. 886/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
16th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

8751/60.

UNCLASSIFIED.

886.—Lifting Appliances—Tests, Maintenance and Periodical Inspections.

(*A.F.O.* 688/1960.)

This order consolidates the important instructions which are to be complied with when carrying out the tests, maintenance and periodical inspections of lifting appliances and associated equipment on H.M.A. ships and includes notes for general guidance and information. Additional copies of this order can be obtained on application to Navy Office.

Periods for Tests.

2. Unless otherwise stated in subsequent paragraphs, all lifting appliances including derricks, davits, cranes, winches, overhead runways, turntables, chains, blocks, Thomas grabs, &c., are to be tested by dockyard officers at each ship refit, subject to the period between tests not exceeding 2¼ years.

3. When lifting appliances due for test have not been used since the last test, a statement to this effect should accompany the Commanding Officers' request for test, and dockyard officers should exercise their discretion as to whether re-test is then considered necessary. This relaxation does not apply to lifting appliances for handling torpedoes, warheads, depth charges, mines, paravanes, ammunition, gun armament and ahead throwing weapon projectiles.

4. The specified interval between tests given in these instructions, viz., the interval between ship refit periods, will be on an average about twelve months for ships in commission.

Method of Initiating Tests.

5. Requests for tests to be carried out by Dockyards are to be initiated by the ship's officers on a main defect list.

Nature of Tests.

6. For ships under construction, and conversion, the specified tests of all lifting appliances and associated equipment are invariably to be indicated on the relevant drawings. These tests are to be applied in the first instance, at each subsequent occasion of testing and also after any repairs or alterations affecting the strength of any part of the lifting or guying systems have been carried out, unless further instructions involving modifications to the test loads have been issued. If any uncertainty exists as to the tests to be applied, the matter should be referred to the Naval Board.

7. The rig of the system, when being tested, is to be in accordance with the approved arrangements, as any variation from these arrangements may result in dangerous stresses occurring in some of the component parts of the system. No alteration to the rig of any lifting system is to be made without prior Naval Board approval. Each lifting and handling system is to be tested as a complete unit.

8. The test is to be carried out on board by dockyard officers with the system rigged in the authorized manner by the ship's staff to ensure that all gear and fittings in association therewith, whether portable or part of the ship's structure, are fully tried. The ship's officers should arrange to be in attendance during these tests.

9. Where the purchase of any system is of cordage the static load of twice the working load is not to be suspended by the purchase, but is to hang by a strop on the head of the derrick or davit, &c. This is to avoid overstretching and injuring the cordage.

10. Any equipment, including spare gear not subjected to test during the tests of the various systems, e.g., geared blocks, strops, spare purchases, &c., is to be tested ashore by the dockyard officers.

11. The term "safe working load" used in connection with these tests is the maximum weight which the system as rigged is approved to hoist and it should be carefully noted that this figure will not in general be the same as the safe lifting load which may be stamped on some of the component parts, leading blocks, &c., and will almost invariably be less than the lifting load marked on the individual parts of the equipment.

12. The lifting appliance should first be surveyed after which the undermentioned tests, in general, are to be carried out in the following order—

(*a*) The system is to be loaded at rest with a static load equal to twice the working load.

(*b*) With the system fully rigged the working load is to be raised and lowered and traversed, where applicable, so as to test all parts of the system; this load is to be moved to the fullest extent possible throughout its complete designed range.

(*c*) A running load of one and a half times the working load moved in the same manner as the working load.

13. If, in a power worked system, the power unit is unable to lift the running test load throughout the full range, the maximum load that can be so lifted is to be applied and reported to the Naval Board.

14. In applying a static test load to a system with the gear, as rigged, in which an electrically driven winch fitted with a slipping clutch is the lifting unit, it should be first confirmed that the slipping clutch is designed to hold twice the working load.

15. After completion of each of the tests the whole gear is to be carefully examined visually for flaws and defects. Any suspected flaws or defects should be investigated by means of radiography, ultrasonics, magnetic crack detector, or in the case of radial davits of forged steel drawn from a solid ingot, by fire-proofing. Where repairs are carried out the whole of the gear is to be re-tested. The results of all tests and examinations are to be recorded and a copy is to be forwarded to the Naval Board and a copy supplied to the Captain for future reference.

16. Any defects that develop during these tests which indicate some form of weakness in design, are to be reported to the Naval Board. For torpedo, &c., lifting equipment, a copy of the reports is to be sent direct to the Director of Weapons, Department of the Navy, Melbourne.

17. If, whilst a ship is on service, any part affecting the strength of the lifting and handling equipment becomes defective and is repaired or renewed, a test, which would normally be carried out at a dockyard, is to be applied by the ship's staff using loads as near the standard loads as can be arranged, before the appliance is passed into service. The result of this latter test is to be recorded and a standard test by dockyard officers is to be carried out at the first opportunity.

18. If there is any reason to suspect that any lifting appliance has been unduly strained, the Commanding Officer should make a request for a re-test to be carried out at the first opportunity without waiting for the usual test period. All parts of a lifting system, including all permanent fittings, are to be carefully examined after lifting maximum loads.

Test Tally Plates.

19. Unless test particulars are stamped on individual items of equipment, test tally plates showing the following data are to be fixed in a conspicuous position whenever a test is applied—

Tested (place and date).
Static load.*
Safe working load.
Initials of person responsible for test.

* Where applicable.

20. Where the system is tested with the gear rigged, the tally plate is to be marked as follows—

System tested as per approved rig.
Tested (place and date).
Static test load.*
Running test load.
Safe working load.
Initials of persons responsible for test.

* Where applicable.

21. Care is to be taken that any securing holes for the attachment of test tally plates or stamp and centre punch markings are positioned so that the strength of the fitting is not impaired.

Miscellaneous Appliances.

22. For ships under construction, the tests of all lifting appliances and associated equipment are to conform to the requirements of the appropriate specifications. For certain appliances, e.g., cranes, the initial tests are more comprehensive than those required to be carried out subsequently, whilst for other, shop trials at maker's works are carried out which are not repeated after the appliances have been fitted on board. When carrying out subsequent tests on the particular appliances referred to below, the following is to be observed in amplification of the instructions contained in paragraphs 2 to 4:

Power and Hand-operated Cranes.

23. To be tested as follows—

(*a*) The working load is to be raised and lowered at the maximum specified radius, by means of the hoisting motion, raised and lowered by means of the topping motion of cranes so provided, and slewed each way with the ship not heeled.

(*b*) At the maximum specified radius a load of 50 per cent. greater than the working load is to be raised,* held, topped* (when applicable), and slewed each way with the ship not heeled, and lowered slowly so as to test all parts of the cranes.

* *Note.*—Except with hydraulic cranes, where the overload is to be placed on the hook, not raised or topped, and the remaining tests carried out.

(*c*) No greater test load than that described in (*b*) should be applied to deck cranes.

(*d*) Electrically-operated cranes should be tested in all their movements when carrying the maximum working load. The speeds of operation and motor currents obtained in this test should approximate to those obtained when the cranes were installed. Where this information is not held on board, it should be obtained from the Director of Electrical Engineering, Department of the Navy, Victoria Barracks, Melbourne.

Mobile Cranes.

24. To be tested as follows—

(*a*) The safe working load is to be raised and lowered at the specified outreach and normal working speed.

(*b*) A running test load of 25 per cent. in excess of the safe working load, in the case of 5-ton and 5.35-ton cranes, and 50 per cent. in excess of the safe working load in the case of 20,000 lb. cranes, is to be raised, held and lowered at the specified outreach. Operation at a slow speed is acceptable for this test. The chassis should be stationary.

(*c*) If ashore, the crane is to be on a level surface when handling the test loads; if on board ship, the crane is to be on an armoured part of the flight deck or over the hangar bulkhead. The motions are to be performed carefully to thoroughly test the equipment, crane structure and operating gear.

(*d*) No greater test load than that described in (*b*) should be applied.

(*e*) The crane should be tested in all its movements when carrying out the safe working load test. The hoisting speeds should be as follows—

(i) 3½-ton crane	35-ft. per min.
(ii) 5-ton crane	23-ft. per min.
(iii) 5.35-ton crane	23-ft. per min.
(iv) 20,000-lb. crane	15-ft. per min.

The existing instructions as to the areas of flight decks over which the crane can be used will apply during movements of the chassis.

Fork Lift Trucks.

25. To be tested as follows—

(*a*) The safe working load is to be raised to the appropriate maximum height on the forks at normal working speed.

(*b*) A running test load of 25 per cent. in excess of the safe working load is to be raised, held and lowered at a slow speed.

Note.—When carrying out this test, the relief valve of the hydraulic circuit must be temporarily adjusted to take this load. The chassis should be stationary.

(*c*) No greater test load than that described in (*b*) should be applied.

(*d*) If ashore, the fork lift truck is to be on a level surface with the mast vertical when handling the test loads; if on board, the truck is to be on an armoured part of the flight deck or over the hangar bulkhead. The motions are to be performed carefully to thoroughly test the equipment, truck structure and operating gear.

(*e*) The ork lift truck should be tested in all its movements when carrying the safe working load. The existing instructions as to the areas of flight deck over which the truck can be used will apply during movements of the chassis.

Quick Release Couplings.

26. The periodic testing of these couplings is carried out by dockyard officers who are responsible for their withdrawal from service at intervals of approximately twelve months.

Lifts Fitted in Aircraft Carriers.

27. All lifts fitted in aircraft carriers are to be tested as follows—

(*a*) Quarterly by ship's staff. The full working load is to be raised and lowered.

(*b*) At each ship refit period by dockyard, subject to the period between tests not exceeding 2¼ years. Tests embodying the operation at slow speed of loads 50 per cent. greater than the full working loads are to be applied so as to test all parts of the lift.

(*c*) In lifts with roller chains, the chains are to be visually inspected every three months by the ship's staff, and attention is drawn to the following—

(i) Though the operating speed of the chain is comparatively slow, it is essential that the bearing surfaces be adequately lubricated.

(ii) The inside plates of the chain should be examined to see whether there are indications of rubbing against the wheel teeth, which would indicate mal-alignment.

Aircraft Lifts.

28. The periodic tests by dockyard are to be carried out as follows for ships named below—

(*a*) *H.M.A.S. SYDNEY.* (Working load 15,000 lb.)
Test load 22,500 lb. to be placed on middle line on an area 5½-ft. square, 8-ft. forward or aft of the transverse centre line. Disconnect wires No. 18 and No. 19 at control panel to obtain slow running. Operate lift in both directions through full travel at slow speed with motor generator set running. Remove test load and reconnect wires No. 18 and No. 19 for normal running.

(*b*) *H.M.A.S. MELBOURNE.* (Working load 24,000 lb.)
Test load 36,000 lb. to be placed on an agreed area on the middle line of platform at a fore and after position representing the centre of gravity of the aircraft. Operate the lift in both directions at slow speed by means of slow running switch.

Bomb and other Lifts, and Associated Equipment.

29. The periodic tests by dockyard are to be carried out as follows for ships named below—

(*a*) *H.M.A.S. MELBOURNE.*

(i) *Bomb Lift.* (Working load 2,600 lb.)
Test load 3,900 lb. to be placed evenly over floor of cage. Lift to be wound slowly downwards by emergency handle. When down, remove 1,300 lb. and operate lift electrically.

(ii) *Rocket Lift.* (Working load 2,600 lb.)
Test load 3,900 lb. to be placed evenly over floor of cage. Lift to be lowered at slow speed by means of slow running switch, 500 lb. to be removed and lift raised.

(iii) *Overside Rocket Lift.* (Working load 820 lb.)
Test load 1,230 lb. to be placed evenly over floor of lift. Operate lift in both directions throughout travel.

(*b*) *H.M.A.S. SYDNEY.*

(i) *Bomb Lift.* (Working load 2,600 lb.)
Test load 3,000 lb. to be placed evenly over floor of cage. Lift to be wound slowly downwards by emergency handle. When down, remove 400 lb. and operate electrically.

30. *Bomb Room Overhead Gear.*

Remove all bomb grippers from overhead traversers and attach a suitable hook or eye for attaching test load.

31. *Flight Deck Gantries.*

(*a*) *Left Hand Gantry Arms.*

(i) Remove bomb gripper and attach a suitable hook or eye to the Pul-Lift for attaching test load.

(ii) Test load of 6,000 lb. is to be raised and lowered by Pul-Lift and traversed in both directions at slow speed.

(*b*) *Right Hand Gantry Arms.*

(i) Remove bomb gripper and attach a suitable hook or eye to the Pul-Lift for attaching test load.

(ii) Test load of 750 lb. is to be raised and lowered by Pul-Lift and traversed in both directions at slow speed.

(*c*) *Pul-Lift on Right Hand Gantry at Flight Deck.*

This should be removed and attached to a suitable structure and a test load of 6,000 lb. raised and lowered slowly.

(*d*) *Bomb Grippers.*

All bomb grippers should be static-load-tested by attaching to a suitable structure and loaded to 4,000 lb.

32. Wires referred to in these instructions are the numbered electrical connections shown in the wiring diagrams, " as fitted " drawings and in diagrams inside the control panels of the various lifts.

3. In some instances an alteration in the working load has been approved and in these cases the test load to be applied is the specified test load and not a load 50 per cent. greater than the new working load.

34. Attention is drawn to the necessity of securing lifts by tackle or other means independent of the safety gear whenever the wires are being repaired or overhauled and before men are sent to work in the lifts or trunks. *When the wires of lifts are being overhauled or repaired the safety gear is never to be relied upon as the only means of securing the lifts in position.*

Aircraft Lift Platforms—Brakes.

35. The brakes on the aircraft lifts should be capable of sustaining static loads considerably in excess of the working load of the lift, provided the brakes are correctly adjusted and maintained in good working order. In order to ensure that the brakes are satisfactory, they are to be tested by dockyard officers at each ship refit period by applying a static load equal to twice the working load of the lift. This test load should be well distributed over the platform.

36. The attention of Commanding Officers is drawn to the need for care in avoiding the inadvertent overloading of the lift platform when it is at flight deck level on such occasions as storing ship or ranging aircraft. In general, the static load placed on the lift should not exceed 1½ times the working load, but it is an operational requirement to park two aircraft on the lift platform and if the weight of each approaches the working load of the lift, the hand operated brakes should also be applied. In no cases should the static load be allowed to exceed twice the working load.

Method to be adopted for the Adjustment of Solenoid Operated Brakes of Electrically Operated Aircraft Lifts.

H.M.A.S. MELBOURNE and SYDNEY.

37. It is of the utmost importance that solenoid operated brakes should at all times be efficiently maintained and frequently checked. The correct method to be adopted for their adjustment is as set out below—

(*a*) Linings should be non-greasy, rivets well countersunk and all hinge pins free and well lubricated.

(*b*) Set screws on brake arms should be slacked back and then it should be carefully checked that magnet plunger is fully home, and not held by top disc on top of magnet.

(*c*) The set screws on brake arms should be screwed up until the magnet plunger lifts about 0.1-in. to 0.125-in.

(*d*) Tighten up brake springs equally until brake just operates, then slack back $\frac{1}{8}$-in. The designed working length of spring with brake applied is $4\frac{5}{16}$-in. but spring could be operated at $4\frac{3}{16}$-in. quite safely.

A further refinement following the above is to screw up set screws, with magnet energized, just sufficiently to eliminate sounds of rubbing from the shoes with the lift running.

38. *Air Armament Lifting and Transporting Equipment.*

(*a*) *Bomb Skids, Pattern No.* 5574 *and Mark* 2. (Working load 2,000 lb.)

(i) The skid is to be carefully surveyed for wear and defects including examination of ball and needle roller bearings on wheels. It is then to be loaded with a load equal to its working load and moved about as would be necessary for its maximum operation. The brake is to be applied quickly at least three times.

(ii) The skid is to be loaded with a load equal to $1\frac{1}{2}$ times its working load and moved about and the brake applied as for the working load. Then it is to be thoroughly examined for signs of straining or fracture.

(*b*) *Bomb Stretcher, Ref.* 4G/3034. (Working load 500 lb.)

(i) To be thoroughly surveyed for cracks or warp and the straps examined for signs of wear or fraying.

(ii) With the end handles supported firmly, so that the feet of the stretcher are a few inches above the deck, apply a static load equal to twice the working load. Then it is to be thoroughly surveyed for cracks and warp.

(*c*) *Bomb Lifting Poles, Ref.* 4G/3206. (Working load 500 lb.)

To be surveyed and then, with pole supported firmly at each end, a static load equal to twice the working load is to be suspended from the swivel hook. Re-survey for bending or cracking in bar, lifting hook and U support.

(*d*) *Bomb Carrier, Pattern No.* 5575. (Working load 2,000 lb.)

Treat similarly to Bomb Skids, Pattern 5574.

(*e*) *Trolley, Pattern No.* 46. (Working load 1,250 lb.)

This trolley is used for moving torpedo warheads, and is similar to a railway porter's truck, having cast wheels, solid rubber tyres and a $\frac{7}{8}$-in. thick wooden platform. It is to be tested in the same way as Bomb Skids, Pattern No. 5574.

(*f*) *Torpedo Bomb Trolley, Mark* 1. (Working load, 2,000 lb.)

(i) A test load of 2,500 lb. should be raised through the range of lift in three minutes with continuous operation and remain in an elevated position for half-an-hour without more than $\frac{1}{2}$-in. settling during this time. The minimum and maximum height for the range of lift is as follows—

Ground to underside of weapon $14\frac{7}{16}$-in. min.
Ground to underside of weapon 80-in. max.

(ii) The relief valve should be set to lift 336 lb. on the quick lift large diameter pistons, and to change over to the small diameter high pressure pistons at loads 20 per cent. in excess of this.

(iii) The moving table should operate satisfactorily over the full range of travel in both fore and aft, and port and starboard directions, the total travel to be 8 inches and 5 inches respectively, and be able to tilt 3° downwards towards the towing handle, and 17° downwards away from the towing handle. Rotation in azimuth 360°, i.e., when lifted clear of the tyres.

(iv) The table, when set parallel to the ground, should maintain parallelism throughout its lift to within $\pm$ 1°.

(v) The steering mechanism shall operate without fouling, and the trolley shall be capable of turning in a circle equal to 9-ft. 3-in. radius.

(vi) The braking system should hold the trolley on a slope of 1 in 4.

(vii) The trolley is to be tested for lifting with maximum working load. The load then to remain in an elevated position, and there is to be no more than $\frac{1}{16}$-in. creep when measured at the cross head, the ends of which protrude through the frame.

(viii) Functioning of the trolley, as to movement of the trolley as a whole, braking when the handles are released, and movement of the head in all directions are to be quite free for maximum travel.

(ix) The trolley is to be subjected to the overload test in sub-paragraph (i) (i.e., 25 per cent. in excess of the maximum working load) annually.

(*g*) *Air Armament Transporter and Associated Cradles.* (Working load 1,000 lb.)

The test should be as for Bomb Skids, Pattern No. 5574 where applicable.

(*h*) *Type "D" and Type "E" Bomb Slings.* (Working load, Type "D" 500 lb., Type "E" 2,000 lb.)

Slings to be thoroughly examined for wear and defects, followed by loading with a static load equal to twice the working load, and then a further examination for defects.

(*i*) *Bomb Loading Hoist, Type "C".* (Working load 1,200 lb.)

Hoist cable and end fittings to be thoroughly examined for defects followed by loading with a static load equal to twice the working load, and then a further examination for defects.

(*j*) *Bomb Trolley, Type "C", Mark* 3. (Working load 4,000 lb.)

Treat similarly to Bomb Skids, Pattern 5574. Test freedom of steering. Test that bombs stops move freely and lock securely in the related position.

Winches.

39. The brakes of power-worked winches are to be tested with a 50 per cent. overload which is to be held by the brakes without slipping, except in cases where the brakes are made to withstand a load in excess of 50 per cent. of the working load of the winch, e.g., minesweeping winch. All winches including those used for handling torpedoes, warheads, mines, depth charges, ammunition, minesweeping and paravanes, are to be tested at each ship refit but not exceeding a period of 2¼ years.

40. Where these winches are tested in conjunction with the approved rig, a test tally plate with particulars as specified in paragraph 20 above, is to be fixed in a conspicuous position and adjacent to the maker's description plate.

41. *Triple-Barrelled Minesweeping Winches.*—" O.M.S." Class, Working load.—The working load of 5 tons is to be raised at a speed of 75-ft. per minute. The high speed underload, i.e., 2½ tons at 300-ft. per minute, is to be left to the discretion of the dockyard officers on the understanding that it may be abandoned where reasonably convenient facilities for its application do not exist, and provided that the winch is run light at revolutions equivalent to a drum speed of 300-ft. per minute for at least 10 minutes so that any tendency to over-heating of bearings, or such defects, may be observed.

42. *Overload Test.*—The overload test is 7½ tons, i.e., 50 per cent. in excess of maximum working load, hauled in at slow speed in order to test the gearing of the winch. Owing to the low factor of safety allowed on the wire due to sweeping difficulties, this test can only be applied to the kite barrel, the corresponding tests for the sweep barrels to be limited to 6 tons.

43. *Brake Tests.*—The specified brake tests, i.e., 15 tons from each of the two outer barrels and 19 tons from the inner barrel at 2-ft. radius, cannot be applied to each brake singly as these loads are the breaking loads of the wires. The barrels are therefore to be clutched together and the brake torque applied as shown on Navy Office Drawing 157/877. The anchoring eyeplates shown on this drawing are diagrammatic. Where eyeplates of sufficient strength exist in the ship in suitable positions, these eyeplates are to be used. If it is necessary for the purposes of the test to fit temporary anchorages, care is to be taken not only that their fastenings are of sufficient strength, but also that the surrounding structure will not be adversely affected.

Derricks and Davits.

44. All derricks and davits including those used for handling torpedoes, warheads, mines, depth charges, ammunition, minesweeping and paravanes, are to be tested at each ship refit provided the period between tests does not exceed 2¼ years. Where derricks or davits are used for dual purposes necessitating different methods of rig, e.g., paravane derricks used for handling ammunition, the specified tests appropriate to each method of rig are to be applied.

Boat Davits.

45. Boats' davits are to be tested at each ship refit period, provided the period between refits does not exceed 2¼ years. Each davit is to be subjected to the specified test loads which it should stand without permanent set or excessive temporary distortion; any deflections are to be carefully measured and recorded. In the case of davits to which a spreader is attached, the davits should be tested with the spreader rigged.

46. When a boat allocated to a ship exceeds in weight the working load to which the ship's derrick or boat davits are tested, the matter is to be reported through the administrative authority and instructions requested as to whether the derrick or davits are to be re-tested to an increased working load.

Boat Slings.

47. The first test on completion of manufacture and all subsequent re-tests are to correspond to twice the working load of the sling. This working load is the pull in each leg of sling, including disengaging gear if fitted, when the boat is suspended at davits, or by similar two point lifts; or the pull in each leg of a bridle sling when lifting by crane, derrick or similar arrangement for one point suspension of boat. The weight of the boat is always to include that of the full equipment and fuel and that of men required to be aboard for lifting and lowering. For seaboats the weight of a full crew should be included.

48. Except where spreader components make it practicable, bridles and slings are not to be tested as a whole; separate tests are to be made with each leg of bridle, span sling and steadying leads, together with all associated joining rings and eyes of disengaging gears or moused hooks.

49. Boat's slings, complete with all associated disengaging gears, &c., of all ships, should be landed for re-test at each ship refit period, and at all other times immediately after repairs have been effected by the ships' artificers. In no case should the period between tests exceed 2¼ years. Form A.S. 1231 (A.D. 786) is to be rendered in triplicate on each occasion, in compliance with the instructions on this form. Ship's officers should carefully scrutinize the certified tests before inserting the form in ship's book, in order that attention may be drawn to possible errors before the ship leaves the port.

50. The test loads for service boat slings are to be as shown on approved sling drawings; where fixed sling rods, sling plates, or similar arrangements are incorporated in the boat, these are to be carefully surveyed together with all fastenings, especially at the lower ends where bilge water is likely to cause corrosion. Results of survey to be shown on Form A.S. 1231 (A.D. 786).

51. Where no information is available regarding tests, either from approved drawings or reference to ship's copy of the previous Form A.S. 1231 (A.D. 786), the test load should be calculated from a diagram of forces, but ship's officers are not to insert calculated test loads on Form A.S. 1231 (A.D. 786) forwarded to dockyards or other testing establishments.

(*a*) For two-legged bridle, the joining ring is to be tested either to twice the lifting weight of boat or twice the working load in the two legs together whichever is the greater.

(*b*) For three-legged bridle, where the distribution of forces is indeterminate, it should be assumed that the test load for the middle leg is 4/3 lifting weight of the boat and that of each side leg equal to the lifting weight; the test load for the joining ring of the three legs is to be twice the lifting weight of the boat.

(*c*) Where boats are suspended from two lifting appliances, as from davits, the working load is to be calculated on the basis of one half the lifting weight of the boat on each sling; the ring joining the two legs of the sling is to be tested either to the lifting weight of the boat or twice the working load in the legs, whichever is the greater.

52. The test load and the date of current test are to be stamped on the rings, enlarged end links of bridle or sling legs, and on the frames of disengaging gear or moused hooks.

53. In ships taken over for naval service from mercantile or private sources or otherwise incorporated in H.M.A. service, special care is to be taken to ensure that the boat slings conform to usual service requirements; sling plates and other relevant fixed fittings in the boat, including fastenings, are to be surveyed, to see that they are efficient and that serviceable clench plates are included with the whole of the fastening arrangements. Results of survey to be shown on Form A.S. 1231 (A.D. 786).

54. The testing of the boat slings should be included in the periodical pink defect list.

55 Special care should be taken by the ships' officers when preparing to lift a boat which has been swamped; the boat should only be gradually raised so that the water can be drained, or otherwise removed, until the total weight to be lifted is not appreciably above the authorized lifting weight of the boat. The lifting weights of boats are given in the appendix to this order and this information until further notice is the only authority for such weights.

Acoustic Sweeps, Inhaul Wires.

56. The inhaul wire when rigged on the derrick is to be tested as follows—

A.D. Mark 3—	Static test load	72 cwt.
	Working load	30 cwt.
	Running test load	51 cwt.
A.H. Mark 4 / A.O. Mark 4	Static test load	4,000 lb.
	Working load	2,000 lb.
	Running test load	2,000 lb.

Foxer Equipment.

57. Foxer davits, rigged as approved, are to be tested as follows—

Static test load	10 cwt.
Working load	5 cwt.
Running test load	7½ cwt.

Depth Charge Gear, Davits, &c.

58. Davits for handling Mark 7 Depth Charges are to be tested as follows—

Static test load	10 cwt.
Running test load	7½ cwt.
Working load	5 cwt.

Ribbon Strops for Torpedo Equipment.

59. Ribbon strops, without leather servings, are to be surveyed and tested to the appropriate working load as follows—

(*a*) Survey and load test immediately before issue.

(*b*) Survey by ship's and depot ship's staff at six months intervals after receipt or test by dockyard.

(*c*) Survey and load test at ship refit period by dockyard. The period between tests is not to exceed 2¼ years.

Machinery Lifting Gear.

60. Hull attachments, together with associated eyeplates, eyebolts, shackles, &c., for lifting machinery items, including propellers, are to be tested in place by dockyard officers to a static load of twice the working load when ship is in hand for large or re-tubing refit. It should be ensured that when the working load is initially assessed the weight of the chain purchase, &c., is taken into account.

61. Before propeller lifting arrangements are rigged for test or changing propellers, hull pads and fittings are to be examined as to their general condition. Eyebolts should be checked, if necessary from the drawing of the approved arrangement, to ensure that they have been specifically supplied for this use. Eyebolt sockets are then to be thoroughly cleaned. Care is to be taken that the faying surfaces on hull pad and eyeplate or eyebolt are free of excrescences which would otherwise prevent accurate faying Eyebolts are to be tightened sufficiently such that the shoulder seats correctly and to prevent slackening back during lifting operations. If doubt exists after inspection that the fittings do not retain their full efficiency, they are to be tested in place by applying the specified static load before use for lifting operations. A foul pull, at an angle to the plane in which the eyebolt lies, should be avoided. In the case of " River " Class Frigates, the propeller lifting arrangements are not entirely in accordance with modern practice. In view of the ages of these ships, it is not intended to change the fittings but these are not to be used. Instead, suitable strops over the quarter deck and preventers are to be rigged for lifting propellers when occasions arise.

62. Most classes of ship are not provided with fittings for lifting shafts. In cases where such fittings are provided, however, they are not to be used in future; instead shafts are to be handled in the normal manner using gantries and jacks as necessary.

Blocks, Geared.

63. All geared blocks for whatever purpose they are provided should be inspected and tested during each ship refit to the appropriate test load shown on the label plate. The period between tests is not to exceed 2¼ years. *See also* paragraphs 65 to 70.

Blocks, Non-geared.

64. Non-geared blocks which have not otherwise been tested as an integral part of a lifting system are to be inspected and tested at a dockyard to the appropriate proof load marked on the block at each ship refit period. The period between tests is not to exceed 2¼ years. *See also* paragraphs 65 to 70.

Blocks, Repair of Load Chains.

65. Consequent upon authorization of the use of high tensile steel chain in lifting appliances, *vide* B.R. 1943 S.D.M. (N) 42/4. *Lifting Gear for Shore Establishments*, it is important that the greatest care should be exercised in the selection of this material when used in the repair of hand operated lifting blocks, particularly where such blocks are of proprietary type, i.e., not strictly to Admiralty pattern or specification.

66. When repair or replacement of the load chain of any block is necessary, none other than material of the same grade as previously fitted to that particular block is to be used.

67. Where identification is difficult, or doubt may exist for any other reason, Navy Office instructions are to be obtained before repairs are carried out.

68. This precaution is necessary to ensure that the lifting capacity of the appliance is not lowered below that for which it is rated due to the incorporation of inferior material during repairs, thereby involving a risk of failure in subsequent use.

69. Until dockyards are fully equipped with the facilities required for the repair and heat treatment of these higher tensile steel chains, work involving the fitting of new links can only be carried out by the chain makers. Appropriate action will, therefore, be necessary on the part of repair authorities at dockyards or bases concerned.

70. The foregoing instructions apply to load chains in particular. Electrically welded, mild steel chain to B.S. 590: 1949 is the minimum standard acceptable for hand chains in these lifting appliances.

Steel Wire Rope.

71. All steel wire rope associated with a lifting appliance which has been used and has not otherwise been tested as a part of such an appliance, is to be subjected to a dead load test of two-fifths the ultimate breaking load at intervals not exceeding 2¼ years. The rope is to be unrove by ship's artificers and sent to a dockyard for re-test. The request from the Commanding Officer of the ship for the ropes to be re-tested is to be accompanied by particulars on the prescribed Form A.D. 786a (in duplicate) of the date and place of the previous test.

72. When tested, the dockyard is to insert in the form a certificate of test. One copy of the certificate is to be furnished to the Commanding Officer of the ship concerned and the other copy is to be recorded at the testing house for reference.

73. *Also see* Q.R. and A.I., Article 5534.

74. When determining the safe working load of steel wire rope for new lifting appliances, the following factors of safety are to be arranged for—

Lift wires	12 (minimum).
Running rigging ex-crane wire	8
Crane wires	6
Standing rigging, including boat bridles	6

Particulars of minimum breaking loads for all grades of steel wire ropes are shown in Specification D.N.C./S.36 incorporated in Material Specification, Part 1.C.

Cordage.

75. Routine test of cordage are to be as laid down in Naval Store Duties Instructions, Article 384, and particulars, shown on tallies, to be attached to each coil. In connection with the visual examination of rig of appliances before commencing and on completion of tests, the following should be noted—

(*a*) No unauthorized departure is to be made from the approved rig, either in respect of size or quality of cordage, as determined by the rigging warrant or otherwise approved, when carrying out the tests. Slings made up for lifting parts of machinery, stores, &c., should be tested as above and slings marked with a tally giving particulars and dates of test.

(*b*) Under normal peacetime supply conditions, untarred sisal and manila, when new, are about equal in strength and rather stronger than tarred sisal. Untarred cordage deteriorates more rapidly than tarred and loses this initial advantage of greater strength after about two months' exposure to sea weather conditions. Coir cordage is about one-fifth the strength of manila or one-fourth the strength of hemp, of same size.

(*c*) Information for ships' personnel is given in Chapter V. of Vol. 2 of the Manual of Seamanship, B.R. 67 (2/51), but to avoid error arising from the use of uncorrected earlier copies of this publication and also of lowered standards of quality due to war-time supply conditions, the figure for the lowest breaking load of hemp should be used for manila or sisal also.

(*d*) The attention of yard officers and overseers responsible for tests is directed to Form A.D. 513.

Hooks.

76. Where a hook is not tested as an integral part of a lifting system, it is to be tested ashore to the proof load stamped on the hook.

Eyeplates and Cleats.

77. Prior to fitting in place, eyeplates and cleats are proof tested in accordance with specification D.N.C./S.48 incorporated in Material Specification, Part 1.C.

78. Welded eyeplates and cleats are only to be used in positions of importance when they can be tested in place after welding, either by direct loading or in connection with the tests of the lifting systems in which they may be incorporated. Tests of eyeplates, &c., are to be shown on Form A.S. 194. Where not associated with lifting systems for which periodic tests are specified, they are to be surveyed during ship refit period or at periods not exceeding 2¼ years, and if then considered necessary, they should be removed and replaced by new fittings.

Chain Cable, &c.

79. Chain cable and chain cable gear and other associated fittings are to be periodically surveyed and tested in accordance with Q.R. and A.I. (Articles 5531–34) and B.R. 367 (Anchors, Chains, Cables, &c.).

Aircraft Lifting Appliances.

80. Aircraft slings, power plant and engine lifting beams and slings and all other lifting tackle used with aircraft or aircraft components, are to be tested as follows—

(*a*) Air Stations and Establishments—At intervals not exceeding 2¼ years.

(*b*) H.M.A. Ships—At each ship refit or at intervals not exceeding 2¼ years.

81. Although this gear is usually supplied as Air Stores under an Air Ministry reference number, as a charge to Vote 8.II, it is nevertheless to be subject to the conditions laid down in this order. Attention is directed to the Air Ministry publication A.P. 2817A, Vol. 1, Section 11, Chapter I. (Lifting Tackle—Servicing and Testing), which contains design data and appropriate test procedure for this type of equipment within the R.A.F.

82. The Air Engineer Officer of the ship, air group or station is to keep a register of lifting tackle on his charge, listing the following information—

(*a*) The description of the appliance.

(*b*) The safe working load.

(*c*) The date when taken on charge.

(*d*) The proof load.

(*e*) Dates of tests carried out and in which dockyard.

He is responsible for inserting the necessary items in the periodical defect list for the testing of such appliances. Should he suspect that a lifting appliance has been overstrained at any time, he is responsible for immediately withdrawing the item from service, and for making arrangements for a survey and proof test to be carried out by dockyard officers as soon as possible.

83. Normally, lifting tackle bearing an A.M. Ref. No. carries a brass tally stamped with test particulars, but this may not be the case with items of early manufacture whose test load must be established on the occasion of the next test and a tally affixed in accordance with paragraphs 19–21.

84. H.M.A. dockyards are periodically issued with a revised list of aircraft slings in current use in the F.A.A. These drawings give sufficient information of prescribed tests and any drawings that may be required in connection with such work can be obtained on application to Navy Office (DAMR).

85. The Air Engineer Officer is himself to decide whether or not a lifting appliance is in a serviceable condition, and should be guided by the instruction for survey and inspection contained in A.P. 2817A. In this inspection, he is not to remove sheave pins, shackles, splice servings or protective coverings unless facilities are readily available for replacement without detriment to the efficiency of the item in question.

86. The following brief extracts from Ministry of Aviation (Aircraft Division Servicing Research and Development) Specification 902/P for Lifting Tackle are for general guidance and information. The specification provides for the supply of lifting tackle for—

(*a*) Special designs for R.A.F. and/or naval aviation which are covered by official drawings.

(*b*) Designs to standard specifications.

(*c*) Proprietary designs.

and includes chain, wire and fibre rope slings, chain pulley blocks, rope sheaves, gantries and shear legs, portable mobile and travelling type cranes (except M/T vehicles), together with such accessories and component fittings as rings, hooks, shackles, swivels, grabs, &c.

87. All items of lifting tackle covered by this specification are designed with a " factor of safety " of not less than 6, except complete aircraft slings designed solely for naval use which have a " factor " of safety " of 4. In the case of multi-leg slings, the safe working load for each sling leg should be shown on the identification tally with the leg at 0°, 45°, 60° and 80° from the vertical position.

88. Each item of lifting tackle, except fibre rope or fibre rope slings, is proof-loaded at manufacture to a load equal to twice the safe working or normal load. Normal loadings are given in A.P. 970.

89. Proof-loading figures for separate pennants are not normally required, since the general practice is to proof-load the complete sling whilst the pennants are spread to the correct angles corresponding to their working position.

Replenishments-at-Sea Reception High Points.

90. High points fitted on H.M.A. ships for use in replenishment-at-sea operations are to be surveyed during each ship refit period or at periods not exceeding 2¼ years. The methods of testing high points are under review and finalized instructions will be promulgated in due course.

Lifting Gear to Armour and other Heavy Hatches.

91. The lifting gear should be examined quarterly, special attention being given to the condition of the shackle pins which should be removed if showing signs of wear. For tests of geared blocks *see* paragraph 63.

Lifting Appliances in Submarines.

92. The test loads of all torpedo lifting appliances in all submarines are to conform to the following—

Static test load	3½ tons.
Running test load	2 tons 12½ cwt.

As the arrangements in submarines were designed originally for a static test of 3 tons and a running test of 2¼ tons, the following procedure is to be adopted—

(*a*) Tests are to be applied by the dockyards as refits provided that the period between tests does not exceed 2¼ years. A visual examination of all the gear is to be carried out by ship's staff or depot ship's staff at intermediate dockings.

(*b*) Should the power units be unable to lift the running test load throughout the full range, the maximum load that can be so lifted is to be applied and reported.

(*c*) The static test load is to be applied at both the lower and upper limits of the purchase wire as rigged.

(*d*) On each occasion of test and at suitable intervals between tests the hoisting wires are to be carefully examined over their whole length and are to be renewed on the first signs of stranding or other defect.

Other lifting appliances are to be tested at refits provided that the period between tests does not exceed 2¼ years. As an exception the 2¼ years maximum period between tests may be exceeded when the submarine is already in refit and the tests will be applied before the completion of that refit.

93. The hoisting wires of periscopes, radar masts, wireless masts and torpedo lifting gear, including the wires on the telemotor presses are generally to be renewed at each refit.

Ships in Reserve.

94. For ships in reserve the period between tests should be as follows—

(*a*) Lifting appliances and associated fittings—To be tested in accordance with the requirements laid down in other parts of this order at ships refit periods; this will generally mean that for ships at naval ports the interval between tests will be three years and for ships at commercial ports the interval will be five years.

All lifting appliances and associated fittings are to be surveyed annually by ship's staff and any defects revealed brought to the notice of the dockyard officers at the next refitting period. Particular attention is to be paid to this survey, especially to ships at commercial ports.

(*b*) Capstans, cable holders, winches and windlasses. *See* paragraphs 111 to 116 regarding periodical inspections.

H.M.A. Fleet Auxiliaries, &c.

95. For vessels built for R.A.N. service under the supervision of classification societies, the tests initially applied to lifting appliances do not always conform to R.A.N. practice. In general, in vessels built under the supervision of classification societies, the initial tests applied to boat davits are in accordance with Board of Trade Regulations, whilst those for other lifting appliances conform to the Statutory Rules and Orders, 1934, No. 279, Docks Regulations, 1934, dated 5th March, 1934; in some instances, however, the tests of certain appliances conform to R.A.N. practice.

96. The standard of tests specified by the Statutory Rules and Orders, 1934, No. 279, Docks Regulations, 1934, dated 5th March, 1934, are appreciably different from those adopted in the R.A.N. service and to illustrate this an extract from these regulations is appended—

> " Every winch with the whole of the gear accessory thereto (including derricks, goosenecks, eyeplates, eye-bolts or other attachments) shall be tested with a proof load which shall exceed the safe working load as follows—

Safe Working Load.	*Proof Load.*
Up to 20 tons	25 per cent. in excess.
20 to 50 tons	5 tons in excess.
Over 50 tons	10 per cent. in excess.

> The proof load shall be applied either by hoisting movable weights or by means of a spring or hydraulic balance or similar appliance, with the derrick at an angle to the horizontal which shall be stated in the certificate of the test. In the former case, after the movable weights have been hoisted, the derrick shall be swung as far as possible in both directions. In the latter case the proof load shall be applied with the derrick swung as far as practicable first in one direction and then in the other."

In view of the various practices adopted, it should be ensured that subsequent tests are the same as those initially applied unless amending instructions in regard to the test loads have been issued. If in doubt as to the tests to be applied on a subsequent occasion of testing, the matter should be referred to the Naval Board.

97. In future, for ships built for R.A.N. service, the derricks, davits (other than for lifeboats), &c., are to be capable of withstanding tests in accordance with R.A.N. practice.

Mercantile Vessels requisitioned for Naval Service.

98. When a mercantile vessel is requisitioned for naval service, the regulations pertaining to periodical examination and tests of all lifting appliances and associated equipment, as laid down in Q.R. and A.I., Articles 5531–34 and also in this order, are to be strictly complied with. If possible the dates of last test of all wire ropes and lifting appliances are to be obtained from the ship's officers and/or the shipping company at the time the vessel is taken over. If tests are due and records are not available, tests are to be carried out during the conversion period. In order to conform to R.A.N. practice the working loads of all lifting appliances, except those for handling boats, are to be down-graded as follows—

> The maximum static test load applied is not to exceed the static test load for which the appliance has been tested previously under the Statutory Rules and Orders. Safe working loads for R.A.N. purposes are to be assigned, equal to half the static test load applied. Plates clearly indicating the maximum safe working load for R.A.N. purposes are to be affixed to all appliances after test. For vessels chartered for the carriage of Naval Armament stores, appliances not required for handling such stores are to be clearly marked " Not to be used for armament stores ".

General Maintenance—Mechanical Equipment.

99. Working parts of all mechanical appliances used in accordance with the lifting and handling equipment are to be kept free from dirt and appropriately lubricated. When maintenance instructions are issued by the maker for a particular appliance, they are to be strictly complied with.

Capstans, Cranes and Winches.

100. The following instructions are to be observed regarding the lubricants to be used in capstans, cranes and winches:

(*a*) *Greases.*

(i) *Motor Bearings.*—Grease XG-274, Pattern E8/9439814, is to be used for all ball and roller bearings of electric motors.

(ii) *All other Bearings.*—Grease LG-280, Pattern E8/861, is to be used for all bearings other than the ball and roller bearings of electric motors. Where crane maker's instructions recommend other makes of grease and where those brands are now being used, the use of such makes is to be continued pending the earliest favorable opportunity for thoroughly cleaning the lubricating systems and bearings and recharging with the appropriate grease.

(iii) Care is to be taken not to mix greases made from different base materials, e.g., Grease LG-280 Pattern E8/861, which is of a lime base, should not be mixed with Grease XG-274, Pattern E8/9439814, which is essentially petroleum oil with a gelling agent.

(iv) Oil OC-338, Pattern E9/4531, is to be used in all worm gear boxes, and in all spur gear boxes. When topping up gear boxes on cranes, care is to be taken to ensure that oil of the same brand is used as that with which the gear box is already charged. Where this is not known with certainty or where supplies of the original oil are not available, the gear box is to be thoroughly drained and cleaned and recharged with the appropriate oil specified above. Oils of different grades should not be mixed.

(*b*) *Wires.*—Wires, including strops, are to be kept as free as possible from moisture in order to avoid corrosion. They are to be periodically lubricated with a mixture of mineral grease and plumbago in order to reduce the cutting action between the strands and to prevent access of moisture. Wire ropes of cranes, &c., should be coated with Grease XG-280, Pattern E8/827.

(*c*) *Cordage.*—All cordage when not in use is to be dried and stowed in a well ventilated space; during its storage and when in use subsequently no part of the cordage should be allowed to come in contact with oil, acid or any other deleterious chemicals.

Periodical Inspections.

101. The Commanding Officer is to ensure that the whole of the equipment of any system, including associated hull fittings, is examined for defects before and after handling its normal load and at six-monthly intervals, and also that all steel wire ropes, splices and strops are examined at frequent intervals with a view to eliminating as far as possible the liability to accident. Particular care should be taken during these examinations having regard to the present increased interval between dockyard refits.

102. A detailed examination of crane structure, before and after use, is precluded because of the time required to do this efficiently except as required by the final sentence of paragraph 18.

103. When using any machinery or equipment in very cold weather, the increased brittleness of steel that accompanies a heavy fall in temperature must be borne in mind and particular attention should be paid to parts of the equipment subjected

to bending stresses, e.g., wires passing round small diameter sheaves, eyes of strops, eyeplates, &c.; the effect of cold on the smaller sizes of wire ropes is more pronounced than on the large sizes. This ill effect is not of a permanent nature and recovery takes place on return to normal temperatures. Special attention is to be paid to crippling or stranding of wires, to signs of drawing splices and to flaws in shackles, eyeplates, and other ship's fittings, used in connection with the system.

Wire Rope.

104. The breakage of a few wires is a sign that the rope has passed through one-half of its life and should be carefully watched and examined at least every month and replaced by a new one at an early opportunity.

105. If the total number of broken wires in any length of eight diameters of any wire rope used for hoisting or lowering exceeds 10 per cent. of the total number of wires, the rope is unfit for use.

106. Boat slings and wires other than those referred to in paragraph 94 are to be wiped down, monthly, with boiled linseed oil, and boat slings wire scrubbed, examined and re-coated every three months.

107. Where the hoisting ropes of lifting appliances are enclosed for any part of their length by a ponder-ball, guard or similar covering, this covering is to be removed on each occasion that an examination of the rope is carried out, in order that the whole length of the rope is exposed for inspection and preservation as necessary.

Ribbon Strops.

108. Strands of ribbon strops for torpedo handling equipment are particularly liable to deterioration underneath the leather serving where so fitted. This defect cannot be detected without removing the leather.

Cordage.

109. All cordage should be inspected frequently and should be returned to a dockyard for test when signs of wear or chafe indicate that it may be unsafe.

Davits.

110. In ships fitted with destroyer type of davits, special attention should be given to the screw gears and if excessive backlash is found, this should be treated as a defect and corrected at the earliest opportunity.

Capstans, Cable Holders, Winches and Windlasses.

111. The Commanding Officer is to ensure that winches and windlass shafts, cable holders and capstan heads and spindles are turned round and properly lubricated once a week; that the spindles and deck bushes of the capstans and shafts of winches and windlasses are examined in ship, except as stated in paragraph 117, once in every twelve months, and also that when capstan bars are shipped they are invariably well secured and swiftered to prevent accidents.

112. In submarines in which the driving shaft for the windlass or capstan passes through a stuffing box and gland on the pressure hull, these fittings, together with the portion of the shaft passing through them, are to be examined at each intermediate docking and during each ship refit.

113. Great care is to be taken in the use of patent capstan compressors and controllers which are fitted to ships, and the directions for their use are to be strictly adhered to.

114. In capstans where the capstan head is secured by means of screws or bolts to a disc keyed to the spindle, the capstan head and the disc are to be parted once in every twelve months, and the bearing surfaces, keys and screws examined for deterioration by rust and any other damage, such as fractured bolts, faulty feather keys, &c.

115. The bearing surfaces are to be cleared of any rust and well greased before the capstan head and disc are replaced. If any repairs are found to be necessary and beyond the capabilities of the ship's staff, they are to be included in the next defect list forwarded for the vessel concerned.

116. For ships in reserve, the spindle and deck bushes of capstans and the shafts of winches and windlasses are to be examined once in every two years.

117. The results of all tests of lifting appliances are to be recorded, one copy to be placed in the Captain's ship's book and one copy forwarded to the Naval Board for inclusion in Navy Office copy of the ship's book.

Appendix.

H.M.A. SHIPS' BOATS—TYPES AND LIFTING WEIGHTS.

The following list gives the lifting weights of ships' boats. Doubtful cases should be referred to the Naval Board.

Types. * *For Special Service.*	*Lifting Weight in Tons.*		
	With Crew and Equipment.	*With Crew and Equipment fitted with Buoyancy Tanks.*	*As Seaboat with Total Number of Men Special Service.*
Hard Chine Motor Boats.			
35-ft. fast motor boat or barge ..	6.13 (3 men)	—	—
30-ft. fast motor boat or barge ..	4.34 (2 men)	—	—
Round Bilge Motor Boats.			
34-ft. survey motor boat ..	6.36 (2 men)	6.44 (3 men)	—
32-ft. motor cutter	—	—	5.10 (6 men)
27-ft. motor whaler	N.K.	—	—
25-ft. motor cutter	—	2.74 (2 men)	—
17½-ft. motor dinghy	—	1.39 (2 men)	—
17¼-ft. boom boat* (fitted with engine)	—	2.56 (2 men)	—
Pulling and Sailing Boats.			
32-ft. sailing cutter	—	—	3.6 (16 men)
27-ft. whaler	—	1.3 (2 men)	1.7 (7 men)
16-ft. skiff dinghy	—	0.7 (2 men)	—
14-ft. sailing dinghy (wood) ..	—	0.52 (2 men)	—
14-ft. sailing dinghy (G.L.P.) ..	0.41 (2 men)	0.41 (2 men)	—
10-ft. dinghy, 4-ft. beam ..	0.29	—	—
8½-ft. pram dinghy	N.K.	—	—

(DCNTS 1211/51/129.)

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C.N.O.'s 911-932/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
17th November, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

8754/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

911.—Ships Badges on Lifebuoys.

Consequent on periodic requests from various ships to repaint ceremonial lifebuoys, it has become necessary to reconsider the policy of supply and maintenance.

2. Ceremonial lifebuoys are an expensive item and the reproduction of ships' badges on them is carried out by skilled signwriters.

3. Ships are requested to pay special attention to the stowage of ceremonial lifebuoys.

4. Ceremonial lifebuoys are to be limited to two in number per vessel.

5. The practicability of encasing the lifebuoys in clear plastic or polythene after signwriting with a view to prolonging the life of the reproduction is being investigated.

(DNC 1275/58/12.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

912.—Members Travelling as Drafts—Payment of Travelling or Meal Allowances.

Where a member travels in a draft by ordinary passenger train, meal orders are not to be issued and Travelling Allowance or Meal Allowance (as appropriate) will be paid, subject to the normal rules governing those allowances.

2. I.P.I. 192 (13) and 195/4 should be noted accordingly.

(HPB 252/7/17.)

UNCLASSIFIED.

913.—Prizes—Herbert Lott Naval Trust Fund Prizes.

The following award has been approved by the Admiralty for the best qualifier at the Navigation Direction (N) course—

Lieutenant M. D. Jackson, R.A.N.—£15 (sterling).

(HPB 211/1/1.)

UNCLASSIFIED.

914.—Ratings Selected as Canteen Managers.

Ratings selected as Canteen Managers will carry out the duty for two years only. In order to preserve sea/shore roster continuity and to avoid ratings being absent from their branch for an unduly long time, extensions beyond this period will not be allowed.

(DDM 333/8/56.)

UNCLASSIFIED.— Cancelled C NO 641/62

915.—Transfer to Canberra—Removals and Allowances.

It has been decided that where a member, because of the transfer of Navy Office to Canberra, sells his house in Melbourne but is unable to move his family to Canberra owing to a house not being available, Temporary Accommodation or Rental Allowances in respect of premises in Melbourne may be paid to him for a period not exceeding six weeks.

2. However, where such a member proceeds to Canberra alone and lives out until the arrival of his family, payment of Temporary Accommodation or Rental Allowances may be continued in respect of the temporary premises in Melbourne, provided that the total amount paid to the member by way of Living Out Away From Home Allowance and Temporary Accommodation or Rental Allowances does not exceed the amount of allowance which would be payable if the member transferred his family to Canberra and resided with them at appropriate boarding accommodation.

3. This order should be read in conjunction with Navy Order 708 of 1960.

(HPB 252/8/23.)

(*Navy Order* 708 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

916.—Main Boilers—Water Level Indicators.

(*A.F.O.* 951/1959.)

As a result of an Admiralty investigation carried out with Messrs. Dewrance into the persistent leakage of the water level gauge glasses in Daring Class Destroyers and A/S Frigates—Type 12, the following remedial action is to be carried out as and when the gauge glasses become defective—

(*a*) Stop plugs, with the exception of the plug required for the packing sleeve location, are to be seal welded.

(*b*) Copper washers, as below, are to be replaced by a .006-in. thick monel washer placed between two compressed asbestos fibre jointing washers each being $\frac{1}{32}$-in. thick, i.e.,

Bottom cap joint ..	..	2 off—$1\frac{27}{32}$-in. O/D × $1\frac{1}{2}$-in. I/D.
Front screw joint (top)	..	1 off— $\frac{43}{64}$-in. O/D × $^{33}/_{64}$-in. I/D.
Top spigot joint ..	..	1 off— $\frac{27}{32}$-in. O/D × $\frac{13}{32}$-in. I/D.
Bottom indicator joint	..	1 off—$1\frac{3}{32}$-in. O/D × $\frac{7}{16}$-in. I/D.
Connecting flange joint	..	2 off— $\frac{31}{32}$-in. O/D × $\frac{7}{16}$-in. I/D.
Bonnet joint	..	1 off— $1\frac{1}{2}$-in. O/D × $\frac{21}{32}$-in. I/D.

(*c*) The cover plates should be strengthened by welding on a strengthening plate at each end to prevent distortion and eliminate the leakage past the glasses.

(*d*) Pitting in the slots in which the glasses are held can, after machining, &c., be overcome by electro-plating as a protection against corrosion.

2. Stocks of the monel and C.A.F. washers listed in 1 (*b*) above will be maintained by naval stores.

3. Little can be done to improve on the mica protecting strip for the glasses as there is no alternative material. However, the fine deposit which causes it to darken can be removed either by frequent blowing-down or by brushing with a special brush obtainable direct from Messrs. Dewrance. Unfortunately both methods tend to shorten the life of the mica.

(DME 1101/51/16.)

UNCLASSIFIED.— Cancelled. N. O. 664/62

917.—Water Tube Boilers—Extension of Internal Cleaning Periods.

(*A.F.O.* 2180/1960.)

Extended intervals between internal examinations and cleaning of water tube boilers of H.M.A. ships fed with distilled water and treated with Navy boiler compound in accordance with B.R. 16 (Engineering Manual), Article 190, or by other approved treatment, have been approved as follows—

(*a*) *Every six months*—

(i) Wash through with distilled water.

(ii) Internal examination of the boiler with complete or partial cleaning, as may be considered necessary by the Engineer Officer of the ship.

(*b*) *Every eighteen months*—Internal examination of the boiler to be carried out by administrative authority followed by complete internal clean.

2. Complete internal cleaning is to be carried out if any of the following conditions apply—

(*a*) If, when opened, the boiler will not be opened again within eighteen months from the date of the last complete cleaning.

(*b*) If the boiler feed has been contaminated with sea water or if untreated shore water has been used—*See* B.R. 16, Article 197 (*b*).

(*c*) If, as a result of the examination carried out in accordance with B.R. 16, Article 198 (1), and paragraph 1 (*a*) above, or of any other examination, the Engineer Officer decides that a complete clean is necessary.

3. Extensions of cleaning intervals as in paragraph 1 can only be maintained if strict attention is paid to purity and alkalinity of the boiler water. Particular attention should be paid to the salinity which is to be maintained below five (5) grains of chlorine per gallon and to the alkalinity which should be kept between .25 per cent. and .5 per cent. normal. Use of blow-down valves at least daily when steaming and the additions of small quantities of boiler compound as required will be needed to maintain the boiler water in such a condition. If the salinity of the boiler water rises above 5 grains chlorine/gallon, the following action is to be taken as soon as possible—

(*a*) *Up to* 7.5 *grain chlorine/gallon.* Reduce salinity by blowing down; change the water as soon as practicable.

(*b*) 7.5 *to* 10.0 *grain chlorine/gallon.* If maintained for less than 24 hours reduce salinity by blowing down; open up the boiler and wash through; refill with clean water.

(*c*) *Over* 10.0 *grains chlorine/gallon for any period, or* 7.5 *to* 10.0 *grains/gallon for over* 24 *hours.* The boiler is to be completely cleaned internally.

4. In no case is the maximum interval of eighteen months between complete internal cleanings to be exceeded without Naval Board approval.

5. If the periodical examinations following the extension of intervals between internal boiler cleanings reveal an appreciable build-up of deposits or the presence of active corrosion, a report should be forwarded to the Naval Board giving full details of the defects and the conditions under which the boiler has been operating, and a statement of the action taken to improve conditions within the boiler.

6. Admiralty has advised that B.R. 16 (Engineering Manual), Article 197, will be amended.

7. Navy Order 1126 of 1958 is hereby cancelled.

(DME 1101/51/22.)

(*Navy Order* 1126 *of* 1958.)

UNCLASSIFIED.

918.—A.S. Transducers, Pattern A.3149—Effect of Treatment by Underwater Grease.

An instance recently occurred where an A.S. transducer Pattern A.3149 was returned for repair liberally coated internally with an underwater grease. Whilst having little beneficial effect on the metallic components, this grease resulted in the rapid deterioration of the rubber separators, mounting pad and wiring insulation which subsequently involved extensive and costly repairs to the transducer.

2. Transducers are not to be treated internally with any type of grease and any transducers held which have been treated in this manner are to be returned for survey and repair at the first opportunity. If this is impracticable at the time, the transducer is to be thoroughly cleaned of grease, washed in fresh water and air dried. Subsequently it is to be returned for survey within six months.

(DW 518/52/70.)

UNCLASSIFIED.

919.—A/S Weapons—A/S Mortars, Marks 3 and 4—TCO83 Fuzes A/S, Mark 2, Mod. 1–4. Filled of Lots 508, 509, 535, 536, 597, 598, 1026 and 1052—Withdrawal.

(*A.F.O.* 2317/1960.)

Ammunition item ..	TCO83 Fuzes A/S, Mark 2, Mod. 1–4 filled of Lots 508, 509, 535, 536, 597, 598, 1026 and 1052.
Action to be taken by H.M.A. Ships	Exchange TA170 Projectiles A/S, Mark 3 or TA196 Projectiles A/S, Mark 3, Mod. 1 filled Minol fitted with fuzes of these lot nos. for unrestricted projectiles at the first opportunity.
By R.A.N.A.D. ..	Projectiles fitted with fuzes of Lots 508, 509, 535, 536, 597, 598, 1026 and 1052 are to be refuzed. Recovered fuzes of these lot nos. together with any held in stock are to be set aside under restricted charge quoting this order. Quantities are to be reported to Navy Office in due course.
Reason for action ..	Fuzes have failed in service.
Safety Category ..	N.M.E.R. (B.R. 862), Article 304, Category f.f., i.e., not dangerous but may have an unacceptable percentage of failures to function.

(DW 714/51/81.)

UNCLASSIFIED.

920.—Demolition Stores—Boxes N.34 Containing UQ003 Charge Demolition SC 1-lb.—Defects—Care in Handling.

(*A.F.O.* 2367/1960.)

Store affected	Box N.34 containing Charges SC 1-lb.
Defect	Instances of broken handles have been reported.
Action to be taken ..	Boxes N.34 are not to be lifted by their handles, but by rope strops or slings around the body of the box.
General information ..	The breakages are thought to be due to a manufacturing or design defect, which is under investigation.

(DW 715/51/128.)

UNCLASSIFIED.

921.—Demolition Stores—UQ003 Charge Demolition, SC 1-lb.—Defect.

(*A.F.O.* 2318/1960.)

Item concerned ..	UQ003 Charge demolition S.C. 1-lb.
Defect	Charges may be found with the bottom " lid " of the container loose. The charges are serviceable unless the lid is so loose that it can be pulled off.
Action by H.M.A. ships and establishments	Charges with detachable lids are to be returned to a R.A.N. Armament Depot at the first convenient opportunity for repair. B.R. 862/1956 Naval Magazine and Explosive Regulations Article 316 is relevant.
Action by R.A.N. Armament Depots	Defective charges with loose or detached lids are to be repaired in accordance with T.I.A.D.(LAB) No. 023 Worksheet No. 6.
General information ..	The T.N.T. filling of these charges is sealed off by an inert composition before the lid is attached. The lid is fixed with cement and in addition is secured by indentations in a cannelure on each side of the charge case. The possibility of lids becoming so loose as to fall off is considered remote, but if this should occur the explosive filling would not be exposed and the lids can be safely secured by R.A.N. Armament Depots.

(DW 715/51/127.)

UNCLASSIFIED.

922.—Torpedo—Rigging Warrants—Provision of Nose and Tail Lines for Torpedoes 18-in., Mark 30, Carried in H.M.A. Ships.

(*A.F.O.* 2319/1960.)

When mark 30 torpedoes are embarked in H.M.A. ships, it is necessary to provide the following items to facilitate the handling of these weapons—

18-*in.*, *Mark* 30 *Torpedo*

(*a*) *Nose lines*

(i) *Action Weapon.*—Due to lack of fittings on this torpedo a nose line cannot be used.

(ii) *Practice Weapon.*—Six in number nose lines are required per ship, each consisting of a suitable length of 1-in. cordage with an eye splice in one end to fit over the spring latch of the sweeping hook.

(*b*) *Tail lines.* Six in number tail lines are required per ship, each consisting of a 1-in. flexible steel wire rope pendant, 6 feet in length, with a 6-in. soft eye at one end (used to form a running noose) and a tail of 1½-in. hemp, 2 fathoms in length.

2. Commanding Officers of H.M.A. ships are to arrange for the manufacture of the nose and tail lines by the ship's staff, and rigging warrants should be amended to include these additional lines.

(DW 713/51/18.)

UNCLASSIFIED.

923.—Anti-Condensation Painting.

Experience has shown that the normal interior fire retardant flat paint used in the R.A.N. will provide acceptable living conditions and the higher initial cost and larger maintenance effort required with the anti-condensation system of adhesive-cork-dusting-flat paint is unwarranted.

2. It has therefore been decided to discontinue the use of cork dusting as an anti-condensation treatment in the R.A.N. and the following action is to be taken—

(*a*) New construction ships will in future be painted with interior fire retardant flat paint in lieu of cork dusting.

(*b*) Cork dusted surfaces of existing ships are to be replaced by the interior fire retardant flat paint when sufficient area requires renewal. When only minor repair is necessary areas are to be patched with cork dust.

(*c*) Incidents of abnormal conditions resulting in frequent severe condensation are to be reported on form A.S. 2022, and consideration will be given to improving insulation of affected areas.

3. A.B.R. 19 will be amended in due course.

(DNC 512/80/12.)

UNCLASSIFIED.

924.—Naval Stores for R.N. Submarines—Accounting.

The instructions detailed in B.R. 4 (58) Naval Storekeeping Manual, Chapters 18, 19 and 21 are generally applicable to accounting for naval stores in R.N. submarines based in Australia. Commander S/M, Fourth Submarine Squadron acts as depot ship authority for the submarines while they are based in Australia. Details of the procedure applying to transactions between the submarines and H.M.A. ships, depots, &c., are set out in the following paragraphs.

2. Direct transactions between submarines and R.A.N. Naval Store Depots are to be effected on forms A.S. 134 or A.S. 331 as applicable. One additional copy of each form is to be prepared and forwarded to the Suptg. Naval Store Officer with the normal copies. On completion of the transaction, copies Nos. 3 and 4 of the forms are to be disposed of as detailed in Articles 0702 and 1002 of A.B.R. 4.

3. Issues by H.M.A. ships and establishments (including H.M.A.S. PENGUIN) to submarines are to be effected on forms A.S. 549, five copies of which are to be prepared by the officer supplying the stores. A receipt is to be obtained on four copies of the voucher and distribution effected as follows—

(*a*) *Copy No.* 1—*Supply Note*

To be despatched to Commander S/M, Fourth Submarine Squadron, for notation and transmission to the Commanding Officer of the submarine concerned.

(*b*) *Copy No.* 2—*Receipt Note*

To be posted to the Naval Store Account of the supplying ship or establishment.

(*c*) *Copies Nos.* 3, 4, 5

To be despatched to Navy Office by the supplying ship or establishment in the quarterly return of forms A.S. 549. These copies will be distributed as follows at Navy Office—

(i) *Copy No.* 3
To Director of Stores (N.S. 4A), Admiralty.

(ii) *Copy No.* 4
To support claim for financial adjustment.

(iii) *Copy No.* 5
For Navy Office use.

Financial adjustment of these supplies will be arranged at Navy Office.

4. Permanent stores required for the use of personnel ashore and crews when disembarked, are to be accounted for in the Naval Store Account of H.M.A.S. PENGUIN, and issued on permanent loan to officers nominated by S/M.4.

(DNAS 501/56/43.)

UNCLASSIFIED.

925.—Naval Stores (General) (Class E, Group 8)—Kilfrost Pastes—Use.

(*A.F.O.* 1788/1960.)

The undermentioned Kilfrost pastes are stocked as Naval Stores but ships and services do not always demand the paste appropriate to their requirements and this could result in the contamination of food.

2. Kilfrost " Lofreeze " Paste, Pattern E8/7037, is for use in retarding the formation of ice from snow in refrigerated chambers, and in facilitating periodical defrosting operations.

3. Kilfrost " Marine " Paste, Pattern E8/10047, is a de-icent for application in cold weather to deck machinery, gun and boat covers, hawse pipes and cables, torpedo tubes, depth charge equipment, &c. This paste contains spirit solvents and *on no account* should it be used instead of Kilfrost " Lofreeze " Paste, Pattern E8/7037, in spaces where food is stored.

4. Navy Order 877 of 1958 is hereby cancelled.

(DNAS 512/87/61.)

(*Navy Order* 877 *of* 1958.)

N.O. 472/63 is relevant.

UNCLASSIFIED.

926.—Planned Maintenance—Dockyard Component—Introduction of Progress Chart.

The tables issued to ships in conjunction with the list of the dockyard component of planned maintenance (Dockyard Maintenance Abstract) were intended to show when each routine becomes due over a period of four or six years. Owing to the deferment of various routines in the past these tables are no longer accurate. In addition tables were not provided for Electrical Planned Maintenance.

2. Also, since planned maintenance schedules are based on a fixed time table and refits follow a more indefinite timing, it is necessary to provide a more flexible chart procedure. These charts will enable ship's refitting and administrative authorities to see at a glance which routines are due at forthcoming refits. They will provide a permanent visible record of the state of the dockyard component of planned maintenance for each ship.

3. Charts will be issued as they are completed for Hull, Marine Engineering, Electrical and Weapons Engineering departments, commencing with the Daring Class. Detailed instructions for the introduction of these charts are given in the appendix to this order.

4. Routines are only to be deferred as a last resort, the requirement for maintenance of sea-going and fighting efficiency being observed at all times. For each routine deferred a detailed report is to be forwarded by the Refitting Dockyard to Navy Office and administrative authorities giving the reasons and circumstances necessitating such action. The report is to include remarks regarding the frequency and adequacy or otherwise of the relevant routine. If a report is necessary after work has been carried out at Dockyards other than Garden Island and Williamstown then the ship concerned is responsible for rendering the report.

5. No written reports of the state of the Dockyard component of Planned Maintenance other than the above will be required but administrative authorities are to forward photographic copies (not less than 14-in. x 8-in.) of the ship's progress charts when inspections are carried out.

Appendix.

THE DOCKYARD PLANNED MAINTENANCE PROGRESS CHART.

1. *Description.*—The chart has been designed to replace the existing list of the Dockyard Component of Planned Maintenance (Dockyard Abstract) and to be a permanent visible record. One line is provided for each individual equipment, structure or system, or group thereof where this is treated as one for maintenance planning purposes. The whole chart is divided by vertical lines, the spaces between which represent years. The area to the left of the current date represents time past and where any unit is, or has been overdue for maintenance, the period of time concerned is represented by an area shaded in red. The unshaded portion represents equipment in a satisfactory state and capable of safe operation. Superimposed on the chart is an abridged text of each group of actual maintenance items concerned. This is provided to reduce the necessity for frequent reference to schedules or cards when reviewing the state of Dockyard Planned Maintenance.

INSTRUCTIONS FOR USING THE CHART.

2. *Ships in which Planned Maintenance is being Introduced for the First Time*—

(*a*) When issued to new ships, or ships in which Planned Maintenance is being introduced, short vertical red lines against each equipment will indicate when each routine is to be considered due for the first time, staggering of routines being arranged as heretofore to prevent all of like frequency from becoming due at the same refit.

(*b*) As soon as a firm date for the ship's next Dockyard refit is known, two vertical lines extending from top to bottom of the chart are to be drawn to correspond with the beginning and end of the refit period. Any space between a *red* line and the beginning of the refit period is to be shaded red by cross-hatching. Routines due at this refit are those which become red either before, during, or very closely after the refit period.

Appendix—*continued.*

(*c*) When a routine is completed a short vertical green line is to be drawn to the right of the red one corresponding to the actual date of completion, and a new red line to show the next occasion of falling due according to frequency.

(*d*) Distribution of these charts will be arranged by Navy Office on the basis of one copy to the ship, and one each to administrative authority and refitting authority.

3. *Ships in which Planned Maintenance is already Established*—

(*a*) Copies of progress charts will be issued to ships for final preparation before distribution. Three copies are to be prepared as follows.

(*b*) From information on Dockyard P.M. Cards insert vertical red lines, followed immediately by a green line indicating the occasions on which routines have been carried out.

(*c*) Insert vertical red lines to show when these routines will be due again according to frequency.

(*d*) Where routines have not been carried out since the introduction of Planned Maintenance insert red strokes to indicate when they first fell due on the original Dockyard Abstract or list of Dockyard Component, or, in the case of the Electrical Department, the Key Plan.

(*e*) Draw double lines representing the duration of previous refits. If the date of the next Dockyard refit is firm, draw double lines as in paragraph 2 (*b*) to show this period and crosshatch in red to indicate routines overdue as in paragraph 2 (*b*). If the refit date is not known this cross-hatching should only be carried up to the current date.

(*f*) On completion of the above, one copy is to be retained in the ship for continuation and the remaining copies forwarded to the ship's administrative authority. The administrative authority will, after scrutinizing the charts, forward one copy to the ship's refitting authority.

4. No written reports of the state of the Dockyard Component of Planned Maintenance other than that called for in paragraph 4 of this order are required, but a photographic copy (not less than 14-in. x 8-in.) of the ship's chart is to be forwarded to Navy Office on each occasion of inspection by the ship's administrative authority and on initial completion of the charts. In addition similar copies may be called for from time to time if required.

5. When routines have been partially completed the following rules are to apply—

(*a*) If it is considered essential to complete the routine before the next occasion of falling due, the routine is to be shown on the chart as overdue until such time as it is completed.

(*b*) If the remainder of the routine can be deferred without jeopardizing the reliability of the equipment until the next occasion of falling due, the routine may be shown as complete.

(*c*) (*a*) and (*b*) above are to be applied with discretion and every effort is to be made by refitting authorities to avoid splitting up routines in this manner.

6. When defects are made good, opportunity may also be taken to complete routines thus extending the date when the routine is next due.

(DCNTS 1209/51/34.)

8754/60.—3

UNCLASSIFIED.

927.—Service System Canteens—Provision of Naval Stores and Equipment.

The policy in regard to the provision of Naval Stores and equipment for use in Service system canteens is as follows—

(*a*) The building and permanent fixtures for the canteen will be supplied at departmental expense in accordance with the scale laid down in the "Standards of Accommodation for Services in Peace".

(*b*) The canteen will be considered as a recreation space, and cleaning equipment will be provided under normal service conditions. A clock, tables and chairs, will be provided at departmental expense as for recreation rooms.

(*c*) Special equipment which is employed in making money, e.g., ice-cream cabinet, beer coolers and siphons, and office equipment such as cash registers, typewriters, adding machines, will be the responsibility of the canteen.

2. Navy Order 1015 of 1958 is hereby cancelled.

(DNAS 400/51/71.)

(*Navy Order* 1015 *of* 1958.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

928.—Cocoa Powder—Availability.

Cocoa powder is now available on demand from Victualling Yards in addition to block drinking chocolate. The cost is 4s. 2d. per 14 oz. packet.

(DV 912/60/12.)

UNCLASSIFIED.

929.—Fixed Issuing Prices for Provisions and Victualling Allowances as from 1st October, 1960.

The supplementary list of issuing prices for fresh fruit and vegetables which has operated since 1st July, 1960, has been amended as from 1st October, 1960, and revised price lists have been distributed to all H.M.A. ships and establishments.

2. Consequent upon the revision of these prices, the following rates of victualling allowance per head per diem will apply as from 1st October, 1960—

	s.	*d.*
Messes of more than 300	6	6
Messes of 300 and less	6	8
Additional for ships attached to the Strategic Reserve ..	0	4
H.M.A.S. MELVILLE	7	0
H.M.A.S. TARANGAU	7	1
R.A.N.C.	7	7
R.A.N.A.T.E.	7	7
Junior Recruit Training Establishment..	7	7

3 Navy Order 648 of 1960 is hereby cancelled.

(DV 903/51/28.)

(*Navy Order* 648 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

930.—Form A.S. 1136 Series—Gunnery Equipment Trials Part 1—Schedules for Inspection of Shell Rooms, Magazine and Miscellaneous Fittings—Introduction.

(*A.F.O.* 2741/1959.)

In order to assist authorities in the conduct of Gunnery Equipment Trials Part 1, Schedules for the Inspection of Gunmountings (Form S.1136 Series) have already been issued *vide* Navy Order 305 of 1959.

2. A full inspection of all other gunnery compartments, gun bays, magazines, shell rooms, and Ready Use stowages, is however an integral part of a Gunnery Equipment Trial Part 1 (B.R. 292—The Ordnance Engineering Manual—Chapter 8, paragraph 27). It has therefore been decided to issue five further forms in the S.1136 Series, as detailed in the Appendix to this order, as guides in carrying out this section of the trial.

3. These schedules are expressly for ships' use in that they are guides to be used to check the equipment on board ship, but they do not comprise a complete specification for the equipment or compartment concerned.

4. They are to be used—

(*a*) During installation of new equipment on board.

(*b*) Annually.

(*c*) At pre-refit trials.

(*d*) At post-refit trials.

(*e*) As ordered by administrative authorities.

5. Trials on the occasion of 4 (*a*) will be carried out by the installing authorities, completed copies of the schedule being handed to the ships' officers.

6. Trials on the occasion of 4 (*b*), (*c*), (*d*) and (*e*) will be carried out by ships' officers.

7. Completed schedules of the latest date, prepared by the installing authority, refitting authority or ship's officers, as appropriate, are to be retained on board for record purposes.

8. An initial issue, without demand, will be made on the following scale—

	No. of copies of each form
CST FND (for Trials Team)	50
C. of P. Sydney (for Reserve Fleet)	25
G.M.G.I. (for S.W.E.)	25
G.M.W.D. (for S.W.E.)	10

9. H.M.A. ships should demand initially six copies of the relevant forms for each magazine, shell room, or compartment fitted, and then as necessary to replenish stocks, demands being rendered to the SNSO, Sydney.

APPENDIX.

Gunnery Equipment Trial Part 1, *Schedules;*

Shell Rooms, Magazine and Miscellaneous Fittings.

4.5-in. and 4-in. Fixed Structure Endless Chain Hoists ..	S.1136 (l) (not yet available)
Shell Rooms	A.S. 1136 (w).
Magazines and Cartridge Handing Rooms	A.S. 1136 (x).
Gun Bays, Magazine Approaches, R.U. Lockers, Supply and Embarkation arrangements	A.S. 1136 (y).
Flooding, Spraying and Miscellaneous Fittings	A.S. 1136 (z).

(DW 464/54/147.)

(*Navy Order* 305 *of* 1959.)

UNCLASSIFIED.

931.—Instructions for Administration, Accounting, Modification, Modernization, Reconditioning and Overhaul of Aircraft, Power Plants and Engines—Air Publication (RAN) 102, Issue 2.

Issue 2 of Air Publication (RAN) 102, dated July, 1960, supersedes the original issue, Parts A and B, dated May, 1957, which is hereby cancelled and is to be disposed of in accordance with article 2513 (*b*) of A.B.R. 4. Naval Storekeeping Manual.

2. Navy Order 770 of 1958, is now included as Chapter 12 of Issue 2 of the Air Publication.

(DAMR 465/53/146.)

(*Navy Order* 770 *of* 1958.)

UNCLASSIFIED.

932.—R.I.—Quarterly List of Navy Orders Affecting.

With reference to page iv of R.I., the following list shows those Navy Orders in force on 30th September, 1960, which amend or amplify R.I.

R.I. Article.	*Navy Order.*	*R.I. Article.*	*Navy Order.*
1604	341/1960	3125	796/1960
1704	365/1960	3423	832/1959
1721	674/1959	3543	859/1959
1725	684/1960	4842	754/1959
1741	713/1959	4961	978/1959
1762	509/1959	4962	978/1959
2408	729/1960	5324	628/1960
2602	133/1960	5605	204/1959
	683/1960		300/1959
2904	856/1959	Appendix 15B ..	953/1959
2906	857/1959		954/1959
2907	296/1960		599/1960
2953	311/1959	17B ..	731/1960

(SEC 47/2/13.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
10th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

933.—Results of Sporting Competitions, for Year Ended 31st March, 1960—H.M.A. Fleet East Australia Area and South-East Australia Area.

The results of interpart and interservice competitions held in the Fleet, East Australia Area and South-East Australia Area for the year ended 31st March, 1960, and civilian competitions in which Navy teams participated, are detailed in the appendix to this order.

2. This order will be reprinted for posting on notice boards.

3. Navy Order 836 of 1959 is hereby cancelled.

APPENDIX.

H.M.A. FLEET INTERPART COMPETITION.

Sport.	*Competition.*	*Winner.*
General Sport ..	Pakistan Shield	H.M.A.S. QUIBERON.
Golf	Naiad Cup	H.M.A.S. MELBOURNE.
Sailing	Rawson Challenge Cup ..	H.M.A.S. QUIBERON.
	Clark Cup	H.M.A.S. VENDETTA.
	Victory Challenge Cup ..	H.M.A.S. VENDETTA.
	Destroyers and Frigates Flotilla Cock	H.M.A.S. VENDETTA.
	Patey Challenge Cup ..	H.M.A.S. MELBOURNE.

EAST AUSTRALIA AREA INTERPART COMPETITION.

Sport.	*Competition.*	*Winner.*
Australian Rules ..	Australian Rules Shield ..	H.M.A.S. ALBATROSS.
Cricket	Zingari Cricket Shield (1959–60)	H.M.A.S. MELBOURNE.
Golf	H. B. Whitham Cup ..	Lakes.
	Sussex Trophy	Rear-Admiral G. G. O. Gatacre, C.B.E., D.S.O., D.S.C. and Mr. R. Taylor.
	G. R. May Trophy (1959)	Supply Lieutenant R. N. Anderson, R.A.N.
	G. R. May Trophy (1960)	Lieutenant M. J. D. Board, R.A.N.
	Randle Ford Cup ..	Lieutenant-Commander L. A. Robinson, R.A.N.
	Guest Cooper Trophy ..	Surgeon-Commander B. J. Treloar, R.A.N.
Rugby Union ..	Dempster Cup	H.M.A.S. ALBATROSS.
	Mick Clifford Cup ..	Police (Navy 2nd).
Sailing	Braemar Challenge Cup ..	Commander J. L. Bath, O.B.E., R.A.N. (Rtd.).
	R.N.S.A. Trophy ..	C.P.O., A. C. Richardson.
	Naval Auxiliary Patrol Whaler Trophy	C.P.O., A. C. Richardson.
	Waterhen Trophy ..	C.P.O., A. C. Richardson.
	C.S.A. Tankard	C.P.O., A. C. Richardson.

APPENDIX—*continued.*

EAST AUSTRALIA AREA INTERPART COMPETITION—*continued.*

Sport.	*Competition.*	*Winner.*
Sailing—*continued.*	Dalgleish Cup	Lieutenant I. F. Marshall, R.A.N.R.
	Island Class Trophy ..	Lieutenant I. F. Marshall, R.A.N.R.
	Warrego Trophy	Sub-Lieutenant Tennant, R.A.N.
Soccer	Rear-Admiral Showers Cup	H.M.A.S. ALBATROSS.
Swimming	G. D. Moore Trophy ..	Dockyard.
Water Polo	Urquhart Cup	Navy.
	Loraine Crapp Cup ..	H.M.A.S. ALBATROSS.

INTERSERVICE COMPETITION.

Australian Rules (1959)	.. .. ..	Navy 1. Army 2. R.A.A.F. (did not compete).
Basketball (Women) (1959)	Cole Trophy	R.A.A.F. 1. Army 2. Navy 3.
Bowls (1960) ..	Malone Trophy	Navy 1. Army 2. R.A.A.F. 3.
Cricket (1960) ..	New South Wales Association Shield and Oldfield Cup	Navy 1. Army 2. R.A.A.F. 3.
Golf (1959)	Officers Interservice Golf ..	Navy.
	Bench and Bar *versus* Combined Service Officers	Combined Service Officers.
Hockey (Women) (1959)	Rural Bank Trophy ..	R.A.A.F. 1. Army 2. Navy 3.
Rugby Union (1959) ..	McCabe Cup	Navy 1. R.A.A.F. 2. Army 3.
Soccer (1959) ..	Convery Lucas Shield ..	Navy 1. R.A.A.F. 2. Army 3.
Swimming and Diving (Men) (1960)	A.I.F. Shield	Army 1. R.A.A.F. 2. Navy 3.
Swimming and Diving (Women) (1960)	David Jones Cup ..	Navy 1. Army 2. R.A.A.F. 3.
Water Polo (1960) ..	R.K.O. Cup and Richardson Cup	Navy 1. R.A.A.F. 2. Army 3.

APPENDIX—*continued.*

SOUTH-EAST AUSTRALIA AREA.

F.N.D.—INTERSERVICE COMPETITION.

Sport.	*Competition.*
Athletics	R.A.A.F. 110 points. Army 83 points. Navy 71 points. Final points—R.A.A.F. 60. Army 40. Navy 20.
Australian Football ..	R.A.A.F. 136 defeated Navy 65. R.A.A.F. 91 defeated Army 62. Navy 93 defeated Army 66. Final points—R.A.A.F. 30. Navy 20. Army 10.
Basketball	R.A.A.F. 33 defeated Army 32. Army 49 defeated Navy 40. R.A.A.F. 52 defeated Navy 24. Final points—R.A.A.F. 30. Army 20. Navy 10.
Cricket	Army defeated Navy on first innings. Army defeated R.A.A.F. outright by 8 wickets. R.A.A.F. defeated Navy outright by 8 wickets. Final points—Army 30. R.A.A.F. 20. Navy 10.
Golf	Army 10 defeated Navy 3. R.A.A.F. 11 defeated Navy 2. Army 7 defeated R.A.A.F. 6. Final points—Army 30. R.A.A.F. 20. Navy 10.
Hockey	Army 4 defeated Navy 2. R.A.A.F. 8 defeated Navy 0. Army 3 defeated R.A.A.F. 2. Final points—Army 30. R.A.A.F. 20. Navy 10.
Rifle Shooting ..	R.A.A.F. 1582. Army 1575. Navy 1498. Final points—R.A.A.F. 30. Army 20. Navy 10.
Rugby Union ..	Navy 8 defeated R.A.A.F. 0. Navy 18 defeated Army 10. Army 32 defeated R.A.A.F. 16. Final points—Navy 30. Army 20. R.A.A.F. 10.
Swimming	Navy 66 points. R.A.A.F. 62 points. Army 52 points. Final points—Navy 30. R.A.A.F. 20. Army 10.
Tennis	R.A.A.F. 6 rubbers defeated Army 3 rubbers. Army 8 rubbers defeated Navy 1 rubber. R.A.A.F. 7 rubbers defeated Navy 2 rubbers. Final points—R.A.A.F. 30. Army 20. Navy 10.
Water Polo	Navy 6 defeated Army 3. R.A.A.F. 12 defeated Army 6. Navy 7 defeated R.A.A.F. 6. Final points—Navy 30. R.A.A.F. 20. Army 10.
Final Placings ..	1st R.A.A.F. 290. 2nd Army 240. 3rd Navy 190.

APPENDIX—*continued.*

CIVILIAN COMPETITIONS IN WHICH DEPOT TEAMS COMPETED.

Sport.	*No. in Competition.*	*Winner.*	*Depot Placing.*
Australian Football—1sts ..	12	Cheltenham	12th
Australian Football (Recruits)	11	Rye	7th
Basketball 1sts	9	Brunswick	2nd
1959 2nds	9	Essendon	4th
1960 1sts	9	St. Johns	2nd
2nds	9	Golden Fleece	6th
Cricket 1sts	12	Press	5th
Recruits	10	French Island	2nd
Hockey	12	Navy	1st
Rugby Union 1sts	10	University	4th
2nds.. ..	10	Navy	1st
3rds ..	11	Kiwis	5th
Colts ..	9	Navy	1st
Soccer	12	Box Hill	7th
Tennis	8	Crib Point	6th
Water Polo	10	Sandringham	5th

F.N.D. INTERPART COMPETITION 1959–60.

Sport.	*Competition.*	*Winner.*
Athletics	Curry Cup .. .. (Obstacle Race)	Seamen.
	Colin Roger Cup .. (4 x 110 yards Relay)	Band.
	Hartley Cup .. .. (4 x 220 yards Relay)	Band.
	Pritchard Cup .. .. (1 mile Medley Relay)	Band.
	Ross Cup .. .. (4 x 440 yards Relay)	Band.
	Walker Hall Cup .. (Champion Athlete)	Lieutenant M. Varley.
	Journal Cup .. .. (Aggregate Relay Score)	Band.
	Grey Smith Bowl .. (Cross Country)	Recruits.
	McCarthy Cup .. .. (All round competition)	Recruits.
	Journal Cup .. .. (Tug-o-War)	Recruits.
Australian Rules ..	Richmond Football Cup ..	Seamen.
Basketball (Winter) ..	Buchanan Cup	Wardroom.
(Summer) ..	Buchanan Cup	Wardroom.
Cricket	Brock Cup	Seaman/Recruits.
Golf	Sarel Cup	C.P.O. WTR. Dalrymple.
	Dallmeyer Cup	P.O. Dickson.
	Axford Cup	Ward. S/LT M. Reilley.
Hockey	Drew Cup	Wardroom.
Rugby	Cowan Cup	Wardroom/Signal School.

APPENDIX—*continued.*

F.N.D.—INTERPART COMPETITION 1959–60—*continued.*

Sport.	*Competition.*	*Winner.*
Soccer	Tolly Cup	Recruit School.
Swimming	Ladava Shield	Recruits.
Tennis	Bittern Transport Cup ..	Wardroom.
Water Polo	Centenary Cup	Recruits.

(HPB 138/6/6.)

(*Navy Order* 836 *of* 1959.)

By Authority: A. J ARTHUR, Commonwealth Government Printer, Canberra

REGISTRAR

RESTRICTED
FOR OFFICIAL USE ONLY.

C.N.O.'s 934-955/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
21st November, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

8860/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

934.—Ensigns and Flags Worn by Naval Establishments.

Navy Order 572 of 1960 is to be amended as follows—

(*a*) APPENDIX—

Under New South Wales, Garden Island—Signal Station, Column 2, *delete* " F.O.I.C.E.A.".

Under Naval Head-quarters, Potts Point, Column 2, *insert* " F.O.I.C.E.A.".

(*b*) APPENDIX—Under **New South Wales** *add*—

R.A.N. Store Depot, Randwick ..		—	Yes	—	—

(*c*) APPENDIX—Under **Victoria** *add*—

Naval Store Depot, Port Melbourne ..		—	Yes	—	—

(*d*) Under A.C.T. in column 1—

*Delete** after " H.M.A.S. HARMAN "

*Insert** after " No. 1 mast ".

*Delete** after " BELCONNEN W/T STATION "

(DSD 37/2/1.)

(*Navy Order* 572 *of* 1960.)

UNCLASSIFIED.

935.—Medical and Dental Fitness for Service Abroad.

All officers or ratings on appointment or draft abroad are to be medically examined on three occasions—

(*a*) On receipt of the appointment or draft—Form A.M. 48 is to be completed and card copy sent to the MDG, a dental examination is to be made and conservative treatment given.

(*b*) 28 days prior to embarkation—Form A.M. 145z is to be completed and forwarded to the MDG.

(*c*) Not less than 24 hours or more than 48 hours prior to embarkation—Form A.M. 145z is to be completed and forwarded to the MDG.

2. If insufficient notice is given to carry out the three examinations, 1 (*b*) and 1 (*c*) may be omitted in that order.

3. If the officer or rating is unfit, Navy Office is to be notified by signal and the medical report airmailed to the MDG. If the passage was arranged by an authority other than the Naval Board, that authority is also to be notified by signal.

4. Should a member have had a satisfactory large film X-ray investigation of his chest made within three months of the date of the first medical examination, as prescribed in paragraph 1 (*a*), another X-ray examination at that stage is not required, but the details and date of that X-ray examination are to be inserted on form A.M. 48. If an X-ray examination of the chest has not been made within three months,

a large X-ray film is to be taken and the result entered on the A.M. 48. In every case, large X-ray film examination of the chest is to be carried out at the time of the second medical examination and the result entered on form A.M. 145z.

5. Medical officers are to ensure that vaccinations (which term includes inoculations) are brought up to date at the time of the first medical examination, in accordance with instructions issued in Navy Orders from time to time, and that the appropriate entries (giving dates) are endorsed by the medical officer in table 4 of A.F. Med. 4. If no documentary evidence of vaccinations within the prescribed periods is available to the examining medical officer, all prescribed vaccinations are to be carried out at the time of the first examination. In all cases of vaccination, international certificates are to be completed and issued to the personnel concerned.

6. These instructions do not cover appointment or draft to H.M.A.S. TARANGAU. In regard to ships proceeding abroad, no special medical examination is necessary for the ship's company. If, however, a member is taking passage in one of H.M.A. ships instead of proceeding abroad by merchant vessel, for service or special courses, or is to be detailed when abroad to undergo a course of training he is to be examined medically in accordance with these instructions.

7. C.O.R. Article 568 is cancelled.

8. This order will be incorporated in R.I. and in A.B.R. 1991 (now in preparation).

(MDG 327/53/18.)

RESTRICTED.

936.—Secrecy and Security—Misuse of Security Classifications.

Navy Order 700 of 1960 is to be amended as follows—

Delete paragraph 5 and *insert* in lieu—

" 5. The abovementioned instructions do not apply to signals where, in the interests of cryptographic security, it is forbidden to refer to any classified document classified higher than RESTRICTED or to any CLASSIFIED signal in an unclassified signal. Detailed instructions about the classification of signals are contained in current Confidential Navy Orders."

(DSD 1617/206/29.)

(*Navy Order* 700 *of* 1960.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

937.—The Collins Trophy.

The Collins Trophy is awarded annually to the air squadron, either front or second line, which carries out its designated task with the highest degree of efficiency.

2. The Collins Trophy for 1960 has been awarded to 724 Naval Air Squadron, the All Weather Fighter Training Squadron, based at the Royal Australian Naval Air Station, Nowra.

3. Navy Order 879 of 1959 is hereby cancelled.

(DAWOT 138/6/17.)

(*Navy Order* 879 *of* 1959.)

UNCLASSIFIED. Cancelled N.O. 654/62

938.—Marriage Allowance—Reminder of Notification to be made by Member Following a Change of Family Circumstances.

Some overpayments of Marriage Allowance have been made because the members concerned did not report changes in their family circumstances. To minimize the risk of this happening because of forgetfulness it is desired to remind members of their obligations in this matter.

2. Accordingly, Captains of ships and establishments are to bring this order to the attention of all members eligible for Marriage Allowance on 1st February and 1st August each year.

3. In applying for Marriage Allowance each member after detailing his family circumstances, signs a declaration on form A.S. 1299Z or form A.S. 1299X as follows—

Form A.S. 1299Z—" I declare that I am voluntarily maintaining my wife at.....".

or

Form A.S. 1299X—" I declare that—

(i) I am a widower.
(ii) I am a divorcee.
(iii) I am separated from my wife.
(iv) My marriage has been annulled.
(v) I am maintaining a home for my children at .....
(vi) I am maintaining my children but not in my home.
(vii) A court order for maintenance at the rate of £.....per week/fortnight was made on.....in favour of my wife/ex wife and child/children by..... .....(*Name of Court*)."

4. On reporting a change in family circumstances a member is to make a further application and declaration for Marriage Allowance if an entitlement still exists.

5. This order will be reprinted for posting on notice boards.

6. Navy Order 381 of 1960 is hereby cancelled.

(HPB 252/5/3.)

(*Navy Order* 381 *of* 1960.)

UNCLASSIFIED.

939.—Members on Long Term Duty—Overseas Allowances During Recreation Leave.

Approval has been given for payment of certain overseas living allowances where a member after long term duty in an overseas country takes leave in that country before his return to Australia, or in another country *en route* to Australia.

2. The maximum period in respect of which approval will be given under this order is—

(*a*) Where the member is on the Foreign Service Leave scale—28 days (paragraph 31 *et seq*. Section III. of Navy Order 753 of 1960).

(*b*) Where the member is on the Home Service Leave scale and Remote Locality Leave scale (Table to paragraph 18, Section III. of Navy Order 753 of 1960)—42 days, i.e., one year's leave credit.

3. Subject to the limitations in paragraph 2 the following will apply—

(*a*) Where a member takes leave in the country to which he is appointed or drafted, the appropriate Overseas Living Out Allowance and Child Allowance, where applicable, will continue until the date prior to departure from that country.

(*b*) Where a member during the journey to Australia takes leave outside the country to which he is appointed or drafted, he will be paid the rate of Overseas Living Out Allowance and Child Allowance, if applicable, appropriate to the country to which he is appointed or drafted, or the country where recreation leave is taken, whichever is the lower. Where the long term rates of allowance in respect of the country in which Recreation Leave is taken are not known, the rate will be advised by Navy Office.

4. Allowances other than Living Out Allowance and Child Allowance are not payable during such leave.

5. Departmental liability for fares incurred on the return journey will not exceed the amount which the fare would have cost had the member returned to Australia by the normal means and route on the completion of duty at the place to which he was appointed or drafted.

6. The above provisions do not apply to a member who takes approved leave outside the country in which he is serving, and resumes duty in the same country after the expiration of his leave. In this case, allowances applicable to the country to which the member is appointed or drafted, will continue to be paid during the leave.

7. The appropriate Overseas Living Out Allowance will be payable to an unmarried member who normally lives in at his place of duty and who is granted approval under these provisions to take leave overseas prior to return to Australia.

8. The prior approval of the Naval Board is to be sought in all such cases.

(HPB 252/1/17.)

(*Navy Order* 753 *of* 1960.)

UNCLASSIFIED.

940.—Officers—Seaman Specialization of the General List—Split between General and Post List Officers.

(*A.F.O.* 2414/1960.)

The Naval Board has reviewed the operation of the present scheme whereby seaman officers are divided into Post and General Lists on promotion to Commander and whereby the two lists operate thereafter on separate career structures. The Board is aware that there are certain unattractive features about this arbitrary division of officers of one specialization.

2. However, the need for some form of distinction stems from one cause alone—the lack of sufficient opportunity for sea experience for all senior officers. There is, regrettably, no reason to suppose that these opportunities will necessarily improve in the future.

3. The Board would like to take this opportunity to emphasize that officers of high quality are necessary on both the Post and General Lists. There are few shore appointments at either Captain or Commander level where very recent sea experience is imperative. Furthermore, although it is not possible to give wide sea experience to officers of the General List without detriment to the sea time of those of the Post List, the Board wish to emphasize that they regard the General List seaman officer as being fully qualified to take command at sea.

4. In the course of its review the Board has considered particularly the present extent of the promulgation given to the distinction between a General List and Post List officer and have now decided that in future the distinction shall be limited to the half-yearly promotion lists, i.e., on the half-yearly lists of promotion the officer newly selected will be shown either as P.L. or G.L. From the January, 1961 edition of the Navy List, however, the crossed swords symbol of a Post List officer will be deleted and all seaman officers, whether General List or Post List, will be shown by their specialist letter X.

(DOA 303/2/15.)

UNCLASSIFIED.

941.—Photographs of Officers for Inclusion in Navy Office Records.

Officers are to forward a photograph of themselves through the usual channels to the Naval Board, for attachment to their record, at the following stages of their careers—

(*a*) *Ex Cadet, Upper Yardmen and Direct Entry Officers of all specializations and branches.*

(i) On promotion to Acting Sub-Lieutenant (*ex* Cadet, Upper Yardmen) or on entry (direct entry officers).

(ii) On promotion to Commander.

(iii) On promotion to Captain.

(*b*) *Chaplains.*

(i) On entry.

(ii) On attaining fifteen years' seniority.

(*c*) *Special Duties List Officers.*

(i) On promotion to the Special Duties List.

(ii) On promotion to Lieutenant-Commander (S.D.).

(*d*) *W.R.A.N.S.*

On promotion to officer or on entry, as appropriate.

2. Those officers who have not already provided photographs should do so now.

3. Photographs of 35-mm. size are suitable. The following particulars are to be given in ink on the back—

(*a*) Date photograph taken.

(*b*) Rank at that date.

(*c*) Name of officer (in block letters).

4. Service photographic facilities may be used. In the event of these being unavailable, the cost of obtaining photographs from commercial photographers will not be accepted as a charge against public funds.

(HPB 164/2/13.)

UNCLASSIFIED.

942.—R.A.N. College Ties and Cravats.

A specially designed tie and cravat have been obtained for sale to graduates, staff and " colours " of the R.A.N. College.

2. The design is executed in a blue silk background with a white Naval Crown with red inset embroidered as a pattern diagonally across the material.

3. The tie is intended for wear by graduates of the R.A.N. College and for R.A.N. College staff and ex-staff with one year's service or more at the college.
a Cadet Midshipman while serving in the RAN College.

4. The cravat is issued as a " colours " distinction to cadets and is available for purchase by college graduates, who were awarded " colours " while serving at the college.

5. The cost is as follows—

	£	s.	d.	
Tie	1	3	6	each.
Cravat	2	7	6	each.

6. Officers wishing to purchase ties and/or cravats should forward details of their requirements, together with the necessary remittance and details of their qualifications, to the Supply Officer, R.A.N. College, Jervis Bay, A.C.T.

(DV 917/83/24.)

UNCLASSIFIED.

943.—Ratings—WRANS—Basic Date of Passing Professionally for Higher Duties.

As from 1st January, 1961, the basic date on the advancement roster for WRANS ratings who pass professionally for a higher rate will be the last day of the half year in which ratings pass the professional examination.

2. WRANS Instructions will be amended in due course.

(HPB 311/6/6.)

UNCLASSIFIED.

944.—War Service Homes—Conditions of Loans.

The Director of the War Service Homes Division has advised that because of the large number of applications for finance for War Service Homes, it is necessary to enforce the Government's direction that assistance should not be provided more than once to any person.

2. A member of the Forces who sells the house made available to him under the War Service Homes Act is therefore not eligible to receive a second loan.

(HPB 347/1/19.)

UNCLASSIFIED.

945.—WRANS—Applications to be Discharged " Free ".

In future, applications for discharge on compassionate grounds are to be submitted by members of the WRANS as applications to be discharged " Free ". Such applications are to be made on form A.S. 222 and except in the case of those made under the rules set out in paragraph 2 are to be supported by a written report from a welfare authority or Chaplain and where appropriate, a medical certificate. All applications are to be accompanied by ratings' Certificates of Service and enclosures.

2. In addition to applications on compassionate grounds, applications will also be considered from members of the WRANS who, during a period of re-engagement, desire to be released from their engagement but have no compassionate grounds to support the application, such applications are subject to the following rules—

(*a*) Applications are to be submitted at least eight weeks prior to the date on which discharge is to take effect.

(*b*) Ratings serving at H.M.A.S. MELVILLE will not be discharged until they have completed twelve months in that establishment.

(*c*) Applications will not be considered from ratings who have re-engaged to undergo a particular course or courses.

(*d*) Applications will not be accepted from ratings who have re-engaged for certain benefits, e.g., D.F.R.B., until they have completed at least four years' service.

3. Conditions of leave and travel warrants applicable to male ratings similarly discharged also apply to WRANS ratings discharged " Free ".

(HPB 302/5/5.)

UNCLASSIFIED.

946.—WRANS Officers—Resignations.

An officer of the Women's Royal Australian Naval Service may apply to resign at any time during an extension of her short service commission although compassionate grounds may not exist.

2. Such resignations will not be recommended for acceptance from officers who—

(*a*) are serving at H.M.A.S. MELVILLE unless they have completed twelve months in that establishment;

(*b*) have extended their short service commission in order to undergo a particular course; or

(*c*) have extended their short service commission for certain benefits (e.g., D.F.R.B.) unless they have completed at least four years' service.

3. Resignations are to be submitted at least three months prior to the date on which it is desired that the resignation should take effect.

(HPB 302/5/5.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED. Cancelled NO 723/62

947.—Radar—Display Outfits JCA/B/C Series—Failure of CV7013.

(*A.F.O.* 2359/1960.)

Failures of MR6 are occurring despite the substitution of CV7013 (which has a higher peak inverse voltage rating) for CV448.

2. Recent reports in the R.N. appear to indicate that RV19 is tracking to earth, causing the failure of MR6. Ships should therefore ensure that the paxolin panel on which RV19 is mounted is kept clean and dry, and free from dirt. Should it prove on inspection that tracking has occurred the panel should be replaced.

3. A modification to overcome the failures will be introduced as soon as possible.

4. Should failure of MR6 continue despite careful attention to the paxolin panel, it should be disconnected as an interim measure pending further instructions. The only effect of this step is that when the Signal Input Control Switch (SW7) is put to " Log S.G.", calibration markers near the start of the trace may not be visible or may be less bright than the remainder.

(DEE 518/51/349.)

UNCLASSIFIED. Cancelled N.O. 706/62

948.—Aircraft Guns—Guns Ballast—Hispano 20-mm.

Aircraft which are not permitted to fly unless guns are installed are to be fitted with ballast guns, Hispano, 20-mm., and belt feed mechanisms whenever they are being flight-delivered to or from a civilian contractor.

2. Ballast guns at present in use in the R.A.N. are known as EP.624 WEIGHTS, ballast, representing Gun, Machine, Hispano, No. 3 and fitted with No. 4 Mark 2 F.M.U.

3. This item is produced from suitable guns (known either to have fired at least 6,000 rounds or have been recovered from crashed aircraft) at the Armament Depot, Sydney, by the following method—

(*a*) Bar out register number.

(*b*) Weld piston guide to piston.

(*c*) Weld barrel to body, mutilating chamber of barrel by welding. (Welding to be by electric arc method and welds painted over with black paint.)

(*d*) Remove breech block and component fittings.

(*e*) Stamp the word " BALLAST " on the top of the body and stencil " BALLAST " in 1-in. letters with white paint on the body.

4. As EP.624 Weights cannot be reconverted to firing guns, security measures appropriate to the latter, in respect of transport and storage, are not applicable.

5. Ballast belt feed mechanisms will be Mark 1* and will be stencilled " BALLAST " in ½-in. white lettering.

6. Ballast weights and B.F.M.'s will be held as follows—

N.A.S., Nowra	8 No.
Naval Overseer's Assistant, Bankstown	16 No.

7. The log books for guns converted to Weights are to be returned by the Armament Depot, Sydney, to Navy Office for cancellation.

8. Before aircraft are despatched by flight-delivery from N.A.S. Nowra, to a civilian contractor, the serviceable guns, &c., are to be removed and ballast gun equipment installed in lieu. Aircraft being returned to N.A.S. Nowra, from a contractor will be similarly equipped.

9. Serviceable guns, &c., removed at N.A.S. Nowra, should be held for re-installing in aircraft as required. They should not normally be returned to a R.A.N. Armament Depot unless due for return in accordance with the instructions contained in B.R. 291/45.

10. In the event of aircraft movements making it necessary to adjust holdings of ballast gun equipment by using road or rail transport, the arrangements for this to be effected are to be made through the Naval Air Engineer Overseer and not the Superintending Armament Supply Officer.

(DW 709/51/35.)

UNCLASSIFIED.

949.—Cartridges, Q.F., 4-in., Mark 16* and 21 Guns, H.E.U.C.—Use for S.U. Practice Firings.

Navy Order 493 of 1960 is to be amended as follows—

(*a*) *Paragraph* 1, line 2.

After " firings " *delete* " over deep water " and *insert* " by H.M. ships in normal firing areas ".

(*b*) *Paragraph* 7, line 2.

After " Schools " *delete* " or by ships in shallow water ".

(DW 726/59/33.)

(*Navy Order* 493 *of* 1960.)

UNCLASSIFIED.

950.—Gun Mountings—4.5-in. Twin R.P. 41 Mountings, Marks 6, 6* and 6* Mod. 1—Modifications—Amendments.

Navy Order 638 of 1960 is to be amended as follows—

Appendix " *D* "—Mk. 6* Mod. 1—Revolving structure, Mod. No. 32—

Column 2, *delete* " N37235 and N55396 ".

Column 3, *delete* " N55396/1, 2, 5–12 Purolator Micronic Filter, Model M.F.2604 ".

insert " N37235 and N55396 ".

Column 4, *insert* " N55396/1, 2, 5–12 Purolator Micronic Filter, Model M.F.2604 ".

2. Navy Order 406 of 1960 and B.R. 2014B are relevant.

(DW 736/259/14.)

(*Navy Order* 406 *and* 638 *of* 1960.)

UNCLASSIFIED.

951.—Gun Mountings—4.5-in. Twin R.P. 41 Mountings, Marks 6, 6* and 6* Mod. 1—Modifications—Amendments.

Commonwealth Navy Order 406 of 1960 is to be amended as follows—

Appendix " *A* ", Mks. 6 and/or 6*, Revolving Structure Mod. No. 72—

Page 15—*Column* 4.

delete " N39346 Rev. items 2–8, 11–33 ".

insert " N39346 Rev. items 15–33 ".

delete " N39346 Rev. dated (27–10–55) ".

insert " N39346 Rev. dated 19–3–56 ".

(DW 736/259/14.)

(*Navy Order* 406 *of* 1960.)

UNCLASSIFIED.

952.—Boats—27-ft. Motor Whalers—Uniform System of Sail Markings.

(*A.F.O.* 2488/1960.)

27-ft. Motor Whalers are to carry the distinguishing letter " L ", and distinctive numbers or letters on their mainsails.

2. The mainsail is to carry the letter " L " near the head, with the visual callsign of the parent ship underneath. In the case of shore establishments the self-evident initials used in Montague Whalers should be used instead of the visual callsign.

3. Where ships or establishments have more than one motor whaler, the mainsail is to be distinguished by a number following the letter " L "; thus a ship's second motor whaler will carry the marking " L2 " with the visual callsign beneath. Markings are to be at different heights on each side of the sail to avoid showing on each other through the transparency of the sail.

4. The marks are to be painted on cotton sheeting, pattern T.665 with black paint, pattern 5340, and sewn onto the mainsail parallel to the gunwhale. Letters and figures are to be 12-in. high and 7-in. wide with 2-in. thickness of stroke.

5. This system is to apply to all motor whalers, users being responsible for the markings.

(DNC 1275/52/39.)

UNCLASSIFIED.

953.—Naval Stores—Air—Vocabulary Section 26BY—Transfer to New Section/Reference Numbers.

The following Reference 26BY items have been re-referenced as indicated. Stocks and records of any which are applicable should be amended accordingly—

Old Ref. No.	*New Ref. No.*	*Old Ref. No.*	*New Ref. No.*
26BY/705	26DV/13709	26BY/5385	26DV/13721
794	13710	5830	13722
827	26FC/13292	5917	13723
842	26DV/13711	7028	13724
852	13712	7937	26FC/13293
1227	13713	7985	26DV/13725
1636	13714	10311	13726
1920	13715	14348	26FY/16402
1931	13716	15920	26DV/13727
3519	13717	16137	26FC/13294
4021	13718	16442	26DV/13728
4037	13719	17285	13729
4038	13720	70498	13730

(DNAS 607/51/20.)

UNCLASSIFIED.

954.—Naval Stores (General) (Class B, Group 11, Part A)—Adoption of British Joint Service Catalogue Numbers and Designations—Revised Constitution in B.R. 810.

(*A.F.O.* 2372/1960.)

British Joint Service Catalogue numbers and designations have been adopted, where applicable, for Tools, Screwcutting under class B, group 11, part A, and revision of the lay-out of this group in Section 10 of B.R. 810, the Rate Book and Authorized List of Naval Stores has been necessary. The new arrangement of contents, which is effective from the date of this order, is shown in the appendix to this order.

2. Stocks and records at Store Depots should be adjusted accordingly.

3. H.M.A. ships and commissioned establishments should comply with A.B.R. 4 (Naval Storekeeping Manual), Article 1812 (*g*).

4. Admiralty advise that B.R. 810 is being reprinted to accord with the new arrangement. Other publications will be amended.

APPENDIX.

Class B 11A.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
3962	Tap, B.A. T ..	910–1665	935	Tap, B.A. B ..	16620
3962	„ S ..	910–7990	936	„ T ..	936
3962	„ B ..	910–1679	936	„ B ..	16621
3963	„ T ..	910–1666	937	„ T ..	937
3963	„ S ..	910–7991	937	„ B ..	16622
3963	„ B ..	910–1680	3946	Tap, B.S.W. T ..	3946
3964	„ T ..	910–1667	3946	„ S ..	16623
3964	„ S ..	910–7992	3946	„ B ..	16624
3964	„ B ..	910–1681	3947	„ T ..	3947
3965	„ T ..	910–1668	3947	„ S ..	16625
3965	„ S ..	910–7993	3947	„ B ..	16626
3965	„ B ..	910–1682	3948	„ T ..	910–1941
3966	„ T ..	910–1669	3948	„ S ..	910–1959
3966	„ S ..	910–7994	3948	„ B ..	910–1977
3966	„ B ..	910–1683	3949	„ T ..	3949
3967	„ T ..	910–1670	3949	„ S ..	16627
3967	„ S ..	910–7995	3949	„ B ..	16628
3967	„ B ..	910–1684	3950	„ T ..	910–1942
3968	„ T ..	910–1671	3950	„ S ..	910–1960
3968	„ S ..	910–7996	3950	„ B ..	910–1978
3968	„ B ..	910–1685	3951	„ T ..	3951
3969	„ T ..	910–1672	3951	„ S ..	16629
3969	„ S ..	910–7997	3951	„ B ..	16630
3969	„ B ..	910–1686	3952	„ T ..	910–1943
3970	„ T ..	910–1673	3952	„ S ..	910–1961
3970	„ S ..	910–7998	3952	„ B ..	910–1979
3970	„ B ..	910–1687	618F	„ T ..	910–1944
3971	„ T ..	910–1674	618F	„ S ..	910–1962
3971	„ S ..	910–7999	618F	„ B ..	910–1980
3971	„ B ..	910–1688	618G	„ T ..	910–1945
3972	„ T ..	910–1675	618G	„ S ..	910–1963
3972	„ S ..	910–8000	618G	„ B ..	910–1981
3972	„ B ..	910–1689	618H	„ T ..	910–1946
3973	„ T ..	3973	618H	„ S ..	910–1964
3973	„ S ..	16612	618H	„ B ..	910–1982
3973	„ B ..	16613	619F	„ T ..	910–1947
929	„ T ..	929	619F	„ S ..	910–1965
929	„ B ..	16614	619F	„ B ..	910–1983
930	„ T ..	930	658	„ T ..	910–1948
930	„ B ..	16615	658	„ S ..	910–1966
931	„ T ..	931	658	„ B ..	910–1984
931	„ B ..	16616	619H	„ T ..	910–1949
932	„ T ..	932	619H	„ S ..	910–1967
932	„ B ..	16617	619H	„ B ..	910–1985
933	„ T ..	933	619K	„ T ..	910–1951
933	„ B ..	16618	619K	„ S ..	910–1969
934	„ T ..	934	619K	„ B ..	910–1987
934	„ B ..	16619	620E	„ T ..	910–1952
935	„ T ..	935	620E	„ S ..	910–1970

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
620E	Tap, B.S.W. B ..	910–1988	697A	Tap, B.S.F. S ..	910–1792
620F	„ T ..	910–1953	697A	„ B ..	910–1829
620F	„ S ..	910–1971	698	„ T ..	910–1777
620F	„ B ..	910–1989	698	„ S ..	910–1793
620G	„ T ..	910–1954	698	„ B ..	910–1830
620G	„ S ..	910–1972	698A	„ T ..	910–1778
620G	„ B ..	910–1990	698A	„ S ..	910–1794
620H	„ T ..	910–1955	698A	„ B ..	910–1831
620H	„ S ..	910–1973	699	„ T ..	910–1779
620H	„ B ..	910–1991	699	„ S ..	910–1795
621F	„ T ..	910–1956	699	„ B ..	910–1832
621F	„ S ..	910–1974	699A	„ T ..	910–1780
621F	„ B ..	910–1992	699A	„ S ..	910–1796
621G	„ T ..	910–1957	699A	„ B ..	910–1833
621G	„ S ..	910–1975	700	„ T ..	910–1781
6219	„ B ..	910–1993	700	„ S ..	910–1797
621H	„ T ..	16654	700	„ B ..	910–1834
621H	„ S ..	16631	701	„ T ..	910–1782
621H	„ B ..	16632	701	„ S ..	910–1798
621K	„ T ..	910–1958	701	„ B ..	910–1835
621K	„ S ..	910–1976	702	„ T ..	910–1783
621K	„ B ..	910–1994	702	„ S ..	910–1799
621L	„ T ..	16655	702	„ B ..	910–1836
621L	„ S ..	16633	703	„ T ..	910–1784
621L	„ B ..	16634	703	„ S ..	910–1821
816	„ T ..	816	703	„ B ..	910–1837
816	„ B ..	16635	704	„ T ..	910–1785
817	„ T ..	817	704	„ S ..	910–1822
817	„ B ..	16636	704	„ B ..	910–1838
818	„ T ..	818	705	„ T ..	910–1786
818	„ B ..	16637	705	„ S ..	910–1823
819	„ T ..	819	705	„ B ..	910–1839
819	„ B ..	16638	4296	Tap, B.S.P.F. S ..	910–8065
8093	Tap, B.S.F. T ..	910–1771	4296	„ B ..	910–1853
8093	„ S ..	910–1787	4308	„ S ..	910–8066
8093	„ B ..	910–1824	4308	„ B ..	910–1854
695	„ T ..	910–1772	4309	„ S ..	910–8067
695	„ S ..	910–1788	4309	„ B ..	910–1855
695	„ B ..	910–1825	4310	„ S ..	910–8068
695A	„ T ..	910–1773	4310	„ B ..	910–1856
695A	„ S ..	910–1789	4311	„ S ..	4311
695A	„ B ..	910–1826	4311	„ B ..	16639
696	„ T ..	910–1774	400E	„ S ..	910–8069
696	„ S ..	910–1790	400E	„ B ..	910–1857
696	„ B ..	910–1827	400F	„ S ..	910–8070
697	„ T ..	910–1775	400F	„ B ..	910–1858
697	„ S ..	910–1791	400G	„ S ..	910–8071
697	„ B ..	910–1828	400G	„ B ..	910–1859
697A	„ T ..	910–1776	401E	„ S ..	910–8072

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
401E	Tap, B.S.P.F. B	910–1860	12675	Tap, U.N.F. S	910–2253
401F	„ S	910–8073	12675	„ B	910–2268
401F	„ B	910–1861	12676	„ T	910–2239
401G	„ S	910–8074	12676	„ S	910–2254
401G	„ B	910–1862	12676	„ B	910–2269
402D	„ S	910–8076	12677	„ T	910–2240
402D	„ B	910–1864	12677	„ S	910–2255
402E	„ S	910–8077	12677	„ B	910–2270
402E	„ B	910–1865	12678	„ T	910–2241
3823	Tap, N.F. T	910–1594	12678	„ S	910–2256
3823	„ S	910–1604	12678	„ B	910–2271
3823	„ B	910–1614	12679	„ T	910–2242
6610	Tap, N.C. T	910–1498	12679	„ S	910–2257
6610	„ S	910–1550	12679	„ B	910–2272
6610	„ B	910–1555	12680	„ T	910–2243
6611	„ T	6611	12680	„ S	910–2258
6611	„ S	16640	12680	„ B	910–2273
6611	„ B	16641	12681	„ T	910–2244
6612	„ T	910–1499	12681	„ S	910–2259
6612	„ S	910–1551	12681	„ B	910–2274
6612	„ B	910–1556	14425	Tap, U.N.C. T	910–2128
6613	„ T	6613	14425	„ S	910–2148
6613	„ S	16642	14425	„ B	910–2168
6613	„ B	16643	14426	„ T	910–2129
6614	„ T	6614	14426	„ S	910–2149
6614	„ S	16644	14426	„ B	910–2169
6614	„ B	16645	14427	„ T	910–2130
6615	„ T	6615	14427	„ S	910–2150
6615	„ S	16646	14427	„ B	910–2170
6615	„ B	16647	14428	„ T	910–2131
6616	„ T	910–1547	14428	„ S	910–2151
6616	„ S	910–1552	14428	„ B	910–2171
6616	„ B	910–1557	14429	„ T	910–2132
12670	Tap, U.N.F. T	910–2231	14429	„ S	910–2152
12670	„ S	910–2246	14429	„ B	910–2172
12670	„ B	910–2261	14430	„ T	910–2134
12671	„ T	910–2232	14430	„ S	910–2154
12671	„ S	910–2247	14430	„ B	910–2174
12671	„ B	910–2262	14431	„ T	910–2135
12672	„ T	910–2233	14431	„ S	910–2155
12672	„ S	910–2248	14431	„ B	910–2175
12672	„ B	910–2263	14432	„ T	910–2136
12673	„ T	910–2235	14432	„ S	910–2156
12673	„ S	910–2250	14432	„ B	910–2176
12673	„ B	910–2265	14433	„ T	910–2137
12674	„ T	910–2237	14433	„ S	910–2157
12674	„ S	910–2252	14433	„ B	910–2177
12674	„ B	910–2267	9260	Tap, B.A. T	910–1637
12675	„ T	910–2238	9260	„ B	910–1651

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
9261	Tap, B.A. T	910–1639	6809	Tap, B.S.W. B	910–1934
9261	„ B	910–1653	6810	„ T	910–1877
9262	„ T	910–1641	6810	„ S	910–1894
9262	„ B	910–1655	6810	„ B	910–1935
9263	„ T	910–1643	6811	„ T	910–1878
9263	„ B	910–1657	6811	„ S	910–1895
9264	„ T	910–1645	6811	„ B	910–1936
9264	„ B	910–1659	6812	„ T	910–1879
9270	Tap, B.S.F. T	910–1724	6812	„ S	910–1896
9270	„ S	910–1740	6812	„ B	910–1937
9270	„ B	910–1756	6813	„ T	910–1880
9271	„ T	910–1726	6813	„ S	910–1897
9271	„ S	910–1742	6813	„ B	910–1938
9271	„ B	910–1758	6814	„ T	6814
9272	„ T	910–1727	6814	„ S	16648
9272	„ S	910–1743	6814	„ B	16649
9272	„ B	910–1759	6815	„ T	910–1881
9273	„ T	910–1728	6815	„ S	910–1898
9273	„ S	910–1744	6815	„ B	910–1939
9273	„ B	910–1760	6816	„ T	6816
9274	„ T	910–1729	6816	„ S	16650
9274	„ S	910–1745	6816	„ B	16651
9274	„ B	910–1761	6817	„ T	910–1882
6801	Tap, B.S.W. T	910–1867	6817	„ S	910–1899
6801	„ S	910–1884	6817	„ B	910–1940
6801	„ B	910–1925	6818	„ T	6818
6802	„ T	910–1868	6818	„ S	16652
6802	„ S	910–1885	6818	„ B	16653
6802	„ B	910–1926	12682	Tap, U.N.F. T	910–2185
6803	„ T	910–1869	12682	„ S	910–2201
6803	„ S	910–1886	12682	„ S	910–2216
6803	„ B	910–1927	12683	„ T	910–2186
6804	„ T	910–1870	12683	„ S	910–2202
6804	„ S	910–1887	12683	„ B	910–2217
6804	„ B	910–1928	12684	„ T	910–2187
6805	„ T	910–1871	12684	„ S	910–2203
6805	„ S	910–1888	12684	„ B	910–2218
6805	„ B	910–1929	12685	„ T	910–2189
6806	„ T	910–1872	12685	„ S	910–2205
6806	„ S	910–1889	12685	„ B	910–2220
6806	„ B	910–1930	12686	„ T	910–2191
6807	„ T	910–1873	12686	„ S	910–2207
6807	„ S	910–1890	12686	„ B	910–2222
6807	„ B	910–1931	12687	„ T	910–2192
6808	„ T	910–1874	12687	„ S	910–2208
6808	„ S	910–1891	12687	„ B	910–2223
6808	„ B	910–1932	12688	„ T	910–2193
6809	„ T	910–1876	12688	„ S	910–2209
6809	„ S	910–1893	12688	„ B	910–2224

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
12689	Tap, U.N.F. T ..	910–2194	6947	Wrench	910–1478
12689	„ S ..	910–2210	6949	„	910–1480
12689	„ B ..	910–2225	6950	„	910–1479
12690	„ T ..	910–2195	6500	Die, B.A.	910–1308
12690	„ S ..	910–2211	6501	„	910–1309
12690	„ B ..	910–2226	6502	„	910–1310
12691	„ T ..	910–2196	6503	„	910–1311
12691	„ S ..	910–2212	6504	„	910–1312
12691	„ B ..	910–2227	6505	„	910–1313
12692	„ T ..	910–2197	6506	„	910–1314
12692	„ S ..	910–2213	6507	„	910–1315
12692	„ B ..	910–2228	6508	„	910–1316
12693	„ T ..	910–2198	6509	„	910–1317
12693	„ S ..	910–2214	6510	„	910–1318
12693	„ B ..	910–2229	6511	„	6511
14434	Tap, U.N.C. T ..	910–2068	6512	Die, B.S.W. ..	6512
14434	„ S ..	910–2088	6513	„ ..	6513
14434	„ B ..	910–2108	6514	„ ..	910–1354
14435	„ T ..	910–2069	6515	„ ..	6515
14435	„ S ..	910–2089	6516	„ ..	910–1355
14435	„ B ..	810–2109	6517	„ ..	6517
14436	„ T ..	910–2070	6518	„ ..	910–1356
14436	„ S ..	910–2090	13216	„ ..	910–1357
14436	„ B ..	910–2110	6520	„ ..	910–1358
14437	„ T ..	910–2071	6521	„ ..	910–1359
14437	„ S ..	910–2091	6522	„ ..	910–1360
14437	„ B ..	910–2111	6523	„ ..	910–1361
14438	„ T ..	910–2072	6524	„ ..	910–1363
14438	„ S ..	910–2092	6525	„ ..	910–1364
14438	„ B ..	910–2112	6526	„ ..	910–1365
14439	„ T ..	910–2074	6527	„ ..	910–1366
14439	„ S ..	910–2094	8094	Die, B.S.F. ..	910–1334
14439	„ B ..	910–2114	6532	„ ..	910–1335
14440	„ T ..	910–2075	6533	„ ..	910–1336
14440	„ S ..	910–2095	6534	„ ..	910–1337
14440	„ B ..	910–2115	6535	„ ..	910–1338
14441	„ T ..	910–2076	6536	„ ..	910–1339
14441	„ S ..	910–2096	6537	„ ..	910–1340
14441	„ B ..	910–2116	6538	„ ..	910–1341
14442	„ T ..	910–2077	6539	„ ..	910–1342
14442	„ S ..	910–2097	6540	„ ..	910–1343
14442	„ B ..	910–2117	6541	„ ..	910–1344
6951	Wrench	—	6542	„ ..	910–1345
6940	„	910–1472	6543	„ ..	910–1346
6941	„	910–1473	6544	„ ..	910–1347
6943	„	910–1475	6607	Die, B.S.P.F. ..	910–1348
6944	„	910–1474	6608	„ ..	910–1349
6945	„	910–1476	6559	„ ..	910–1350
6946	„	910–1477	6560	„ ..	910–1351

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
6609	Die, B.S.P.F. ..	910–1352	4487	Die, Nuts, B.S.W.	910–2316
6561	„ ..	910–1353	4486	„	4486
3829	Die, N.F.	910–1299	4485	„	910–2317
6660	Die, N.C. ..	910–1290	4484	„	4484
6661	„ ..	6661	8091	Die, Nuts, B.S.F.	910–2276
6662	„ ..	910–1291	4010	„	910–2277
6663	„ ..	6663	4009	„	910–2279
6664	„ ..	6664	4008	„	910–2280
6665	„ ..	6665	4007	„	910–2281
6666	„ ..	910–1292	4006	„	910–2282
12648	Die, U.N.F. ..	910–1404	4005	„	910–2283
12649	„ ..	910–1405	4004	„	910–2284
12650	„ ..	910–1406	4003	„	910–2285
12651	„ ..	910–1408	4002	„	910–2286
12652	„ ..	910–1410	4001	„	910–2287
12653	„ ..	910–1411	4000	„	910–2288
12654	„ ..	910–1412	8092	„	910–2289
12655	„ ..	910–1413	6760	Die, Nuts, N.C. ..	6760
14443	Die, U.N.C. ..	910–1393	6761	„ ..	6761
14444	„ ..	910–1394	6762	„ ..	6762
14445	„ ..	910–1395	6763	„ ..	6763
14446	„ ..	910–1396	6764	„ ..	6764
14447	„ ..	910–1397	6765	„ ..	6765
14448	„ ..	910–1399	6766	„ ..	6766
14449	„ ..	910–1400	12658	Die, Nuts, U.N.F.	910–2353
14450	„ ..	910–1401	12659	„	910–2354
14451	„ ..	910–1402	12660	„	910–2355
9280	Die, B.A.	9280	12661	„	910–2357
9281	„	9281	12662	„	910–2359
9282	„	9282	12663	„	910–2360
9283	„	9283	12664	„	910–2361
9284	„	9284	12665	„	910–2362
9290	Die, B.S.F. ..	9290	12666	„	910–2363
9291	„ ..	9291	12667	„	910–2364
9292	„ ..	9292	12668	„	910–2365
9293	„ ..	9293	12669	„	910–2366
9294	„ ..	9294	14452	Dies, Nuts, U.N.C.	910–2338
4499	Die, Nuts, B.S.W.	910–2302	14453	„	910–2339
4498	„	910–2303	14454	„	910–2340
4497	„	910–2304	14455	„	910–2341
4496	„	910–2305	14456	„	910–2342
4495	„	910–2306	14457	„	910–2344
4494	„	910–2307	14458	„	910–2345
4493	„	910–2308	14459	„	910–2346
4492	„	910–2309	14460	„	910–2347
4491	„	910–2310	6528	Dies, B.S.W. ..	910–1454
4490	„	910–2312	6529	„ ..	910–1455
4489	„	910–2314	6545	Dies, B.S.F. ..	6545
4488	„	910–2315	6562	Dies, B.S.P.F. ..	910–1450

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
6563	Dies, B.S.P.F. ..	910–1451	961A	Chaser, B.S.W., Ext.	910–3659
6564	,, ..	6564	960A	,,	910–3660
12656	Dies, U.N.F. ..	910–1460	959A	,,	910–3661
12657	,, ..	910–1461	958A	,,	910–3662
14559	Dies, U.N. ..	14559	4633	,,	910–3663
14560	,, ..	14560	984A	,,	910–3664
6573	Collet	910–1415	4634	,,	910–3665
6574	,, ...	910–1416	13241	,,	910–3666
6575	,, ...	910–1417	4635	,,	910–3667
6577	,, ...	910–1419	986	,,	910–3668
6579	,, ...	910–1421	987	,,	910–3670
6580	,, ...	910–1422	634B	Chaser, B.S.W., Int.	910–3637
6582	,, ...	910–1424	634A	,,	910–3638
6583	,, ...	910–1425	634	,,	910–3639
6585	,, ...	910–1427	633	,,	910–3640
6586	,, ...	910–1428	632	,,	910–3641
6588	,, ...	910–1430	631	,,	910–3642
6590	,, ...	910–1432	630	,,	910–3643
6592	,, ...	910–1434	629	,,	910–3644
6593	,, ...	910–1435	628	,,	910–3645
6595	,, ...	910–1437	627	,,	910–3646
6596	,, ...	910–1438	626	,,	910–3647
6598	,, ...	910–1440	625	,,	910–3648
6601	,, ...	910–1443	624	,,	910–3649
6565	Die Stocks ..	910–1463	13217	,,	910–3650
6566	,, ,, ..	910–1466	623	,,	910–3651
6567	,, ,, ..	910–1467	13225	Chaser, B.S.W., Ext.	910–3618
12710	,, ,, ..	910–3287	13226	,,	910–3619
6572	,, ,, ..	6572	13227	,,	910–3620
13219	Chaser, B.S.W., Int.	13219	13228	,,	910–3621
13221	,,	13221	13229	,,	910–3622
13223	,,	13223	13230	,,	910–3623
964	,,	910–3672	13231	,,	910–3624
963	,,	910–3673	13232	,,	910–3625
962	,,	910–3674	13233	,,	910–3626
961	,,	910–3675	13234	,,	910–3627
960	,,	910–3676	13235	,,	910–3628
959	,,	910–3677	13236	,,	910–3629
958	,,	910–3678	13237	,,	910–3630
4632	,,	910–3679	13218	,,	910–3631
984	,,	910–3680	13238	,,	910–3632
13239	,,	910–3681	12708	Chaser, Unified, Int.	12708
13240	,,	910–3682	14471	,,	910–3774
13220	,,	13220	14473	,,	910–3773
13222	,,	13222	14475	,,	910–3772
13224	,,	13224	14477	,,	910–3771
964A	Chaser, B.S.W., Ext.	910–3656	14479	,,	910–3770
963A	,,	910–3657	12708	Chaser, Unified, Ext.	12709
962A	,,	910–3658	14472	,,	910–3762

APPENDIX—*continued.*

Class B 11A—continued.

Old Pattern No.	*Description.*	*New Pattern No.*	*Old Pattern No.*	*Description.*	*New Pattern No.*
14474	Chaser, Unified, Ext.	910–3761	14467	Chaser, Unified, Int.	910–3745
14476	,,	910–3760	14469	,,	910–3744
14478	,,	910–3759	12695	Chaser, Unified, Ext.	910–3738
14480	,,	910–3758	12697	,,	910–3737
12694	Chaser, Unified, Int.	910–3755	12699	,,	910–3736
12696	,,	910–3754	12701	,,	910–3735
12698	,,	910–3753	12703	,,	910–3734
12700	,,	910–3752	12705	,,	910–3733
12702	,,	910–3751	14462	,,	910–3732
12704	,,	910–3750	12707	,,	910–3731
14461	,,	910–3749	14464	,,	910–3730
12706	,,	910–3748	14466	,,	910–3729
14463	,,	910–3747	14468	,,	910–3728
14465	,,	910–3746	14470	,,	910–3727

(DNAS 505/71/125.)

Section 7.
CANCELLED LIST.

UNCLASSIFIED.

955.—Cancellation of Navy Orders.

The following Navy Orders, or paragraphs thereof as indicated, are hereby cancelled, having been incorporated in A.B.R. 4, Naval Storekeeping Manual.

1958—	**1959**—continued.	**1960**—
896	448	30
1016	456	120
1029	495	121
1065	530	199
1107	544	239
1112	588	246
	658	278 (Paragraphs 2, 3, 4 and 5)
1959—	699	
167	719	303
218	741	326
272	784	356
296	1007	378
317	1041	439
325	1043	
368	1053	
374	1103	

(DNAS 47/8/8.)

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C.N.O. 956/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
24th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

8861/60.

RESTRICTED → Cancelled CNO 293/62

956.—Calibration of Guns by Radio Doppler Type 900C Muzzle Velocity Measuring Equipment—Instructions—Use of Results.

(*A.F.O.* 1524/1960.)

Prolonged trials have proved that type 900C Muzzle Velocity Measuring Equipment is the most accurate means of obtaining muzzle velocities available to the Fleet, and when type 900C measurements are available, they are to be used in preference to the M.V./Wear curve. The second object of these calibrations (but no less important) is to provide the Admiralty with data from which M.V./Wear relationships can be re-assessed and other information affecting Naval gun accuracy obtained.

Location, Maintenance and Operation of Equipment.

2. Two sets of type 900C are held at R.A.N.T.E., Sydney under the control of the Deputy Inspector of Naval Ordnance (Sydney). They are maintained and operated by the staff of D.I.N.O. (Sydney).

Frequency of Calibration.

3. Ships concerned are to calibrate—

(*a*) On commissioning, re-commissioning or as early as practicable in the Work Up.

(*b*) As soon as practicable after two series inspections. At present it is only intended to calibrate ships fitted with 4.5-in. guns.

Requests for Calibration.

4. When a calibration is required a signal to this effect is to be sent to Captain of the Port, Sydney, giving as much notice as possible. At least 48 hours notice is required. Whenever possible, an Inspecting Officer will visit the ship before a calibration in order to arrange details.

5. In the Royal Navy, ships' staffs are responsible for carrying out their type 900C calibration themselves. Therefore, when serving in the Strategic Reserve, ships of the R.A.N. should include a request for technical assistance in their signals asking for the equipment.

Calibration Team.

6. This will normally consist of an Inspecting Officer and two civilians. They will embark, align and check the equipment and will carry out the calibration.

Calibration Procedure.

7. Ideally, guns should fire three series, each on a different day, to eliminate "Day to Day" variations in muzzle velocity. However, ships may carry out a complete calibration in as little as one day provided that the firings are made independent by—

(*a*) Firing the three series, one early morning, one mid-day, one evening. At least three hours must separate series and, therefore, it may be more convenient to spread the firings over two days.

(*b*) Re-aligning measuring apparatus.

(*c*) Cooling and cleaning of gun barrels between firings as detailed in paragraph 11 (*d*),

(*d*) Re-checking of propellant temperatures.

8. Each series for each gun will consist of one warmer round followed by five calibration rounds. A sixth calibration round may be fired if the Inspecting Officer considers it necessary owing to the spread of observed velocities in the series. One twin mounting can be calibrated in about ten minutes. In a Daring Class Destroyer, all three mountings should complete one series in 45 minutes. As guns are normally measured for wear before and after a type 900C calibration (*see* paragraph 13 below) it is not desirable for ships to carry out other firings between these two wear measurements.

Embarkation of the Equipment.

9. The equipment should be embarked the day before the first calibration firing. The loading will be expedited if the ship is under a crane. This is essential in the case of a ship not fitted with davit seatings on gunhouses. A suitable davit can be supplied with the equipment. One or two T/R (Aerial) units will be bolted to the seatings on gunhouses, depending on the class of ship being calibrated, as follows—

Daring Class—One T/R unit on "B" gunhouse to calibrate "A" and "B" guns. A second T/R unit on "X" gunhouse to calibrate "X" guns.

Battle Class—One T/R unit on "B" gunhouse to calibrate "A" and "B" guns.

10. In addition the following equipment will be embarked—The display unit, the main A/C unit and main power unit. These will be placed on board in some convenient place, under shelter. When selecting a site for these units it should be borne in mind that adequate power supplies of stabilized 240-volt A.C. to 110-volt A.C. will be required and that communication with the bridge is necessary. In Daring Class ships, the Radio Maintenance room has been found suitable.

Preparations by the Ship.

11. (*a*) The ship is to initiate the normal action regarding application for a firing area.

(*b*) Twenty-one rounds per gun will be required for the full calibration. One mark of shell only is to be used for any given calibration.

(*c*) The ship is to provide the Calibration Team with the most recent reading of the minimum thermometer in the magazine or stowage immediately before each series. A more accurate method of obtaining charge temperature is by means of dial type charge thermometers. However, if this type of thermometer is to be used, they will be provided by the Calibration Team, after discussion with the ship.

(*d*) Guns are to be prepared as follows before each series firing—

(i) Clean out bore using paraffin.

(ii) Dry out bore with a clean non-fluffy rag.

(iii) Soak a clean rag in oil AP 950 so that it is saturated, wrap it round a piasaba brush and pull through the bore three times.

(iv) Immediately prior to firing, wrap a clean dry rag round a piasaba and pull through once.

Random errors may occur in M.V.'s if guns are not prepared in this uniform manner before each series.

(*e*) The ship is to arrange for the marking of cartridge cases so that each case can be identified with the series and round to which it belongs. The Calibration Team will provide suitable quick drying ink so that cases can be marked shortly before each is loaded and fired. Empty cases from calibration firings should be kept separate, and are to be returned to the Armament Depot as soon as possible for weighing.

RESTRICTED → Cancelled C NO 293/62

956.—Calibration of Guns by Radio Doppler Type 900C Muzzle Velocity Measuring Equipment—Instructions—Use of Results.

(*A.F.O.* 1524/1960.)

Prolonged trials have proved that type 900C Muzzle Velocity Measuring Equipment is the most accurate means of obtaining muzzle velocities available to the Fleet, and when type 900C measurements are available, they are to be used in preference to the M.V./Wear curve. The second object of these calibrations (but no less important) is to provide the Admiralty with data from which M.V./Wear relationships can be re-assessed and other information affecting Naval gun accuracy obtained.

Location, Maintenance and Operation of Equipment.

2. Two sets of type 900C are held at R.A.N.T.E., Sydney under the control of the Deputy Inspector of Naval Ordnance (Sydney). They are maintained and operated by the staff of D.I.N.O. (Sydney).

Frequency of Calibration.

3. Ships concerned are to calibrate—

(*a*) On commissioning, re-commissioning or as early as practicable in the Work Up.

(*b*) As soon as practicable after two series inspections. At present it is only intended to calibrate ships fitted with 4.5-in. guns.

Requests for Calibration.

4. When a calibration is required a signal to this effect is to be sent to FLAG OFFICER IN COMMAND EAST AUSTRALIA AREA as possible. At least 48 hours notice is required. Whenever possible, an Inspecting Officer will visit the ship before a calibration in order to arrange details.

5. In the Royal Navy, ships' staffs are responsible for carrying out their type 900C calibration themselves. Therefore, when serving in the Strategic Reserve, ships of the R.A.N. should include a request for technical assistance in their signals asking for the equipment.

Calibration Team.

6. This will normally consist of an Inspecting Officer and two civilians. They will embark, align and check the equipment and will carry out the calibration.

Calibration Procedure.

7. Ideally, guns should fire three series, each on a different day, to eliminate "Day to Day" variations in muzzle velocity. However, ships may carry out a complete calibration in as little as one day provided that the firings are made independent by—

(*a*) Firing the three series, one early morning, one mid-day, one evening. At least three hours must separate series and, therefore, it may be more convenient to spread the firings over two days.

(*b*) Re-aligning measuring apparatus.

(*c*) Cooling and cleaning of gun barrels between firings as detailed in paragraph 11 (*d*),

(*d*) Re-checking of propellant temperatures.

8. Each series for each gun will consist of one warmer round followed by five calibration rounds. A sixth calibration round may be fired if the Inspecting Officer considers it necessary owing to the spread of observed velocities in the series. One twin mounting can be calibrated in about ten minutes. In a Daring Class Destroyer, all three mountings should complete one series in 45 minutes. As guns are normally measured for wear before and after a type 900C calibration (*see* paragraph 13 below) it is not desirable for ships to carry out other firings between these two wear measurements.

Embarkation of the Equipment.

9. The equipment should be embarked the day before the first calibration firing. The loading will be expedited if the ship is under a crane. This is essential in the case of a ship not fitted with davit seatings on gunhouses. A suitable davit can be supplied with the equipment. One or two T/R (Aerial) units will be bolted to the seatings on gunhouses, depending on the class of ship being calibrated, as follows—

Daring Class—One T/R unit on "B" gunhouse to calibrate "A" and "B" guns. A second T/R unit on "X" gunhouse to calibrate "X" guns.

Battle Class—One T/R unit on "B" gunhouse to calibrate "A" and "B" guns.

10. In addition the following equipment will be embarked—The display unit, the main A/C unit and main power unit. These will be placed on board in some convenient place, under shelter. When selecting a site for these units it should be borne in mind that adequate power supplies of stabilized 240-volt A.C. to 110-volt A.C. will be required and that communication with the bridge is necessary. In Daring Class ships, the Radio Maintenance room has been found suitable.

Preparations by the Ship.

11. (*a*) The ship is to initiate the normal action regarding application for a firing area.

(*b*) Twenty-one rounds per gun will be required for the full calibration. One mark of shell only is to be used for any given calibration.

(*c*) The ship is to provide the Calibration Team with the most recent reading of the minimum thermometer in the magazine or stowage immediately before each series. A more accurate method of obtaining charge temperature is by means of dial type charge thermometers. However, if this type of thermometer is to be used, they will be provided by the Calibration Team, after discussion with the ship.

(*d*) Guns are to be prepared as follows before each series firing—

(i) Clean out bore using paraffin.

(ii) Dry out bore with a clean non-fluffy rag.

(iii) Soak a clean rag in oil AP 950 so that it is saturated, wrap it round a piasaba brush and pull through the bore three times.

(iv) Immediately prior to firing, wrap a clean dry rag round a piasaba and pull through once.

Random errors may occur in M.V.'s if guns are not prepared in this uniform manner before each series.

(*e*) The ship is to arrange for the marking of cartridge cases so that each case can be identified with the series and round to which it belongs. The Calibration Team will provide suitable quick drying ink so that cases can be marked shortly before each is loaded and fired. Empty cases from calibration firings should be kept separate, and are to be returned to the Armament Depot as soon as possible for weighing.

Provision of Ammunition.

12. Ammunition allowed for type 900C calibration is in addition to the normal practice allowance.

Shell.—The following shell are suitable for Doppler calibration; *see also* paragraph 11 (*b*)—

4.5-in. Practice SU(D) Mk. N1, N2, N3 and N4 fuzed 230. H.E. Mk. N3, N10 or N12 fuzed 230.

In peacetime, for reasons of economy, SU(D) shell should be used if available.

Charges.—It is important that the entire calibration of a ship be done with one propellant lot. Care should be taken that the charges used for calibration are kept in the stowage for which tempratures have been recorded, until just before firing; ideally, rounds should be brought up one at a time as required.

Measurement of Guns.

13. D.I.N.O. (Sydney) will arrange for 1-in. C. of R. measurements to be taken before and after the calibration. D.I.N.O. (Sydney) will also arrange for measurements to be taken after each series if this is practicable.

14. The result of the calibration should be entered in the Memorandum of Inspection on the page used for recording measurements at 1-in. C. of R. The date and the average of the mean wear at mid series for the three series and the Inspecting Officer's signature should be entered in the appropriate columns and across the remaining columns " M.V. by Radio Doppler Calibration + (or −) X f.s. compared with M.V. from 1-in. C. of R. measurement ".

Calculation of M.V.'s.

15. M.V.'s will be calculated by the Inspecting Officer from the photographic records obtained by the equipment. Accurate M.V.'s will be passed to the ship, by signal if necessary, as soon as possible after the calibration.

Calibration Report.

16. This will be compiled by the Deputy Inspector of Naval Ordnance, Sydney, and will be forwarded to the Naval Board (for the Director of Weapons), the Flag Officer Commanding Her Majesty's Australian Fleet and the ship.

Analysis of Calibration.

17. From the ship's point of view the most important part of the Calibration Report is Section 3, the " Analysis of Calibration ", an example of which is shown in the Appendix. The M.V.'s derived from the type 900C calibration are shown in the Corrected Velocity column, the mean M.V. for the three series being shown for each gun. The mean figure showing the " difference from expected " velocity is shown in the last column. For instance, in the example shown, the M.V. of the Right of A was expected to be 2,400 ft./sec., this figure being based on the latest wear measurement. This figure does not appear on the " Analysis of Calibration ". The actual mean M.V. derived from this type 900C calibration was 2,408 ft./sec.; the " difference from expected " was therefore + 8 ft./sec. It should be noted that the M.V.'s shown on the " Analysis of Calibration " will not be corrected for " sigma " but that this correction should be taken into account when working out ballistics on board ship. (*See* paragraphs 20 and 21 below.)

18. If the standard deviation between all the M.V.'s is small, it is likely that the differences are not significant and that, when calculating ballistics, a single mean M.V. should be used for all guns. If, however, the standard deviation is large, individual M.V.'s should be used for each gun. A small calculation on the bottom of the " Analysis of Calibration " will show which method is to be adopted. If the last line reads " which is greater than the factor ", then individual M.V.'s should be used for each gun; if it reads " which is less than the factor " then the mean of all the M.V.'s should be used. For example, in the case of the " Analysis of Calibration " shown in the Appendix, individual M.V.'s should be used; i.e., Right of A, 2,408 ft./sec. (or + 8 ft./sec.). Left of A, 2,401 ft./sec. (or + 2 ft./sec.) (*see* paragraph 21 below).

19. Some discretion is necessary if guns are in widely different states of wear. If, for example, some guns are in the first quarter and some in the third quarter, it would be advisable to group the guns by wear and test each group separately by the method outlined in paragraph 18. If this proves to be necessary, this separation of calculations for groups of guns will be done by D.I.N.O. and will be shown on the bottom of the " Analysis of Calibration ".

20. Alterations in M.V. level between calibrations should be allowed for by adjusting the M.V. obtained at calibration for rounds fired since calibration in accordance with the difference figure quoted in Section A, Part 1 of the Range Tables. Before setting on the Fire Control equipment, adjustment should of course be made for " sigma " effect obtained from the Range Tables, and for the various other corrections necessary as set out in B.R. 1898 (10).

21. In cases where an M.V. calibration is overdue, and a subsequent wear measurement has been taken by the local Inspecting Officer (without a further calibration being made), the following procedure should be used. The Range Table is entered for an M.V. equivalent to the latest measurement. After correction for " sigma " effect in accordance with the Range Tables, a further correction should be applied, namely, the " difference from expected " figure obtained at the last calibration, per gun or group of guns, as the case may be, and calculated in accordance with paragraphs 18 and 19 above.

22. Navy Order 258 of 1960 is relevant.

23. Navy Order 64 of 1960 is hereby cancelled.

APPENDIX.

(Section 3 of Report.)

Restricted

Ship.....

Date.....

Place.....

ANALYSIS OF CALIBRATION.

Gun— (*a*) *Where mounted.* (*b*) *Barrel/gun No.*	*Series.*	*M.D.*	*Mean Wear.*	*Corrected Velocity.*	*Corrected Velocity - Expected Velocity.*
R. of A.	1	4.7	.0605	2404	+ 3
	2	.7	.061	2410	+10
S.8572	3	3.7	.0625	2411	+12
			.0613	2408	+ 8
L. of A.	1	2.4	.0605	2400	− 1
	2	4.2	.061	2406	+ 6
S.8573	3	2.7	.064	2398	0
			.0618	2401	+ 2
R. of B.	1	2.8	.0505	2407	− 1
	2	4.3	.0515	2409	+ 2
B.7981	3	2.9	.0535	2406	0
			.0518	2407	0
L. of B.	1	1.6	.0495	2409	+ 1
	2	2.4	.0515	2410	+ 3
S.8562	3	10.6	.0535	2408	+ 2
			.0515	2409	+ 2
R. of X.	1	5.3	.055	2414	+ 9
	2	2.6	.056	2418	+14
S.8419	3	3.0	.0575	2411	+ 8
			.0561	2414	+10
L. of X.	1	3.2	.0505	2409	+ 1
	2	2.7	.0515	2420	+13
S.8424	3	6.0	.0535	2414	+ 8
		65.8	.0518	2414	+ 7
Overall M.D. =		3.7			

APPENDIX—*continued.*

Gun.	*Corrected — Velocity.*	*Expected Velocity.*	*d.*
R. of A.	8		3.2
L. of A.	2		2.8
R. of B.	0		4.8
L. of B.	2		2.8
R. of X.	10		5.2
L. of X.	7		2.2
	6)29		6)21.0
	4.8		3.5

Factor for 6 guns = 0.45

$$\frac{\text{m.d.}}{\text{overall m.d.}} = \frac{3.5}{3.7} = .95$$ which is greater than the factor.

Individual M.V.'s should therefore be used.

(DW 739/51/1.)

(*Navy Orders* 64 *and* 258 *of* 1960.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

REGISTRAR

FOR OFFICIAL USE ONLY. C.N.O. 957/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
25th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

8862/60.

UNCLASSIFIED.

957.—Ratings—Titles, Specialist Qualifications and Abbreviations.

The list of titles, specialist qualifications and abbreviations contained in appendixes A and B to this order are to be used in all communications, reports, returns, &c.

2. The order in which the branches appear in the appendixes is the standard order, and is to be used for all purposes.

3. Unless it is apparent from the correspondence, forms, &c., the specialist qualification is always to be shown, e.g., CPO(GI) NA1(AH3).

4. " Acting " is to be used where appropriate as a prefix, abbreviation " A/.....", (e.g., Acting Petty Officer—A/PO, Acting Engine Room Artificer 4th Class—A/ERA4).

5. Junior Recruits will be allocated to respective branches and rated " Junior Recruits (Seaman) "—J.R.(Smn), on completion of the second term at the Junior Recruits Training Establishment.

6. Appendix 1 to A.B.R. 18—Manual of Instructions for Pay Accounting System —will be amended in due course.

7. Navy Order 1043 of 1958 is hereby cancelled.

APPENDIX A.

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Seaman ..	—	Chief Petty Officer ..	CPO
		Petty Officer	PO
		Leading Seaman	LS
		Able Seaman	AB
		Ordinary Seaman	Ord.
		Recruit (Seaman)	Rct.(Smn.)
Sailmaker ..	—	Chief Sailmaker	C Slmr.
		Sailmaker	Slmr.
		Sailmaker's Mate	Slmr.Mate
Communication	Tactical Communication	Chief Communication Yeoman	CCY
		Communication Yeoman ..	CY
		Leading Tactical Communication Operator	LTO
		Tactical Communication Operator	TO
		Ordinary Tactical Communication Operator	OTO
		Recruit (Communication Operator)	Rct.(CO)
	Radio Communication	Chief Radio Communication Supervisor	CRS
		Radio Communication Supervisor	RS
		Leading Radio Communication Operator	LRO
		Radio Communication Operator	RO
		Ordinary Radio Communication Operator	ORO
		Recruit (Communication Operator)	Rct.(CO)

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Communication —*continued.*	Radio Special..	Chief Radio Supervisor Special	CRS(S)
		Radio Supervisor Special ..	RS(S)
		Leading Radio Operator Special	LRO(S)
		Radio Operator Special ..	RO(S)
		Ordinary Radio Operator Special	ORO(S)
		Recruit (Communication Operator)	Rct.(CO)
Engineering ..	Engine Room Artificer	Chief Engine Room Artificer	CERA
		Engine Room Artificer 1st Class	ERA1
		Engine Room Artificer 2nd Class	ERA2
		Engine Room Artificer 3rd Class	ERA3
		Engine Room Artificer 4th Class	ERA4
		Engine Room Artificer 5th Class	ERA5
		Recruit (Engine Room Artificer 4th Class)	Rct.(ERA4)
		Engine Room Artificer Apprentice	ERAA
	Mechanician ..	Chief Mechanician ..	C Mech.
		Mechanician 1st Class ..	Mech.1
		Mechanician 2nd Class ..	Mech.2
	Engineering Mechanic	Chief Engineering Mechanic	CM(E)
		Petty Officer Engineering Mechanic	POM(E)
		Leading Engineering Mechanic	LM(E)
		Engineering Mechanic 1st Class	M(E)1
		Engineering Mechanic 2nd Class	M(E)2
		Recruit (Engineering Mechanic)	Rct.(M(E))
Naval Shipwright	—	Chief Naval Shipwright ..	CNS
		Naval Shipwright 1st Class ..	NS1
		Naval Shipwright 2nd Class..	NS2
		Naval Shipwright 3rd Class ..	NS3
		Naval Shipwright 4th Class ..	NS4
		Naval Shipwright 5th Class ..	NS5
		Recruit (Naval Shipwright 4th Class)	Rct.(NS4)
		Naval Shipwright Apprentice	NSA
Artisan ..	Joiner ..	Chief Joiner	C Jnr.
		Joiner 1st Class	Jnr.1
		Joiner 2nd Class	Jnr.2
		Joiner 3rd Class	Jnr.3
		Joiner 4th Class	Jnr.4

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Artisan—*continued.*	Blacksmith ..	Chief Blacksmith	C Blk.
		Blacksmith 1st Class ..	Blk.1
		Blacksmith 2nd Class ..	Blk.2
		Blacksmith 3rd Class ..	Blk.3
		Blacksmith 4th Class ..	Blk.4
	Plumber ..	Chief Plumber	C Plmb.
		Plumber 1st Class ..	Plmb.1
		Plumber 2nd Class ..	Plmb.2
		Plumber 3rd Class ..	Plmb.3
		Plumber 4th Class.. ..	Plmb.4
	Painter ..	Chief Painter	C Ptr.
		Painter 1st Class	Ptr.1
		Painter 2nd Class	Ptr.2
		Painter 3rd Class	Ptr.3
		Painter 4th Class	Ptr.4
Ordnance Artificer	—	Chief Ordnance Artificer ..	COA
		Ordnance Artificer 1st Class	OA1
		Ordnance Artificer 2nd Class	OA2
		Ordnance Artificer 3rd Class	OA3
		Ordnance Artificer 4th Class	OA4
		Ordnance Artificer 5th Class	OA5
		Recruit (Ordnance Artificer 4th Class)	Rct.(OA4)
		Ordnance Artificer Apprentice	OAA
		Suffixes—	
		Weapons	(W)
		Control	(C)
Electrical ..	Electrical Artificer	Chief Electrical Artificer ..	CEA
		Electrical Artificer 1st Class	EA1
		Electrical Artificer 2nd Class	EA2
		Electrical Artificer 3rd Class	EA3
		Electrical Artificer 4th Class	EA4
		Electrical Artificer 5th Class	EA5
		Recruit (Electrical Artificer 4th Class)	Rct.(EA4)
		Electrical Artificer Apprentice	EAA
	Electrical Artificer (Air)	Chief Electrical Artificer (Air)	CEA(Air)
		Electrical Artificer (Air) 1st Class	EA(Air)1
		Electrical Artificer (Air) 2nd Class	EA(Air)2
		Electrical Artificer (Air) 3rd Class	EA(Air)3
		Electrical Artificer (Air) 4th Class	EA(Air)4
	Electrical (Power), (Electronics) or (Air)	Chief Electrician (Power), (Electronics) or (Air)	CE(P), (E) or (Air)
		Petty Officer Electrician (Power), (Electronics) or (Air)	POE(P), (E) or (Air)
		Leading Electrical Mechanic (Power), (Electronics) or (Air)	LEM(P), (E) or (Air)

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Electrical—*continued.*		Electrical Mechanic (Power), (Electronics) or (Air) 1st Class	EM(P)1, (E)1 or (Air)1
		Electrical Mechanic (Power), (Electronics) or (Air) 2nd Class	EM(P)2, (E)2 or (Air)2
		Recruit (Electrical Mechanic (Power), (Electronics) or (Air))	Rct.(EM(P), (E) or (Air))
		Recruit (Electrical Branch) ..	Rct.(LB)
	Radio Electrical	Chief Radio Electrician ..	CRE
		Petty Officer Radio Electrician	PORE
		Leading Radio Electrical Mechanic	LREM
		Radio Electrical Mechanic 1st Class	REM1
		Radio Electrical Mechanic 2nd Class	REM2
		Recruit (Radio Electrical Mechanic)	Rct.(REM)
		Recruit (Electrical Branch) ..	Rct.(LB)
	Radio Electrical (Air)	Chief Radio Electrician (Air)	CRE(Air)
		Petty Officer Radio Electrician (Air)	PORE(Air)
		Leading Radio Electrical (Mechanic (Air)	LREM(Air)
		Radio Electrical Mechanic (Air) 1st Class	REM(Air)1
		Radio Electrical Mechanic (Air) 2nd Class	REM(Air)2
		Recruit (Radio Electrical Mechanic (Air))	Rct.(REM(Air))
		Recruit (Electrical Branch) ..	Rct.(LB)
Air	Aircraft Artificer	Chief Aircraft Artificer (Airframes/Engines) or (Ordnance)	CAA(A/E) or (O)
		Aircraft Artificer (Airframes/Engines) or (Ordnance) 1st Class	AA(A/E) or (O)1
		Aircraft Artificer (Airframes/Engines) or (Ordnance) 2nd Class	AA(A/E) or (O)2
		Aircraft Artificer (Airframes/Engines) or (Ordnance) 3rd Class	AA(A/E) or (O)3
		Aircraft Artificer (Airframes/Engines) or (Ordnance) 4th Class	AA(A/E) or (O)4
		Recruit (Aircraft Artificer 4th Class)	Rct.(AA4)
		Aircraft Artificer Apprentice	AAA

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Air—*continued.*	Aircraft Mechanician	Chief Aircraft Mechanician (Airframes/Engines) or (Ordnance)	CA Mech.(A/E) or (O)
		Aircraft Mechanician (Airframes/Engines) or (Ordnance) 1st Class	A Mech.(A/E) or (O)1
		Aircraft Mechanician (Airframes/Engines) or (Ordnance) 2nd Class	A Mech. (A/E) or (O)2
	Naval Airman Mechanic	Chief Airman Fitter (Air frames) (Engines) or (Ordnance)	CAF(A) (E) or (O)
		Petty Officer Airman Fitter (Airframes) (Engines) or (Ordnance)	POAF(A) (E) or (O)
		Leading Airman Pilot's Mate	LAPM
		Leading Airman Mechanic (Airframes) (Engines) or (Ordnance)	LAM(A) (E) or (O)
		Naval Airman Pilot's Mate 1st Class	NAPM1
		Naval Airman Mechanic (Airframes) (Engines) or (Ordnance) 1st Class	NAM(A) (E) or (O)1
		Naval Airman Mechanic (Airframes) (Engines) or (Ordnance) 2nd Class	NAM(A) (E) or (O)2
		Recruit (Naval Airman Mechanic)	Rct.(NAM)
	Naval Airman	Chief Airman	C Air.
		Petty Officer Airman ..	PO Air.
		Leading Airman	L Air.
		Naval Airman 1st Class ..	NA1
		Naval Airman 2nd Class ..	NA2
		Recruit (Naval Airman) ..	Rct.(NA)
	Aircrew ..	Observer 1st Class ..	Obs.1
		Observer 2nd Class ..	Obs.2
Sick Berth ..	—	Sick Berth Chief Petty Officer	SBCPO
		Sick Berth Petty Officer ..	SBPO
		Leading Sick Berth Attendant	LSBA
		Sick Berth Attendant ..	SBA
		Sick Berth Attendant 2nd Class	SBA2
		Recruit (Sick Berth Attendant)	Rct.(SBA)
Dental ..	Dental Assistant	Chief Petty Officer Dental Assistant	CPODA
		Petty Officer Dental Assistant	PODA
		Leading Dental Assistant ..	LDA
		Dental Assistant	DA
		Dental Assistant 2nd Class ..	DA2
		Recruit (Dental Assistant) ..	Rct.(DA)

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Dental—*contd.*	Dental Mechanic	Chief Dental Mechanic ..	CDM
		Dental Mechanic 1st Class ..	DM1
		Dental Mechanic 2nd Class ..	DM2
		Dental Mechanic 3rd Class ..	DM3
		Dental Mechanic 4th Class ..	DM4
Supply and Secretariat	Writer ..	Chief Petty Officer Writer ..	CPO Wtr.
		Petty Officer Writer ..	PO Wtr.
		Leading Writer	L Wtr.
		Writer	Wtr.
		Writer 2nd Class	Wtr.2
		Recruit (Writer)	Rct.(Wtr.)
	Stores (Stores) or (Victualling)	Stores Chief Petty Officer (Stores) or (Victualling)	SCPO(S) or (V)
		Stores Petty Officer (Stores) or (Victualling)	SPO(S) or (V)
		Leading Stores Assistant (Stores) or (Victualling)	LSA(S) or (V)
		Stores Assistant (Stores) or (Victualling)	SA(S) or (V)
		Stores Assistant (Stores) or (Victualling) 2nd Class	SA(S)2 or (V)2
		Recruit (Stores Assistant (Stores) or (Victualling))	Rct.(SA(S)) or (V)
		Recruit (Stores Assistant) ..	Rct.(SA)
	Cook (Ships) or (Officers)	Chief Petty Officer Cook (Ships) or (Officers)	CPO Ck.(S) or (O)
		Petty Officer Cook (Ships) or (Officers)	PO Ck.(S) or (O)
		Leading Cook (Ships) or (Officers)	L Ck.(S) or (O)
		Cook (Ships) or (Officers) ..	Ck.(S) or (O)
		Assistant Cook (Ships) or (Officers)	Asst.Ck.(S) or (O)
		Recruit (Cook)	Rct.(Ck.)
	Steward ..	Chief Petty Officer Steward	CPO Std.
		Petty Officer Steward ..	PO Std.
		Leading Steward	L Std.
		Steward	Std.
		Assistant Steward	Asst.Std.
		Recruit (Steward)	Rct.(Std.)
	Butcher ..	Chief Petty Officer Butcher	CPO Btchr.
		Petty Officer Butcher ..	PO Btchr.
		Leading Butcher	L Btchr.
		Butcher	Btchr.
Regulating ..	—	Master-at-Arms	MAA
		Regulating Petty Officer ..	RPO
		Leading Patrolman ..	LPM
Musician ..	—	Chief Petty Officer Musician	CPO Musn.
		Petty Officer Musician ..	PO Musn.
		Leading Musician ..	L Musn.
		Musician..	Musn.
		Ordinary Musician ..	O Musn.
		Recruit (Musician) ..	Rct.(Musn.)
		Junior Musician	J Musn.

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Printer ..	—	Chief Petty Officer Printer ..	CPO Prntr.
		Petty Officer Printer ..	PO Prntr.
		Leading Printer	L Prntr.
Naval Dockyard Police	—	Sergeant 1st Class ..	Sgt.1
		Sergeant 2nd Class ..	Sgt.2
		Constable	Const.
General	—	Junior Recruits 1st Class ..	JR1
		Junior Recruits 2nd Class ..	JR2
		Naval Artificer Apprentices..	NAA

WOMEN'S ROYAL AUSTRALIAN NAVAL SERVICE.

Communication	Radio Communication	Chief Wran Radio Communication Supervisor	C Wr.RS
		Wran Radio Communication Supervisor	Wr.RS
		Leading Wran Radio Communication Operator	L Wr.RO
		Wran Radio Communication Operator	Wr.RO
		Wran Radio Communication Operator (Probationer)	Wr.RO(Prob.)
		Recruit (Wran Communication Operator)	Rct.(Wr.RO)
	Radio Special..	Chief Wran Radio Supervisor Special	C Wr.RS(S)
		Wran Radio Supervisor Special	Wr.RS(S)
		Leading Wran Radio Operator Special	L Wr.RO(S)
		Wran Radio Operator Special	Wr.RO(S)
Sick Berth ..	—	Chief Wran Sick Berth ..	C Wr.SB
		Petty Officer Wran Sick Berth	PO Wr.SB
		Leading Wran Sick Berth Attendant	L Wr.SBA
		Wran Sick Berth Attendant	Wr.SBA
		Recruit (Wran Sick Berth Attendant)	Rct.(Wr.SBA)
Supply and Writer Secretariat ..		Chief Wran Writer (General Duties) or (Pay)	C Wr.Wtr.(GD) or (P)
		Petty Officer Wran Writer (General Duties) or (Pay)	PO Wr.Wtr. (GD) or (P)
		Leading Wran Writer (General Duties) (Pay) or (Shorthand)	LWr.Wtr.(GD), (P) or (ST)
		Wran Writer (General Duties), (Pay) or (Shorthand)	Wr.Wtr.(GD), (P) or (ST)
		Recruit (Wran Writer (General Duties), (Pay) or (Shorthand))	Rct.(Wr.Wtr. (GD), (P) or (ST))

APPENDIX A—*continued.*

Branch.	*Category.*	*Substantive Ratings.*	*Abbreviations.*
Supply, &c.—*continued.*	Stores (Naval Stores) or (Victualling)	Chief Wran Stores (Naval Stores) or (Victualling)	C Wr.S(S) or (V)
		Petty Officer Wran Stores (Naval Stores) or (Victualling)	PO Wr.S(S) or (V)
		Leading Wran Stores Assistant (Naval Stores) or (Victualling)	L Wr.SA(S) or (V)
		Wran Stores Assistant (Naval Stores) or (Victualling)	Wr.SA(S) or (V)
		Recruit (Wran Stores Assistant (Naval Stores) or (Victualling))	Rct.(Wr.SA(S) or (V))
	Cook (Ships) ..	Chief Wran Cook (Ships) ..	C Wr.Ck.(S)
		Petty Officer Wran Cook (Ships)	PO Wr.Ck.(S)
		Leading Wran Cook (Ships)	L Wr.Ck.(S)
		Wran Cook (Ships) ..	Wr.Ck.(S)
		Recruit (Wran Cook (Ships))	Rct.(Wr.Ck.(S))
	Steward (General)	Chief Wran Steward (General)	C Wr.Std.(G)
		Petty Officer Wran Steward (General)	PO Wr.Std.(G)
		Leading Wran Steward (General)	L Wr.Std.(G)
		Wran Steward (General) ..	Wr.Std.(G)
		Recruit (Wran Steward (General))	Rct.(Wr.Std. (G))
Regulating ..	—	Chief Wran Regulating ..	C Wr. Reg.
		Petty Officer Wran Regulating	PO Wr.Reg.
		Leading Wran Regulating ..	L Wr.Reg.
		Wran Regulating	Wr.Reg.
		Recruit (Wran Regulating) ..	Rct.(Wr.Reg.)
Miscellaneous ..	Radar Plot ..	Chief Wran Radar Plot ..	C Wr.RP
		Petty Officer Wran Radar Plot	PO Wr.RP
		Leading Wran Radar Plot ..	L Wr.RP
		Wran Radar Plot	Wr.RP
		Recruit (Wran Radar Plot) ..	Rct.(Wr.RP)
	Motor Transport	Chief Wran Motor Transport Driver	C. Wr.MTD
		Petty Officer Wran Motor Transport Driver	PO Wr.MTD
		Leading Wran Motor Transport Driver	L Wr.MTD
		Wran Motor Transport Driver	Wr.MTD
		Recruit (Wran Motor Transport Driver)	Rct.(Wr.MTD)

Note: The term Wran or Wrans is only to be used in correspondence when referring to women holding that particular rating. The term WRANS (not Wrans) is to be used in the same sense as RAN.

APPENDIX B.

Specialist Qualifications.	*Abbreviations.*
Gunnery Instructor	GI
Quarters Armourer 1st Class	QA1
Quarters Armourer 2nd Class	QA2
Fire Control Armourer 1st Class	FC1
Fire Control Armourer 2nd Class	FC2
Gunlayer Armourer 1st Class	GA1
Gunlayer Armourer 2nd Class	GA2
Seaman Gunner (Quarters)	SG(Q)
Seaman Gunner (Control)	SG(C)
Torpedo and Anti-Submarine Instructor	TASI
Underwater Weapons 1st Class	UW1
Underwater Weapons 2nd Class	UW2
Underwater Weapons 3rd Class	UW3
Underwater Control 1st Class	UC1
Underwater Control 2nd Class	UC2
Underwater Control 3rd Class	UC3
Plotting and Radar Instructor	PRI
Radar Plot 1st Class	RP1
Radar Plot 2nd Class	RP2
Radar Plot 3rd Class	RP3
Coxswain	Cox.
Surveying Recorder 1st Class	SR1
Surveying Recorder 2nd Class	SR2
Surveying Recorder 3rd Class	SR3
Staff Physical Training Instructor	SPTI
Physical Trainer 1st Class	PT1
Physical Trainer 2nd Class	PT2
Clearance Diver 1st Class	CD1
Clearance Diver 2nd Class	CD2
Clearance Diver 3rd Class	CD3
Atomic, Biological and Chemical Protection and Damage Control Instructor	ABCDI
Tactical Communication Instructor	TCI
Radio Communication Instructor	RCI
Radio (Special) Instructor	R(S)I
Wran Radio Communication Instructor	Wr.RCI
Aircraft Handler 1st Class	AH1
Aircraft Handler 2nd Class	AH2
Aircraft Handler 3rd Class	AH3
Safety Equipment Worker 1st Class	SE1
Safety Equipment Worker 2nd Class	SE2
Safety Equipment Worker 3rd Class	SE3
Photographer 1st Class	Phot.1
Photographer 2nd Class	Phot.2
Photographer 3rd Class	Phot.3
Meteorological Observer 1st Class	MET.1
Meteorological Observer 2nd Class	MET.2
Meteorological Observer 3rd Class	Met.3
Hygiene Inspector	Hyg.
Laboratory Assistant	Lab.
Masseur	Not abbreviated

APPENDIX B—*continued.*

Specialist Qualifications.	*Abbreviations.*
Advanced Nurse	Adv.Nurse
Operating Room Assistant	ORA
Mental Nurse	M Nurse
X-Ray Assistant	X-Ray
Chiropodist	Chirop.
Dietitian	Diet.
Dispenser	Disp.
Occupational Therapist	Occ.Ther.
Orthoptist	Orthop.
Aviation Medicine	Av.Med.
Engine Room Branch Certificates and Courses.	
Auxiliary Machinery Watchkeeping Certificate	AWC
Boiler Room Watchkeeping Certificate	BWC
Engine Room Watchkeeping Certificate	EWC
Machinery Charge Certificate	MCC
Mechanical Training Course	MTC
Trades—Engine Room Artificers.	
Fitter	F
Turner	T
Fitter and Turner	FT
Toolmaker	TM
Boilermaker	BM
Boilermaker/Welder	BM/W
Coppersmith	CS
Enginesmith	ES
Pattern Maker	PM
Moulder	M
Other Qualifications.	
Motor Transport Driver	MTD
Gunnery Office Writer	GOW
TAS Officer's Writer	TASOW
Navigator's Yeoman	NY
Engineer Officer's Writer	EOW
Air Engineer Officer's Writer	AEOW
Electrical Officer's Writer	LOW
Shorthand Typist (Higher Grade)	ST(HG)
Shorthand Typist (Lower Grade)	ST(LG)
Air Gunnery Officer's Writer	AGOW
Captain's Writer	Capt.Wtr.
Commander's Office Writer	Cdr.OW
Radar Plot Writer	RPW
Diver	Diver
Commander (Air's) Writer	Cdr.AW
Range Assessor	RA

(HPB 311/4/52.)

(*Navy Order* 1043 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
25th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

8863/60.

UNCLASSIFIED.

958.—Books—Distribution of Non-accountable Publications during September, 1960.

The non-accountable publications, amendments to A.P.'s and B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series contained in the appendix to this order, have been distributed to ships and services during September, 1960.

2. Article 2518 of A.B.R. 4 is relevant.

3. Copies of A.F.O. " P " Series amendments and A.P. amendments referred to in the appendix to this order, are available for supply in demand to holders of personal copies of Books of Reference and Air Publications in accordance with Article 2518 (7) of A.B.R. 4.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	24th June, 1960.
Aeroplane	1st July, 1960.
Aeroplane	8th July, 1960.
Aeroplane	15th July, 1960.
Aeroplane	22nd July, 1960.
Aeroplane	29th July, 1960.
Aeroplane	5th August, 1960.
Aircraft	Volume 39, No. 12, September, 1960.
Australian Joint Service Catalogue of Telecommunications, Components and Valves	Serial No. 48, July, 1960, Issue 2, Section 1, Amendment No. 5.
Australian Joint Service Catalogue of Telecommunications, Components and Valves	Serial No. 49, July, 1960, Issue 1, Section 24, Amendment No. 1
Educational Information	No. 104, 22nd July, 1960.
Fibres and Plastics	Volume 21, No. 7, dated July, 1960.
Flight	24th June, 1960.
Flight	1st July, 1960.
Flight	8th July, 1960.
Flight	15th July, 1960.
Flight	22nd July, 1960.
Flight	29th July, 1960.
Flight	5th August, 1960.
Joint Services Recognition Journal	Volume 15, No. 5, May, 1960.
Joint Services Recognition Journal	Volume 15, No. 6, June, 1960.
Journal of the British Institute of Navigation	Volume XIII., No. 3, July, 1960.
Journal of the American Institute of Navigation	Volume 6, No. 8, Winter 1959–60.
Journal of Naval Engineering	Volume 12, No. 2, March, 1960.
N.A.M.A.N.	N2114–N2123 dated 31st August, 1960.
Occupational Safety and Health	Index, Volume IX., 1959.
United Nations Review	Volume 7, No. 1, July, 1960.
United Nations Review	Volume 7, No. 2, August, 1960.
United States Naval Institute Proceedings	Volume 86, No. 8, August, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 10	Amendment No. 4.
B.R. 16	41.
B.R. 49/1958	1.
B.R. 70/1959	Supplement, May, 1960.
B.R. 125/1960–61	Supplement No. 1—July, 1960.
B.R. 125/1960–61	New Entries No. 1—July, 1960.
B.R. 129 (3) (2), 5th Edition, November, 1957	Supplement No. 9.
B.R. 226B (46)	Amendment No. 2.
B.R. 268 (62)	4.
B.R. 386	5.
B.R. 763, 6th Edition	Supplement No. 4, 31st May, 1960.
B.R. 819 (1), 1955—R.N.A.S.—Part 1	Chapter 10 (Admiralty Reference AS/DC 1160A).
B.R. 819 (1), 1955—R.N.A.S.—Part 1	Amendments Nos. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.
B.R. 819 (2)	Amendment No. 7
B.R. 862/1956	Australian Amendment No. 1.
B.R. 875	Chapters Nos. 6, 7, 17, 18, 23 and 26.
B.R. 878	Chapters Nos. 13 and 16.
B.R. 878	Appendixes 15, 28, 36, 37 and 38.
B.R. 878	Amendment No. 3.
B.R. 923	2.
B.R. 1096	1.
B.R. 1145 (1)	2.
B.R. 1145 (2)	4.
B.R. 1159	14.
B.R. 1492A	35.
B.R. 1545	Interim R.A.N. Amendment.
B.R. 1645/1958	Amendment No. 1.
B.R. 1661 (2)	7.
B.R. 1703 (1/52)	3.
B.R. 1837 (7), Division L, Introduction	24.
B.R. 1837 (7), Division L, Section LX	20.
B.R. 1837 (7), Division L, Section LY	19.
B.R. 1837 (7), Division L, Section LZ	4.
B.R. 1837 (8), Division M, Section MA	11.
B.R. 1837 (8), Division M, Section MV	15.
B.R. 1837 (8), Division M, Section MY	12.
B.R. 1837 (8), Division M, Section MZ	9.
B.R. 1913 (2)	10.
B.R. 1928	50.
B.R. 1943	3.
B.R. 1944 (1)	10.
B.R. 1944 (2)	8.
B.R. 1944 (3)	7.
B.R. 1944 (4)	6.
B.R. 1944 (5)	6.
B.R. 1946 (1)	5.
B.R. 2014B—1957	5.
B.R. 2050 (648)	2.
B.R. 2050 (652)	1 and 2

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 2050 (687)	1.
B.R. 2110 (1)	11.
B.R. 2125 (3)	7.
B.R. 2125 (7)	4.
A.C.P. 114H	Change No. 9.
A.C.P. 127	C.N. Supplement No. 1.
A.C.P. 127B	R.A.N. Tape Relay Instruction, 3rd August, 1960.
A.C.P. 135A	Change No. 3.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 163.
1086, Book 2 (2nd Edition)	A.L. 96 and 97.
1086, Book 4, Part 1 (2nd Edition)	A.L. 113 and 114.
1086, Book 4, Part 2 (2nd Edition)	A.L. 55.
1086, Book 4, Part 3 (2nd Edition)	A.L. 82 (Erratum).
1086, Book 4, Part 4 (2nd Edition)	A.L. 26 and 27.
1086, Book 5 (2nd Edition)	A.L. 87.
1086, Book 6 (2nd Edition)	A.L. 103.
1086, Book 8, Part 1 (2nd Edition)	A.L. 57 and 58.
1086, Book 8, Part 2 (2nd Edition)	A.L. 16.
1086, Book 9 (2nd Edition)	A.L. 133.
1086, Book 12, Part 1 (2nd Edition)	A.L. 181, 181 (Erratum), 182, 183 and 184.
1086, Book 13 (2nd Edition)	A.L. 138.
1086, Book 15 (2nd Edition)	A.L. 164, 165 and 166.
1181, Vol. 2	(A.L. 112)–B.93.
1182 (N), Vol. 1	A.L. 24.
1182 (N), Vol. 2	(A.L. 85)–C.28 (A.L. 84)–G.16 (Alt. 1).
1182A, Vol. 2, Part 1	C.47 E.25 G.14 H.5 J.1 J.2 J.3 J.4 J.6 J.7.
1182C, Vol. 1	A.L. 144.
1182C, Vol. 2	(A.L. 85)–F.18 (Alt. 1).
1182C (N), Vol. 1	A.L. 21.
1182E, Vol. 2	(A.L. 83)–E.7.
1234A, Vol. 1	A.L. 7.
1275A, Vol. 1, Section 13	A.L. 29.
1275A, Vol. 1, Section 16	A.L. 41.
1275A, Vol. 1, Section 17	A.L. 31 and 32.
1275A, Vol. 1, Section 18	A.L. 34.
1275A, Vol. 1, Section 20	A.L. 58 and 59.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1275A, Vol. 1, Section 21	A.L. 32.
1275A, Vol. 1, Section 22	A.L. 25.
1275A, Vol. 1, Section 24	A.L. 49.
1275A, Vol. 1, Section 25	A.L. 10.
1275A, Vol. 1, Section 26	A.L. 27.
1275A, Vol. 6, Section 20	A.L. 10 and 11.
1275B, Vol. 1, Section 11	A.L. 22 and 23.
1275E, Vol. 2, Part 1	(A.L. 207)–E.6.
1275G, Vol. 1	A.L. 68.
1275T, Vol. 1	A.L. 89.
1355D, Vol. 1	A.L. 34.
1374B, Vol. 2, Part 1	(A.L. 71)–J.4.
1374G, Vol. 1	A.L. 43 and 44.
1464B, Vol. 1	A.L. 172 and 173.
1464B, Vol. 2, Part 1	No. 3 (A.L. 2 inc.).
1464D, Vol. 1	A.L. 209 and 210.
1492A, Vol. 1	A.L. 90.
1492A, Vol. 2, Part 1	(A.L. 42)–C.4.
1538D, Vol. 6, Parts 2 and 4	A.L. 82.
1538E, Vol. 2, Part 1	No. 131.
1538P, Vol. 6, Parts 2 and 4	A.L. 43.
1641F, Vol. 1, Part 2 and Vol. 5 (2nd Edition)	A.L. 16.
1641S, Vol. 1, Parts 1 and 3	A.I.L. 1/60 A.L. 42.
1641S, Vol. 1, Part 2 and Vol. 5	A.I.L. 2/60 A.L. 34.
1661, Vol. 2, Part 1	F.4.
1661C, Vol. 1 (2nd Edition)	A.L. 77.
1661D, Vol. 1 (2nd Edition)	A.L. 116 and 117.
1661F, Vol. 1	A.L. 89, 90 and 91.
1664A (2nd Edition), Vol. 1, Book 1	A.L. 18 and 19.
1664A (2nd Edition), Vol. 1, Book 2	A.L. 19, 20 and 21.
1664A, Vol. 2, Part 1	A.119 A.120.
1664A (2nd Edition), Vol. 2, Part 3, Book 1	A.L. 26.
1664A (2nd Edition), Vol. 2, Part 3, Book 2	A.L. 20 and 21.
1664D, Vol. 1, Part 2 and Vol. 5 (2nd Edition)	A.L. 54.
1664E, Vol. 1 and Vol. 5	A.L. 18 and 19.
1664E, Vol. 2	(A.L. 10)–B.3.
1803, Vol. 2, Part 1	D.161 D.162 D.171 E.136 F.81 (A.L. 1) F.100 (A.L. 1) F.104 F.105 T.12.
1803B, Vol. 1	A.L. 175.
1803D, Vol. 1, Book 2	A.L. 56.
1803D, Vol. 2, Part 3	A.L. 265.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
1803E, Vol. 2, Part 2	A.L. 80.
1803E, Vol. 2, Part 3	A.L. 91.
1803F, Vol. 1, Book 2	A.I.L. 1/60.
1803T, Vol. 1	A.L. 85.
2039M, L, Vol. 2	A.L. 5.
2234E, Vol. 2, Part 1	(A.L. 48)–M.1 (A.L. 49)–M.3.
2239A, Vol. 2, Part 1	A.30.
2240A, Vol. 1 and Vol. 6 (Book 4)	A.L. 20 and 22.
2240A, Vol. 2, Part 1	No. 120 No. 121 No. 122.
2241, Vol. 1 and Vol. 6, Part 1	A.I.L. 1/60 A.I.L. 2/60.
2276F, Vol. 3 (2nd Edition)	A.L. 2 and 3.
2306B, Vol. 1 and Vol. 6 (2nd Edition)	A.L. 7.
2306P, Vol. 5	A.L. 1.
2337, Vol. 2	(A.L. 176)–C.77 (Alt. 2 inc.).
2337, Vol. 6	A.L. 79.
2531J, Vol. 2	(A.L. 3)–A.2.
2531N, Vol. 3	A.L. 8.
2533C, Vol. 2, Part 1	No. 16.
2536C, Vol. 1, Part 1	A.L. 21.
2538HA, Vol. 2, Part 1	(A.L. 130)–B.81.
2550B, Vol. 2, Part 1	No. 20 (A.L. 3 inc.) No. 21 (A.L. 1 inc.) No. 23.
2552J, Vol. 6, Part 2	A.L. 6.
2563DU, Vol. 2	B.3.
2655, Vol. 1 (2nd Edition)	A.L. 7.
2656A, Vol. 1 (2nd Edition)	A.L. 12.
2876E, Vol. 2	(A.L. 14)–B.10.
2887N, Vols. 1 and 6	A.L. 18 and 21.
2892F, Vol. 2	(A.L. 92)–B.71 (Alt. 2) (A.L. 95)–B.73 (Alt. 1).
2892F, Vol. 3, Part 1 (2nd Edition)	A.L. 13.
3158, Vol. 2	(A.L. 521)–B.11 (Alt. 21) (A.L. 518)–B.41 (A.L. 522)–C.10 (Alt. 5 inc.) (A.L. 520)–E.4 (Alt. 15) (A.L. 519)–E.7 (A.L. 523)–H.6 (Alt. 1 inc.).
3207 (2nd Edition)	A.L. 10.
3339	A.L. 1.
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4089D	D.400–D.499.
4089E	E.100–E.199.
4099J—G.H.N.	A.L. 11.
4099J, Vol. 2	(A.L. 349)–B.15 (Alt. 2) (A.L. 346)–B.16 (Alt. 1 inc.) (A.L. 348)–J.33.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4099J, Vol. 3, Part 2 (App. " A " 2147)	A.L. 51.
4121C, Vol. 2, Part 1	(A.L. 105)–M.2 (Canc.).
4269C, Vol. 3, Part 1	A.L. (RAN) 2 A.L. (RAN) 3.
4269C, Vol. 4, Part 3 (N) (Office and Working Copies)	A.L. 12.
4282A, Vol. 2, Part 2	A.L. 18 and 19.
4288, Vol. 1, Part 2 and Vol. 5	A.I.L. 6/60 A.L. 81 and 82.
4288, Vol. 2	(A.L. 365)–B.165 (Alt. 2 inc.) (A.L. 377)–B.231 (Alt. 1) (A.L. 354)–B.236 (Alt. 1 inc.) (A.L. 357)–B.263 (A.L. 358)–B.264 (A.L. 367)–B.271 (A.L. 375)–B.276 (A.L. 378)–B.278.
4288 (N), Vol. 1, Parts 1 and 2	A.L. 42 and 43.
4303B, Vol. 1, Book 1	A.L. 35.
4306A	A.L. 42.
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4343E, Vol. 2	(A.L. 32)–R.3.
4343G, Vol. 1	A.L. 51 and 53.
4411A, Vol. 1	A.L. 12.
4471A, Vol. 1	A.L. 132.
A.P. (N) 76	A.L. 6, 7, 8, 9, 10, 11, 12 and 13.
A.P. (N), 400 (V.N.)	A.L. 17.
A.P. (N), 1024, Vol. 4, Part 6	A.L. 6.
A.P. (RAN) 400 (Syc.) (2nd Edition)	A.L. 2.
A.P. (RAN) 400 (V.A.)	A.L. 4.
N.A.M.O. Engines	A.L. 55.
N.A.M.O. Gannet	A.L. 23 SI/16 (30–5–60).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
N.A.M.O. General	A.L. 83 A.81 (30–5–60) O.97 (13–5–60) STI/RAA/140A (2–6–60) STI/Safety Equipment/Index Pages 3 and 4 (New Issue).
N.A.M.O. Sea Venom	A.L. 26 S.1 (16–5–60).
N.A.M.O. Vampire	STI/198 (17–5–60.)
N.A.M.O. Westland Whirlwind	A.L. 15 SI/25 (30–5–60).
R.A.N.A.M.O. Ejection Seat	STI/RAN.15 (June, 1960).
R.A.N.A.M.O. Gannet	A.10 (October, 1957) A.12 (February, 1958) G.1 (January, 1958) L.5 (October, 1957) L.6 (July, 1960) X.22 (January, 1958) STI/RAN.41 (October, 1957) STI/RAN.42 (November, 1957) STI/RAN.44 (December, 1957) STI/RAN.45 (January, 1958) STI/RAN.84 (July, 1960) SI/RAN.17 (October, 1957) SI/RAN.19 (November, 1957) SI/RAN.34 (July, 1960).
R.A.N.A.M.O. General	Q.23 (August, 1958) R.32 (Issue 2) (July, 1958) STI/Electrical/RAN.28 (July, 1956) STI/Electrical/RAN.30 (August, 1956) STI/Electrical/RAN.41 (August, 1960).
R.A.N.A.M.O. Ghost	No. 10 (July, 1960).
R.A.N.A.M.O. Sea Venom	A.12 (July, 1957) A.43 (August, 1960) S.1 (March, 1958) X.5 (July, 1956) STI/RAN.15 (July, 1956) STI/RAN.29 (Issue 2) (July, 1957) SI/RAN.32 (August, 1960).
R.A.N.A.M.O. Vampire Trainer ..	A.10 (December, 1957) A.12 (December, 1957) A.13 (February, 1958) F.2 (February, 1957) STI/RAN.20 (September, 1957) STI/RAN.21 (November, 1957) STI/RAN.22 (December, 1957) STI/RAN.24 (December, 1957) STI/RAN.25 (December, 1957) SI/RAN.11 (December, 1957) SI/RAN.12 (February, 1958).
Air Pictorial	June, 1960.
D.C.A. Publication No. 6	Revised Sections 1 to 4

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
D.C.A. Aeronautical Information Circulars	28/1960 (22.8.60) 29/1960 (25.8.60) 31/1960 (26.8.60) 33/1960 (8.9.60) 34/1960 (31.8.60) 35/1960 (12.9.60) 36/1960 (12.9.60).
D.C.A. Aeronautical Information Publications	General A.L. 37 RAC/2 (A.L. 36).
D.C.A. Airways Operations Instructions, Vol. 1	A.L. 4.
D.C.A. Notams	No. 7/1960 No. 8/1960 No. 9/1960.
I.C.A.O. Bulletins	No. 4—1960.
Kelvin Hughes Aviation Instrument Publications	*Manual of Spare Parts, Vols* 1 *and* 2*:* Pt. 66/52 Pt. 130/50 Pt. 175/50 Pt. 175/50/1 Pt. 195/50 31–31–56/S.P. Pt. 68/54, Pages 7 and 8 Pt. 156/53, Pages 7 and 8 Index (March, 1960). *Manual of Description and Maintenance Instructions, Vols* 1 *and* 2*:* MA.02/51 (December, 1959) MA.02/52 (December, 1959) MA.03/53 (November, 1959) Index (March, 1960).
Smiths Aviation Instrument Publications ..	*Manual of Spare Parts, Vols.* 1, 2 *and* 3*:* Pt. 50/11 (February, 1960) Pt. 08/51/01 (November, 1959) Pt. 08/65/2 (January, 1960) Pt. 101/40/2 (January, 1960) Index (March, 1960). *Manual of Description and Maintenance Instructions, Vols.* 1 *and* 2*:* MA.8/51 (January, 1960) MA.8/65 (January, 1960) Index (March, 1960). *Manual of Overhaul and Repair Instructions, Vols.* 1, 2 *and* 3*:* Revision Transmittal No. 1 (February, 1960) Index (March, 1960).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

Title.	*Date.*
Lloyds Shipping Index	5th September, 1960.
Lloyds Shipping Index	12th September, 1960.
Lloyds Shipping Index	19th September, 1960.
Lloyds Shipping Index	26th September, 1960.

(DNAS 465/57/215.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

REGISTRAR

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C.N.O.'s 959-985/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
28th November, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

9183/60.

CONTENTS.

CONTENTS—*continued.*

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

959.—Move to Canberra.

The third stage of the transfer of the Department to Canberra is being effected in November and December, 1960. The following additional offices will be located at Navy Office, Canberra, as from the dates indicated—

Director of Civil Personnel (excluding Industrial Section) ..	7th November.
Director, Organization and Methods	7th November.
Director of Naval Reserves	7th November.
Director, Naval Education Service	7th November.
Inspector, Naval Recruiting	5th December.
Chief Psychologist	5th December.
Director-General, Supply and Secretariat Branch and Director of Administrative Planning	7th November.

2. The Naval College Section at present located with " N " Branch, Melbourne, will be transferred to Naval Personnel Branch, Canberra, late 1960 or early 1961.

3. Correspondence to Directors of these Branches under the provisions of R.I. 5201 (5), should be directed to—

The Director.....,
Department of the Navy,
Navy Office,
CANBERRA, A.C.T.

as from the date of transfer.

(Secretary 2/4/39.)

UNCLASSIFIED.

960.—Return of Ratings Borne.

Returns, in original only, are to be rendered to the Secretary, Department of the Navy, annually on 31st January, indicating—

(*a*) Character and efficiency assessments of all ratings borne on 31st December of the previous year;

(*b*) Chief Petty Officers, Petty Officers and Leading rates, of all branches, who are recommended for—
- (i) Recruit training duties.
- (ii) Other instructional duties.

(*c*) The following in respect of ratings who have been employed as Instructors during the previous year—
- (i) Whether a satisfactory instructor.
- (ii) Whether he may become a satisfactory instructor with further experience.
- (iii) Whether unsuitable for employment as an instructor.

2. The list at (*a*) above should be arranged in alphabetical order irrespective of branch. Lists at (*b*) and (*c*) above should be in branch order.

3. C.O.R. Article 159 is cancelled. This order will be incorporated in Regulations and Instructions for the Royal Australian Navy.

(DMT 302/2/16.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

961.—Annual Medical Examination—Asian Countries.

Approval has been given for each officer or rating serving in an Asian country to be X-rayed and medically examined at public expense at the end of each twelve months of his appointment or draft, because of the unhealthy conditions and the general risk of disease in such countries. This approval also applies to the member's family where they accompany him at public expense.

2. Servants could also be a source of infection for members, and approval is given for servants of members of the Royal Australian Navy to be X-rayed and medically examined at public expense on initial engagement, and then at twelve monthly intervals, to avoid the risks attendant on employment or continued employment.

3. Before any expense is actually incurred, the concurrence of the Head of Mission must be obtained. X-rays and medical examinations should, where practicable, be carried out at Service institutions, or in the absence of such, at an appropriate Government or Public institution. Where special rate doctors' fees are available to Public Servants, a member should at all times avail himself of this concession.

4. In view of the different circumstances regarding the employment of servants in Singapore and Malaya, this approval does not apply in respect of members serving in these areas.

(HPB 252/10/6.)

UNCLASSIFIED.

962.—Drafting Movements—Draft Notes—Special Instructions.

It has come to notice that in certain instances ratings are not being moved in accordance with the instructions contained in the Draft Note. To avoid any variation in the interpretation of the action to be taken these instructions are standardized as follows—

(*a*) *Date of draft only shown*—discharging authority is to despatch the rating on draft on the date indicated.

(*b*) *Date of draft plus notation " HHLD " (Having Had Leave Due)*—the discharging authority is to ensure that the rating has had all leave due by the date indicated. Procedure at (*a*) above then follows. If convenient to the discharging authority this notation may be regarded as a modified form of " Leave and Draft ", i.e., rating is discharged in time to complete leave by the date shown on the Draft Note, travelling time to be borne by the receiving ship.

(*c*) *Date of draft plus notation " L & D " (Leave and Draft)*—the discharging authority is to despatch the rating on leave on the date indicated and the rating is to join the receiving authority on completion of leave. Travelling time to be borne by the receiving ship.

(*d*) *Date preceded by the notation " TJB " (To Join By)*—the discharging authority is to despatch the rating in sufficient time to enable him to join the receiving authority by the date indicated.

2. A ship or establishment which does not receive a rating on the due date, or within a reasonable period thereafter to allow for travelling time, is to communicate direct with the discharging ship or establishment, reporting the inquiry to Navy Office.

3. If for any reason a rating is unable to take up his draft on the due date this fact is to be reported to the Naval Board and the receiving authority as soon as it is known.

(DMT 333/3/12.)

UNCLASSIFIED. Cancelled N.O. 720/62

963.—Forfeiture of Medals and Good Conduct Badges on Desertion.

(*A.F.O.* 18/1959.)

Although the Naval Discipline Act (1957), which came into force on 1st January, 1959, makes no provision for the forfeiture of Medals and Decorations and Good Conduct Badges consequent upon desertion such forfeiture will continue for Good Conduct Badges. Medals and Decorations will also continue to be liable to forfeiture but each case should be submitted to the Naval Board for direction.

2. Navy Order 237 of 1959 is hereby cancelled.

(HPB 38/1/11.)

(*Navy Order* 237 *of* 1959.)

UNCLASSIFIED.

964.—Instructional Films and Film Strips—Serial A.1059, "Upkeep of the Fleet"—Distribution.

Copies of the Admiralty instructional film, Serial No. A.1059, "Upkeep of the Fleet" have been obtained and the initial distribution will be effected, without demand, by the SNSO Sydney, on the following scale—

H.M.A. Naval Establishments—	*No. of Copies.*
F.N.D.	1
R.A.N. Film Library, Sydney	1

2. The film describes in simple terms how the documentation system enables work to be planned, records to be kept, and the maintenance state known, both to the ship and higher authorities.

3. Although this film deals with the R.N. procedure, that existing in the R.A.N. differs only in detail. The references to Depot Ship support are not relevant to the R.A.N. This function is absorbed by additional Dockyard effort.

4. Commanding Officers should make the maximum use of this film which is intended particularly to stimulate those carrying out periodical maintenance.

5. The film has a running time of 27 minutes and is issued on one spool.

(DNAS 519/56/41.)

UNCLASSIFIED. Cancelled C.N.O 547/62

965.—Instructional Technique—Maintenance of Standards.

The Naval Board is concerned that a uniformly high standard of instruction should be maintained at all Training Establishments. There is a need to review constantly the standard and accuracy of instruction, the arrangement of timetables to achieve balance between theoretical and practical instruction, the use made of instructional aids and the introduction of new aids as they become available.

2. It is appreciated that the duration of instructional technique courses is, of necessity, short and hence instructors may not always be as well-equipped to impart knowledge as is desirable.

3. To assist Commanding Officers to maintain high standards, the Director, Naval Education Service, accompanied by an officer from his staff, will visit each training establishment once a year for a few days with the object of listening to all forms of classroom instruction and to advise and assist with new techniques. Syllabuses will not be examined during these visits though one object will be to ensure that lessons are correct in their content.

(DMT 311/3/15.)

RESTRICTED.

966.—Officers—Seamen—Training of Officers in the Navigation and Direction Branch.

(*A.F.O.* 2468/1960.)

The Naval Board have decided not to retain the Direction sub-specialization within the R.A.N. after the withdrawal of the Fleet Air Arm in 1963. No further selection of officers to undergo the D course will be made. The responsibility of the SD(PR) officer will increase to meet the limited Aircraft Direction requirement that will continue in the Fleet after 1963.

2. The arrangements for training officers in the Navigation and Direction Branch are as follows—

General List Officers.

3. Officers selected for the ND branch will undergo a common ND course to be followed immediately by the N course. The syllabus for the common ND training has been confined to subjects required by both Navigating and Direction Officers. On qualifying, officers will be known by the short title (N).

4. After sea experience suitable (N) officers will be selected for the (N+) course.

5. An outline of the common ND and subsequent N course, and of the advanced N+ course is contained in the Appendix to this order.

(SD) (PR) Officers.

6. In order that (SD) (PR) officers may be fitted to shoulder the wider responsibilities now required of them, the scope of their qualifying course has been enlarged to include both interception training and astronomics. The standard (SD) (PR) qualifying course will include one week's synthetic interception training, and those candidates who show aptitude will receive a further four weeks' live interception training as a post-graduate course after qualifying (SD) (PR). Officers who successfully complete this course will be designated (SD) (PR) (*d*).

7. It is intended that suitable (SD) (PR) and (SD) (PR) (*d*) Officers should be eligible to qualify (N) subject to recommendation. Captains may forward recommendations for (SD) (PR) officers to qualify (N) provided that the officer concerned—

(*a*) has obtained a certificate of competence and watchkeeping certificate.

(*b*) has completed eighteen months sea service as an (SD) (PR).

(*c*) has been awarded an Ocean Navigation Certificate as laid down for General List Officers in Navy Order 1077 of 1959. (General List Officers (New Scheme)—Award of Ocean Navigation Certificate.)

8. Recommendations should be forwarded to the Secretary, Department of the Navy. (SD) (PR) Officers are no longer required to obtain a certificate to say they are " competent to undertake navigating duties in a destroyer or frigate " and the title (PR+) is abolished.

9. (SD) (PR) officers selected to qualify in Navigation under paragraph 8 above, will undergo the course with the general list candidates preceded by the common ND course. An outline of this course is contained in the Appendix to this order.

Qualifications.

10. The main aims of the training outlined above will be to produce GL and SD officers capable of carrying out duties as follows—

(*a*) (N)—on first qualifying—

(i) Navigating Officer and AIO Officer of a private destroyer or frigate.

(ii) 2nd Navigating Officer of a carrier and ORO in a carrier at cruising stations.

(*b*) (N)—after sea experience—

(i) Navigating Officer of a " Daring " class destroyer.

(ii) 2nd Navigating Officer of a carrier and ORO in a carrier at cruising stations.

(*c*) N+

(i) Navigating Officer of a Carrier.

(ii) Navigating Officer of a Destroyer or Frigate Squadron.

(iii) Navigating Officer of Staff Officer status.

(*d*) (SD) (PR)—

(i) Intercept Officer and other AIO duties in carriers.

(ii) AIO Officer and Aircraft Direction duties in small ships.

11. Navy Order 577 of 1959 is hereby cancelled.

APPENDIX.

Courses to be Taken by GL and SD Officers Qualifying in the ND Branch.

1. *GL Officers.*

(*a*) N.D. Common Course—

Radar	4 weeks
AIO/Helicopter Direction	6 weeks
Communications	1 week
Fleetwork	2 weeks
JASS Londonderry	2 weeks
Met.	1 week
	16 weeks

APPENDIX—*continued.*

(*b*) N. Course—

Navigation	14 weeks

(*c*) N+ Course—

Radar/AIO	2 weeks
Fleet work/Communications	2 weeks
War Game	1 week
Navigation	2 weeks
Sea Time	2 weeks
	9 weeks

2. *SD Officers.*

(*a*) (SD) (PR) Course—

School	6 weeks
Radar	2 weeks
AIO	3 weeks
Communications	1 week
Fleetwork	1 week
Navigation	7 weeks
Air Station visit	1 week
Interception Training	1 week
Seamanship	2 weeks
	24 weeks

(*b*) (SD) (PR) Post Graduate (*d*) Course—

Live Interception Training	4 weeks

(*c*) SD N and N+ Courses.

(SD) (PR)'s will qualify with GL officers in appropriate N and N+ courses, as in paragraph 1 of this appendix.

(DOA 312/203/48.)

(*Navy Orders* 577 *and* 1077 *of* 1959.)

UNCLASSIFIED.

967.—Ratings—Communication Branch—Reporting of Examination Results.

Consequent on the abolition of forms A.S. 1124 (*see* Navy Order 984 of 1960) the following procedure is to apply for reporting Communication Branch examination results—

(*a*) Examinations for advancement to Tactical Communication Operator, Radio Communication Operator or Radio Operator Special—examining authority is to report by letter to Navy Office and CST, FND, the names of all candidates passed and failed. Details are to be given of all failed subjects together with marks.

(*b*) Fleet Board examinations—the President of the Board is to report by letter through convening authority to Navy Office and CST, FND, the information in (*a*) above.

2. Forms A.S. 161 and 161a are to be rendered by ratings' own ships.

3. A.B.R.'s 10 and 5009 will be amended.

(HPB 80/1/7.)

(*Navy Order* 984 *of* 1960.)

UNCLASSIFIED.

968.—Review of Ratings Duties and Training in the R.A.N.

The structure of branches, the allocation of duties and the training given to the various categories of rating have evolved over a long period. Some duties are not now being carried out by the most appropriate rate and some training is not properly related to the duties to be performed.

2. It has therefore been decided to review the duties performed by ratings in all branches in order accurately to determine such factors as what capacity, skill, technical knowledge, degree of responsibility and training are required of each rate.

3. In the first instance job analyses will be carried out by Fleet Work Study teams. These will show the actual work, including its frequency, carried out by each rate. After determining that each duty is being carried out by the most appropriate rate, selected members of the Training Panel, assisted by the school concerned, will review the training necessary, be it on-the-job or by course, and draw up new syllabuses.

4. The order in which the training of ratings in the various branches is examined will be determined after consideration of such factors as the length of existing courses, the period for which present syllabuses have been used without review and bearing of ratings in the branch. It is not intended to suggest that the branches investigated first are less efficient than those investigated later.

5. On completion of a job analysis of a particular branch in a ship or establishment, the results are to be forwarded to the Head of Fleet Work Study at Navy Office, with a copy to the Captain of the ship or establishment where the analysis was performed.

(DMT 303/21/41.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

969.—Radar—Display Outfits JCA/B/C—Minor Modification No. 19 (B.R. 1917).

(*A.F.O.* 2312/1960.)

A manufacturing error in the assembly of A.P. 184038 Scanning Coil Assembly, part of Modification Kit A.P. 172050, results in the auto-aligning striker pin being misaligned by 90°. This error may be identified and corrected by rotating the gear wheel in relation to the tufnol body, as follows—

(*a*) Place the assembly on the bench with the two slip rings uppermost and turn it until the soldered connection on the lower slip ring is at 0°, and that on the upper slip ring is at 180°. The correct position of the striker pin should be at 315°.

(*b*) Should the striker pin not appear at this position the flanged gear wheel must be removed from the tufnol body and rotated into the correct position. To do this remove the 4 in number 8 B.A. cheese-headed screws securing the gear wheel flange to the tufnol body, press the tufnol body out of the gear wheel flange and rotate the gear wheel until the striker reaches the correct position. Re-assemble.

2. Modification Kits A.P. 172050 now in current production are correctly assembled and are identified by a letter " X " marked on the packaging in 1-in. red lettering.

(DEE 518/51/348.)

UNCLASSIFIED. Cancelled N.O. 755/62

970.—Radar—Types 262M/P/Q—Interference by Adjacent Mountings—Issue of Magnetrons.

Trials carried out in the R.N. in a destroyer showed that under certain conditions it is possible for a mounting in the SEARCH condition to be tripped into the TARGET LOST condition by radiation from the transmitter of the adjacent mounting.

2. The angle between the two aerial axes for which this occurs depends upon the difference in frequency between the transmitters of the two mountings. The trial showed that by using a CV.991 magnetron in one transmitter and a CV.994 in the other, the maximum exterior angle for which this tripping occurs is approximately 40 degrees. With a combination of CV.992 and CV.994 this angle increases to approximately 90 degrees. (For 262 P/Q Magnetrons, *see* paragraph 6.)

3. The present policy is to fit CV.991's in the port transmitter and R.M.R. and CV.994's in the starboard equipment. If difficulty is experienced in obtaining CV.991's or CV.994's then CV.992 or CV.993 respectively may be used in lieu provided this does not result in the two latter magnetrons being used in adjacent, mountings simultaneously.

4. The case of a ship fitted with more than two Type 262M/P/Q's is more complicated and will in some measure have to be treated on individual merits. However, the following general rules may be used as a guide in such cases—

(*a*) Where mountings or directors are in close proximity to each other with no screening structure to prevent mutual interference, adjacent transmitters should be fitted with magnetrons having the largest frequency spacing, i.e., CV.994 and CV.991.

(*b*) Where the arcs of coverage of mountings or directors tend to coincide, the respective transmitters should be fitted with magnetrons having the largest frequency spacing.

(*c*) Where mountings or directors are fitted on different deck levels, it is permissible for adjacent transmitters to be fitted with CV.994 and CV.992 or with CV.993 and CV.991.

(*d*) It is possible for the frequency of a CV.991 magnetron to be very near that of a CV.992, or a CV.993 to be very near that of a CV.994, so that judicious selection of magnetrons may be necessary.

5. CV.992 and CV.993 magnetrons will continue to be supplied and should be used as directed in paragraphs 3 and 4.

6. Ships fitted with 262P/Q are to follow the policy outlined in paragraphs 3 and 4 above, substituting the CV numbers of the 262P magnetrons for those quoted, in accordance with the list below—

262M Magnetron.		*262P Magnetron.*	
CV. No.	*Freq. Coverage.*	*CV. No.*	*Freq. Coverage.*
991 ..	9820–9900 Mcs.	2111 ..	9820–9890 Mcs.
992 ..	9740–9820 Mcs.	2112 ..	9740–9820 Mcs.
993 ..	9660–9740 Mcs.	2113 ..	9660–9740 Mcs.
994 ..	9580–9660 Mcs.	2114 ..	9590–9660 Mcs.

(DEE 518/51/369.)

UNCLASSIFIED.

971.—Ammunition—Cartridges, Q.F. 40/60—Break-up Shot—Withdrawal of Lot RNP1655.

(*A.F.O.* 2482/1960.)

Ammunition Item .. Cartridges Q.F. 40/60 Break-up Shot, filled MNQF/R, Lot No. RNP1655.

Action to be taken—

By H.M.A. Ships .. To be landed at the nearest Armament Depot at the first opportunity. Replacements being demanded on exchange basis.

By Depots .. .. G.A.C.L. No. 651 refers.

Reason for Action .. Consequent on puff shots of several rounds.

Safety Category .. N.M.E.R. (B.R. 862), Article 304, Category f.f.—Not dangerous but may have a percentage of failures to function.

(DW 726/66/40.)

UNCLASSIFIED.

972.—Ammunition—Small Arms—Cartridges, S.A. .303-in. Blank of 1944 Manufacture—Withdrawal.

(*A.F.O.* 2483/1960.)

Ammunition Item—

JX 344 (ex JX 627) Cartridges, .303-in. Blank of 1944 Manufacture.

Action to be taken—

By H.M.A. Ships and Shore Establishments Return any such cartridges to the nearest R.A.N. Armament Depot for exchange.

By R.A.N. Armament Depots Arrange disposal in accordance with G.A.C.L. 632.

Reason for Action .. .. Annual proof has shown a high incidence of failures attributable mainly to age.

Safety Category .. .. N.M.E.R. (B.R. 862), Article 304, Category d.d. (i.e., Dangerous if used).

(DW 726/69/54.)

UNCLASSIFIED.

973.—Anti-Aircraft Fire Control—M.R.S. 8—D.B.U. and S.B.U.—Ballistic Drawer, Coupling Withdrawal Gear.

(*A.F.O.* 2534/1960.)

A number of instances have been reported in the R.N. of the non-ambiguous couplings of the ballistic drawers failing to become completely withdrawn prior to withdrawal or replacement of the ballistic drawers.

2. In each such case reported, the coupling withdrawal gear has been Bowden cable operated, and it would appear that these failures have been due to stretching of the operating cable or to slipping of the cable in the sleeve.

3. As such failures are likely to cause damage to couplings and shafts, particularly during replacement of ballistic drawers, the Bowden cable operated coupling withdrawal gear is to be examined and functionally checked on each occasion of withdrawing a ballistic drawer.

(DW 737/56/20.)

UNCLASSIFIED.

974.—Guns—Q.F. 40/60, Marks 9, 10, 11 and N1 Series—DV239 Plunger—Modification.

(*A.F.O.* 3485/1960.)

It has been found that the stamping of store reference DV811 after modification to DV239 Plunger has led to a stress concentration in the metal which resulted in a fracture. To obviate future failures attributable to stamping it has been decided, to substitute etching for stamping on drawing N.O.D. 3138/627.

2. Guns, Q.F. 40/60, Mark N1 Series and Accessories Serial No. 38;
Guns, Q.F. 40/60, Mark 9 Series and Accessories Serial No. 28;
Guns, Q.F. 40/60, Mark 10 Series and Accessories Serial No. 38; and
Guns, Q.F. 40/60, Mark 11 Series and Accessories Serial No. 30;

which were added to Schedule of Modifications, Part 1 by Navy Order 988 of 1956 are to be *amended* as follows—

Column 3. *For* " (ii) Bar out existing marking and stamp on DV811 ".
Read " (ii) Bar out by electrical etching existing marking and etch on DV811 ".

3. Attention of depots is drawn to a new hardness test to be made on plungers after modification. Details of this test have been added to drawing N.O.D. 3138/627 which will be issued on receipt from United Kingdom.

(DW 708/51/46.)

UNCLASSIFIED.

975.—Guns—Q.F. 40/60—Damage due to Incorrectly Filled Buffers.

(*A.F.O.* 2365/1960.)

There have been three instances of unnecessary damage caused to 40/60 Guns in the R.N., during the past twelve months, due to incorrectly filled buffers.

2. The attention of the Commanding Officers of all ships fitted with the above equipment is drawn to the instructions contained in B.R. 1057/53, chapter 5, paragraphs 2 and 3, which are to be strictly observed. Monthly planned maintenance items and " Before Firing " routines also refer.

(DW 708/51/45.)

UNCLASSIFIED.

976.—Accounting for Fuel Oil in H.M.A. Ships.

It has been decided that furnace fuel oil and diesel fuel (in bulk) are no longer to be accounted for in the Naval Store Accounts of H.M.A. ships.

2. The entry in the Engineering Department Master Log will, in future, be regarded as being sufficient record for accounting purposes.

3. Normal vouchering procedure will be followed in the case of supplies from R.A.N. Oil Fuel Installations and the certificates on the back of copy No. 4 of forms A.S. 134 will require to be completed by the Engineer Officer, who will also be required to certify London Vouchers and claims for supplies from commercial installations.

4. Supplies of diesel fuel in drums should continue to be accounted for in the Naval Store Account in the normal manner.

5. A.B.R. 4, Naval Storekeeping Manual, will be amended.

(DNAS 523/51/144.)

UNCLASSIFIED.

977.—Naval Stores (General) (Class B, Group 11, Part A)—Tools, Screw Cutting.

(*A.F.O.* 2433/1960.)

The following items are obsolete and are being deleted from B.R. 810, the Rate Book and Authorized List of Naval Stores—

Pattern.	*Description.*
B11A/616A ..	.. Die stock for two piece angular type dies.
B11A/621A to 621E	.. Dies, B.S.W., two piece, angular.
B11A/860 to 881	.. Chasers, Hand, B.A.
B11A/965 to 985	.. Chasers, Machine, B.S.W.

2. Stocks should be disposed of in accordance with current instructions.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 506/71/122)

UNCLASSIFIED.

978.—Naval Stores (General) (Class E, Group 2D)—Mica Lubricated Valve Gland Packing in Sets of Formed Rings—Introduction.

(*A.F.O.* 2316/1958.)

In order to obtain a more efficient and lasting packing of glands necessitated by the high temperatures and pressures of modern steam installations, a range of mica lubricated valve gland packing in sets of formed rings as detailed in the appendix of this order, is being introduced. These packings are to be used in Daring Class Destroyers and A/S Frigates—Type 12 for steam systems operating at or above 250 lb. per sq. inch or 450° F. and supplies should be demanded from the nearest (S)NSO on an " as required " basis.

APPENDIX.

Mica Lubricated Gland Packing.

A/S Frigates—Type 12.

Pattern No.	*Ext. Dia.*	*Int. Dia.*	*Sq. Section.*	*No. of Rings per Valve.*	*No. of Rings per Ship.*
	Ins.	Ins.	Ins.		
—	$1\frac{1}{2}$	1	$\frac{1}{4}$	9	36
—	$1\frac{13}{32}$	$\frac{7}{8}$	$\frac{17}{64}$	7	14
—	$1\frac{27}{64}$	$\frac{59}{64}$	$\frac{1}{4}$	7	182
7957 ..	$1\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{4}$	7	77
7948 ..	$1\frac{3}{16}$	$\frac{11}{16}$	$\frac{1}{4}$	5	50
—	$1\frac{7}{32}$	$\frac{3}{4}$	$\frac{11}{64}$	7	105
—	$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{1}{4}$	6	138
—	$1\frac{1}{64}$	$\frac{33}{64}$	$\frac{1}{4}$	5	805
Daring Class Destroyers—					
—	$3\frac{1}{2}$	$2\frac{3}{8}$	$\frac{9}{16}$	10	20
—	$2\frac{3}{4}$	$1\frac{7}{8}$	$\frac{7}{16}$	8	32
—	$2\frac{1}{2}$	$1\frac{5}{8}$	$\frac{7}{16}$	8	16
—	$1\frac{7}{8}$	$1\frac{1}{4}$	$\frac{5}{16}$	10	60
—	$1\frac{5}{8}$	1	$\frac{5}{16}$	6	96
—	$1\frac{1}{2}$	1	$\frac{1}{4}$	9	36
—	$1\frac{1}{2}$	$\frac{27}{32}$	$\frac{21}{64}$	5	100
—	$1\frac{1}{2}$	$\frac{7}{8}$	$\frac{5}{16}$	5	20
7957 ..	$1\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{4}$	8	320
—	$1\frac{3}{8}$	$\frac{25}{32}$	$\frac{19}{64}$	5	530
7941 ..	$1\frac{3}{16}$	$\frac{7}{8}$	$\frac{7}{32}$	9	306
7947 ..	$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{4}$	7	56
—	$1\frac{5}{32}$	$\frac{21}{32}$	$\frac{1}{4}$	5	400
—	$1\frac{1}{8}$	$\frac{3}{4}$	$\frac{3}{16}$	5	270
—	$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{1}{4}$	5	10
7946 ..	$1\frac{3}{32}$	$\frac{1}{2}$	$\frac{19}{64}$	3	396
7951 ..	1	$\frac{5}{8}$	$\frac{3}{16}$	7	84

(DNAS 512/56/18.)

UNCLASSIFIED.

979.—Naval Stores—General—Demands—H.M.A. Ships and Commissioned Establishments.

In order to assist in planning of Naval Store activities, it has been decided that the " date required " block on form A.S. 134 or A.S. 134S is to be completed in all cases in which casual demands are placed for subsequent collection. This portion of the forms need not be completed when stores are to be collected at the same time as the demands are lodged.

2. In addition, a copy of all demands raised by Storing Yards for ships in commission and commissioned establishments will in future be forwarded to the ship or establishment concerned and should be filed with other ships' copies of demands.

Whenever possible the known or expected date of availability will be shown on the demand as a guide to the ship in arranging collection, &c.; where an expected date only can be shown, form A.D. 480 (Stores Availability Notification) will be used to notify the ship or establishment when the stores become available for collection.

3. Articles 0307, 0601 and 0603 of A.B.R. 4 Naval Storekeeping Manual will be amended.

(DNAS 400/51/75.)

UNCLASSIFIED.

980.—Paints and Compositions—Weatherdeck Covering Materials.

(*A.F.O.* 2380/1960.)

Abrasive treadstrips are approved for fitting to the weatherdecks of H.M.A. ships in such places as working areas around equipment and in walkways. They are to be fitted in replacement as existing deck coverings become defective.

2. In areas subject to heavy traffic, treadstrips are to be laid ¼-in. apart and the gap covered with the sealing. Elsewhere they are to be laid 6-in. apart.

3. In the case of decks which are pitted or corroded sufficiently to prejudice the adhesion of abrasive treadstrips, the following instructions are to be carried out—

(*a*) Remove any previous deck covering, and machine descale and mechanically wire brush the deck.
(*b*) Clean and degrease with Pattern 50 solvent Naphtha and wipe dry.
(*c*) If areas of rust are still present after carrying out the treatment described at (*a*) above (e.g. in the pits) treat the areas with phosphoric acid derustant, Pattern No. 7072, in accordance with present approved practice.
(*d*) Prime the pitted areas with adhesive, Pattern 9062, and allow to dry.
(*e*) Fair off any deep pits with " Safety Walk " underlayment cement and allow to dry. Again prime with adhesive, Pattern 9062, and allow to dry.
(*f*) Apply the treadstrip and immediately seal the edges with a bead of adhesive Pattern 9062.

4. The " Safety Walk " underlayment cement is a rapid hardening filler, which dries in 1½–2 hours under good weather conditions.

5. The deck between the abrasive treadstrips spaced 6-in. apart, and elsewhere, is to be painted with the approved weatherdeck paint system. Care is to be taken to ensure that the abrasive treadstrips are not painted.

6. Commanding Officers of ships concerned are to insert an item in their Defect List to cover the work involved in first fitting or subsequent renewal.

7. A.B.R. 19 will be amended.

(DNC 1211/51/182.)

UNCLASSIFIED.

981.—Ships' Complement of Boats—Amendment.

Navy Order 519 of 1960 is to be amended as follows—Under heading " Standard Range of Boats for Supply to Ships " *delete* " 25-ft. Motor Whaler " and *insert* in lieu " 25-ft. Motor Cutter ".

(DNC 1275/51/44.)

(*Navy Order* 519 *of* 1960.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

982.—Demands for Cap Ribbons.

It has come to notice that many H.M.A. ships and establishments are not lodging their demands for cap ribbons by the due date as required.

2. Stocks of cap ribbons are not normally held at the Royal Edward Victualling Yard, Sydney, and in order that requirements may be met, demands are to be forwarded by all ships and establishments (including Naval Reserve Establishments) to reach the Superintending Victualling Store Officer by 1st April, 1st August, and 1st December, each year. The quantities demanded are, together with stocks held to cover estimated requirements for a period of six months from date of demand. Usually two months will elapse before replenishment is effected.

3. Nil returns are required to be submitted on the dates specified in paragraph 2. if replenishment is not desired.

(DV 917/73/20.)

UNCLASSIFIED.

983.—Victualling Stores—Gold Lace—Issue of and Accounting for in Inches.

The present method of issuing and accounting for gold lace by yard measurement has proved cumbersome and unsuited to the accounting systems in H.M.A. Victualling Yards.

2. In future, therefore, gold lace will be issued and accounted for in inches. The issuing prices per inch are as follows—

	s.	*d.*
1¾-in.	1	8
1¼-in.	0	8
$\frac{9}{16}$-in.	0	5
½-in.	0	5
¼-in.	0	3

3. The official memorandum " Prices of Clothing, &c., Maintained for Issue to Ships' Companies " is to be amended accordingly.

(DV 917/51/8.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

984.—Form A.S. 1124—Abolition.

In order to reduce paper work, it has been decided to abolish forms A.S. 1124. Revised method of reporting is contained in Navy Order 967 of 1960.

(DNAS 464/54/124.)

(*Navy Order* 967 *of* 1960.)

Section 6.
ESTABLISHMENTS.

RESTRICTED.

985.—Security of Telephones—Warning Notices.

So that telephone users will be constantly reminded of the danger of discussing CLASSIFIED matter over the telephone, warning notices are to be attached to telephones in all Shore Establishments in the R.A.N.

2. The warning notices are durable and self-adhesive. They are oblong, 3¼ inches in length, and are to be affixed horizontally on the telephone hand-set, below the dial.

3. Supplies of these warning notice labels may be obtained on demand from SNSO Sydney.

(DNI 1617/206/35.)

With reference to Navy Order 1094 of 1959, Navy Orders 854 to 986 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
28th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

9184/60.

RESTRICTED.

986.—Reports on Officers—Forms A.S. 206.

(*A.F.O.* 945/1960.)

Having reviewed the procedure for reporting on officers the Naval Board have approved certain changes in the report form A.S. 206, and the occasions on which reports are made, and also the abolition of form A.S. 206A. It is hoped that these changes will not only improve the standards of reporting and provide better information for promotion purposes but also simplify the existing arrangements.

Purpose and Use of Reports.

2. Reports on officers are required to provide information for two main purposes; the consideration of officers for promotion and the selection of officers for appointments.

3. When selecting officers for promotion, the Naval Board considers the confidential reports A.S. 206 or A.S. 206A on all officers in the zone and on any officers who are recommended exceptionally for " out-of-zone " promotion. The Naval Board not only considers current reports but also takes account of each officer's previous reports. This overall picture of an officer's capabilities determines his suitability for promotion.

Form A.S. 206.

4. Although retaining many of its present features, form A.S. 206 is being modified to meet various criticisms which have been made from time to time and to make it more suitable for use in connection with the long-term development of the new officer structure, particularly the Amalgamated General List. It is also being amended to replace form A.S. 206A.

5. The instructions printed on the cover of each pad of form A.S. 206 are being amended to give more guidance to less experienced officers, and spare copies of these instructions will be made available on demand for use by reporting officers who do not require a full pad of forms.

6. In the past, it has sometimes occurred that reporting officers have failed to inform an officer of adverse comments about shortcomings which are within his own power to remedy. Reporting officers will in future have to certify that the officer concerned has been warned of such failings and the necessary certificate is being included in the revised form A.S. 206. It will not then be necessary to use red underlining in the body of the report to indicate that the officer has been informed.

Occasions for Rendering Reports.

7. Half-yearly reports will continue to be required on all officers in the promotion zones and in certain other circumstances.

8. The procedure for making reports on " termination of appointment " and on " supersession of Commanding Officers " will, however, be modified and largely replaced by annual reports to be rendered on the anniversary of each officer's joining the ship or establishment. The annual report will not be required for officers within the promotion zones, as the half-yearly reports will provide all the information required.

Form A.S. 450—*Officer's Certificate.*

9. There is some evidence that, on occasions, the form A.S. 450 given to an officer has not accurately reflected his service in the appointment to which it has related. **Comments on form A.S. 450 must never be incompatible with the latest report A.S. 206 on the officer concerned.** Failure to observe this rule will discredit form A.S. 450 for reference purposes.

10. It has also been decided that it is no longer necessary for senior officers to prepare form A.S. 450 in their own handwriting. The certificates may in future be typewritten, with only the senior officer's signature in manuscript. The form and covering instructions will be amended in due course.

Index Error.

11. It is essential that all reporting officers should realize that the value of their reports will be nullified if they overmark. Habitual overmarking can readily be detected by the various superior authorities who subsequently examine the reports; thus, it can cast doubt on the judgment of the reporting officer and may prejudice the position of all the officers on whom he has reported. Senior officers should continue to apply an " index error " when they consider it necessary and the Naval Board hopes that, when they do so, they will inform the reporting officer accordingly.

Further Assistance to Reporting Officers.

12. There is room for improvement in the standards of reporting and the Naval Board expects senior officers to try to eradicate faults at the source whenever possible by discussion with and advice to officers who are less experienced in writing reports.

Dates for Introduction of New Arrangements.

13. *Occasions for Rendering Reports.*—With immediate effect (A.C.N.B. 112F Message) reports are to be rendered on the occasions enumerated in Appendixes A and B to this order.

14. *Officer's Certificates.*—Also with immediate effect, form A.S. 450 need no longer be prepared in the senior officer's own handwriting (paragraph 10, above). Duplicate copies are to be forwarded to Navy Office.

15. *Introduction of new Form A.S.* 206. Initial supplies of the revised form A.S. 206 and covering instructions will be issued without demand through the normal channels as soon as possible. The date for introduction of the new form will be announced later.

Special Note on New Form A.S. 206.

16. It should be particularly noted that the covering instructions to the new form A.S. 206 will include a revised scale of marking to allow wider scope for the assessment of officer's attributes, and it is to be expected that the resultant numerical markings will usually be lower than they would be under the existing procedure. The Naval Board emphasize that they expect this, and that a lower marking on the new form will not be taken necessarily to indicate any change in the reporting officer's opinion or in the qualities shown by the officer to whom the report relates.

Appendix A.

RECOMMENDATIONS FOR PROMOTIONS.

Promotion to Rear-Admiral.

Administrative authorities are to forward to the Naval Board half-yearly lists of Captains (Seaman Specialization) in the promotion zone, who have the necessary qualifications and experience to fit them for Flag appointments and who are highly recommended for promotion. These lists should be accompanied by reports on form A.S. 206.

2. Reports on form A.S. 206 are also to be rendered in respect of Captains (Seaman Specialization) in the promotion zone not covered by paragraph 1.

3. The zone for promotion under this section is eight years' seniority and above for Captains R.A.N. and in accordance with current A.F.O.'s for Captains, R.N.

4. Reports on R.A.N. officers are to reach Navy Office by 1st April and 1st October and on R.N. officers (in duplicate) by 15th January and 15th July.

Promotion to Captain and Commander. (All Lists except Special Duties.)

5. Commanding Officers are to forward to the administrative authority a report on form A.S. 206 for—

a) every Commander and Lieutenant-Commander, within the zones of promotion, whether recommended for promotion or not, who is serving under his command or has so served since the preceding recommendations were forwarded; excluding those in the top six months of the promotion zone and those whose provisional selection has already been announced.

(*b*) any Commander or Lieutenant-Commander who, although above or below the zones, is considered to be worthy of immediate promotion.

6. The administrative authority is to insert any remarks he may wish to make on the forms A.S. 206 and forward them to the Naval Board, together with forms A.S. 206 for officers of his own staff where appropriate, and with lists on forms A.S. 596 prepared in accordance with paragraphs 7 to 9.

Officers of the Royal Navy and R.N.Z.N.

7. Form A.S. 596, accompanied by forms A.S. 206 (in duplicate) are required to reach Navy Office by 1st March and 1st September for R.N. and R.N.Z.N. officers. These dates may be varied from time to time to meet the wishes of the Admiralty and the New Zealand Naval Board.

Preparation of Forms A.S. 596.

8. A separate form is to be prepared for each specialization and rank. Officers are to be listed in half-yearly batches, i.e., seniority of 31st December to 29th June inclusive and 30th June to 30th December inclusive. An order of merit for officers recommended for immediate promotion is to be shown in the full list but an order of merit is no longer required within the batch lists.

9. In addition to the lists shown in paragraph 8 a comprehensive list is to be prepared showing all Commanders, irrespective of specializations, who are recommended for immediate promotion in a single order of merit.

10. Recommendations are required to reach Navy Office by 15th May and 15th November; officers to be included are those who will be within the promotion zones at the following 30th June and 31st December and those who will enter the zone before the expiration of a further six months.

Appendix A—*continued.*

Promotion of Officers of the Special Duties List.

11. Commanding Officers are to forward to the administrative authority for onward transmission to the Naval Board, half-yearly reports on officers of the Special Duties List within the promotion zones.

12. Reports are required to reach Navy Office by 15th February and 15th August and are to include officers who will be in the promotion zones on the following 1st April and 1st October.

Officers of the Royal Navy.

13. Forms A.S. 206 (in triplicate) are required to reach Navy Office by 15th June and 15th December.

Promotion of W.R.A.N.S. Officers.

14. Reports on W.R.A.N.S. officers within the promotion zones are to be rendered on forms A.S. 206 to reach Navy Office by 15th May and 15th November.

Appendix B.

OCCASIONAL REPORTS.

15. Reports are to be rendered on all officers holding appointments, including officers of the Emergency List, R.A.N.R., &c., who may be serving, and officers borne supernumerary for not less than three months. Officers serving at Navy Office, in H.M.A. dockyards, or other establishments, or otherwise holding appointments on shore, are to be reported on equally with those serving afloat.

16. Reports will not be required on officers undergoing courses of instruction except where specifically stated below.

17. Reports are to be rendered on the following occasions—

(*a*) *Officers in Command.*

(i) When the officer is appointed away from a ship or establishment.

(ii) When the administrative authority under whom the officer has served is superseded.

(*b*) *Officers on the Staff of a Flag Officer or Commodore.*

(i) When the Flag Officer or Commodore hauls down his flag or broad pendant.

(ii) When the officer is appointed away after not less than three months' service.

(*c*) *Other Officers.*

(i) Annually on the anniversary of their appointment to the ship or establishment provided they have served under the reporting officer for at least three months.

(ii) If less than three months, reports are to be deferred until three months have elapsed. Conversely the Annual Report is to be advanced when either the officer being reported on, or the reporting officer leaves the ship or establishment within three months of the date when the Annual Report is due, unless a report has been rendered within the preceding six months.

(iii) Officers undergoing courses lasting three months or more—completion of the course.

APPENDIX B—*continued.*

(*d*) *Additional Reports on S.D. List Officers.*

(i) On acting Sub-Lieutenants becoming due for confirmation in rank.

(ii) On Sub-Lieutenants attaining two and three years' seniority in rank. These reports are to be deferred up to three months if "Insufficient Knowledge" would be the immediate assessment.

(*e*) *Fleet Air Arm Officers.*

Officers in Command of Squadrons.

(i) When the squadron moves away from its parent ship or air station after more than three months' service.

(ii) When the Commanding Officer of the parent ship or air station is superseded.

(iii) When the officer is relieved.

Other Officers in the Squadron.

(i) On supersession of the Squadron Commanding Officer.

(ii) When an officer leaves after more than three months' service.

Note.—In reporting on Pilots, section 1 (*d*) of current form A.S. 206 (section V (i) of revised form) should contain the last assessment of Flying Proficiency in accordance with Article 810 of Instructions for the Fleet Air Arm.

(*f*) *Additional Reports on Short Service Aircrew Officers.* All short service aircrew officers are to be reported on annually; these reports are to reach Navy Office by 15th February.

(*g*) *Subordinate Officers* (*up to and including Acting Sub-Lieutenants*).

(i) On completion of Phase III. Training in the United Kingdom.

(ii) On discharge from each ship or establishment in which they serve.

Amending Reports.

18. If a Reporting Officer has reason to alter his opinion of an officer after the Annual Report has been rendered (paragraph 17 (*c*) (i) and (ii) above) he should forward another report when either he or the officer being reported on terminates his appointment.

Medical and Dental Officers.

19. Officers reporting on medical and dental officers are to obtain as indicated hereunder, opinion as to their professional conduct and ability during the periods covered by the reports. Except where opinions are to be obtained from MDG at Navy Office, remarks are to be obtained separately and forwarded to Navy Office as enclosures to form A.S. 206. Where MDG's remarks are required, Section II. (*e*) (Section II. (*b*) (i) new form) should be left blank and necessary action to complete will be taken at Navy Office.

APPENDIX B—*continued.*

Officers reported on.	*Opinion to be obtained from.*
Command Medical Officer East Australia Area ..	Medical Director-General.
Medical Officer-in-Charge, Balmoral Naval Hospital	
Medical Officer-in-Charge, Flinders Naval Hospital	
Fleet Medical and Dental Officers, The Senior Medical Officer of any independent command	
The Senior Dental Officer, Flinders Naval Depot	
The Command Dental Surgeon, East Australia Area	
The Senior Dental Officer of any independent command	
The Senior Medical Officers and Dental Officers serving in ships and establishments administered by FOICEA.	Command Medical Officer, or Command Dental Surgeon, East Australia Area
The Senior Medical Officers and Dental Officers serving in H.M.A. Fleet	Fleet Medical or Dental Officer.
Medical and Dental Officers serving under Senior Medical or Dental Officers	Their Senior Medical or Dental Officer.

Note.—If the Fleet or Command Dental Officer is below Commander's rank it will be necessary to obtain the opinion of the Medical Director-General.

Special Reports.

20. The Naval Board or an administrative authority may call for a special report on an officer when particular information is required. A request for a special report does not necessarily imply that the officer has been adversely reported on. Unless a direction to the contrary is given, form A.S. 206, headed "Special Report" and bearing a reference to the relevant correspondence, is to be used.

21. The Captain may also initiate a special report without being called upon to do so, if he should deem it to be expedient, e.g., when as a result of movements of the officer and/or his Captain the rendering of a report in accordance with procedures outlined above would otherwise be unduly delayed. Form A.S. 206, headed "Special Report" is to be used and is to be accompanied by an explanatory letter.

Quarterly Reports.

22. The placing of officers under quarterly report can be authorized by the Naval Board only, either following recommendations from an administrative authority or in such cases as may be thought fit. When directions are given for an officer to be placed under quarterly report, the Naval Board letter is to be read by the Commanding Officer to the officer concerned. Should the latter be transferred to another appointment, the Naval Board letter is to be forwarded to his new ship through the usual channels, accompanied by remarks on the appropriate form for the broken period. The Naval Board is to be informed when this has been done. If the officer's next appointment is not known the letter is to be returned to Navy Office with the appropriate form for the broken period.

APPENDIX B—*continued.*

23. Quarterly reports on officers are always to be made on forms A.S. 206. When used for that purpose, the form is to be headed " Quarterly Report ", quoting the Naval Board letter. The report should continue to be rendered promptly until Naval Board authority for discontinuance is issued or the officer is removed from the Active List.

24. Navy Order 1104 of 1958 and A.C.N.B. message 112F of 25th May, are hereby cancelled.

(DOA 303/201/7.)

(*Navy Order* 1104 *of* 1958.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
28th November, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

UNCLASSIFIED.

987.—R.A.N. Relief Trust Fund—Financial Statement for 1959-60.

The Statement of Accounts of the R.A.N. Relief Trust Fund for the period 1st July, 1959, to 30th June, 1960, and the Balance Sheet as at 30th June, 1960, are promulgated as an appendix to this order.

Remarks on Balance Sheet.

2. The balance sheet shows a small increase in the Fund's assets as under—

	As at 30th June, 1959.			As at 30th June, 1960.		
	£	s.	d.	£	s.	d.
Invested Capital	3,067	0	0	3,067	15	4
Working capital, mostly bearing Savings Bank Interest	35,208	0	0	35,457	16	6
Money out on loan	117,942	0	0	120,420	12	10
	156,217	0	0	158,946	4	8

3. The assets at 30th June, 1959, included £30,000, representing three years' annual contributions at £10,000 a year by the Central Canteens Fund, which had been made available in advance during 1954 to 1958 for purpose of reducing the waiting list period for housing and furniture loans, then running to upwards of eight months. The Trustees have been able to manage without any new money from the Central Canteens Fund for the year 1959–60, and it has been possible therefore to write off £10,000 of the advance payments as being the annual contribution normally due for 1959–60. The advance payments included as assets at 30th June, 1960 thus amount to £20,000.

4. The Trustees are not seeking from the Central Canteens Fund new money during the remainder of 1960. The half yearly contribution of £5,000 normally due on 1st November, 1960, will therefore be regarded as already received in advance, and the total advance will be written down further by that amount to the total of £15,000.

5. The question of seeking more new money from the Central Canteens Fund as for the half year commencing 1st May, 1961, will be considered later, when it can be seen whether a material extension of the waiting list periods is threatened.

6. The new year has commenced with a satisfactory cash balance, which should enable the Trustees to approve of early payments of loans where necessary.

7. Loans made during 1959–60 have averaged £11,667 a month. The intake by way of repayment of loans is expected to average approximately £11,500 for the next twelve months. Allocating therefore £500 a month for grants and administrative expenses, the Trustees, without reckoning on any donations, intend to limit loan expenditure to an average of £11,000, allocated as follows—

	£
Housing and Furniture	8,500
Other loans	2,500
	11,000

Development of Loan Business.

8. Since the Fund was established on 1st July, 1947, with a capital of £60,000, the increase in available funds has made possible a development in loan business as shown hereunder:—

Year.	*Money Advanced on Loan.*	*Amount Out on Loan at End of Year.*
	£	£
1947–48	4,720	3,201
1948–49	11,199	5,175
1949–50	15,149	5,842
1950–51	14,718	6,069
1951–52	20,066	7,140
1952–53	27,372	9,281
1953–54	48,364	22,223
1954–55	109,418	64,808
1955–56	121,986	86,287
1956–57	137,324	96,618
1957–58	155,127	109,777
1958–59	141,122	117,942
1959–60	140,014	120,420

Reasons for Loans.

9. The reasons for which loans have been made during the last two years are indicated broadly hereunder—

	Loans made.		*Percentage of Cases.*	
	1958–59.	1959–60.	1958–59.	1959–60.
Hospital and medical expenses ..	299	343	16	18
Housing	374	381	20	20
Furniture	366	413	19	22
Travelling and removals	162	136	9	7
Arrears in household bills	534	466	28	25
Other reasons	143	161	8	8
	1,878	1,900	100	100

The amounts expended during the same period are as under—

	1958–59.	1959–60.
	£	£
Housing loans	69,024	61,174
Furniture loans	40,287	46,249
Other loans	31,811	32,591
	141,122	140,014

10. It will be seen that for the year under review the expenditure was for—

	£
Housing and furniture	107,423
Other loans	32,591
	140,014

This indicates that the bulk of the money goes to personnel who are establishing their homes and providing equivalent contributions from their own savings.

Repayment of Loans.

11. Repayment of loans is required within the following maximum periods—

Housing loans	3 years.
Furniture combined with housing loans	3 years.
Other furniture loans	18 months.
Other loans	12 months.

12. It is emphasized, however, that loans should be repaid as quickly as possible, so as to be available for loan to others and assist in keeping down the waiting list period. Recipients of long term loans are therefore expected to allot as much as they reasonably can and should not assume automatically that they have the maximum period in which to repay. Having regard to the recent increase in pay the Trustees take the view that Chief Petty Officers and above can as a rule be expected to declare something more than the minimum allotment. It is gratifying to note that since the pay increase several members have increased their allotments.

Housing Loans.

13. Expenditure on housing loans during 1959–60 has averaged £5,098 a month, and thanks to donations received the waiting list period has not run to more than three months. It is hoped that for the present the period will not be extended materially beyond the three months. Experience shows that on this basis the money is often available before it can be used and payment has to be deferred.

Furniture Loans.

14. Expenditure for 1959–60 has averaged £3,854 a month. Applications for furniture loans have shown a tendency to increase recently, and, with the new maximum of £200, expenditure in relation to housing may be on a 50-50 basis.

15. The attention of Agencies has been drawn to the fact that most firms will allow 90 days credit if furnished with a letter from the agent guaranteeing payment of the money when the loan becomes due. Early payment of the loan when credit is not obtainable, e.g., when goods are purchased second hand or through A.S.C.O., can as a rule be authorized.

Naval Health Benefits Society.

16. Loans are available to assist members in meeting initial medical expenses, but it is expected that any refund paid by the Naval Health Benefits Society, or other Society to which the member may belong, will normally be applied at once towards repayment of the loan. Members of the Naval Health Benefits Society on receipt of a loan are required to sign a form for the purpose of authorizing any repayment being made direct to the Fund.

Grants.

17. During the year grants have been made as under—

	£	s.	d.
To widows and dependants of personnel who have died while serving	560	18	0
To the estates of deceased personnel of balance owing on death	112	7	0
To ex-naval men or their dependants who were ineligible for assistance from the Services Canteens Trust Fund, not having served between 3rd July, 1939 and 30th June, 1947	289	4	6
	962	9	6

Donations.

18. The following donations have been received during the year—

	£	s.	d.
N.S.W. Fleet Club	1,000	0	0
H.M.A.S. MELBOURNE	1,000	0	0
Miss Gibbins' Estate	2,000	0	0
Lt. Cdr. Swan	10	10	0
Messrs. W. G. Crossle & Co.	5	0	0
Miscellaneous	4	10	11
	4,020	0	11

The thanks of the Trustees have been conveyed to the donors.

19. On the 1st July, 1960, there were 1,419 persons on the Fund's books.

20. This order will be required for posting on notice boards.

21. Navy Order 943 of 1959 is hereby cancelled.

ROYAL AUSTRALIAN NAVY RELIEF TRUST FUND.

(A) Statement of Income and Expenditure for Year ended 30th June, 1960.

1958–59.	Expenditure.				1959–60.	1958–59.	Income.	1959–60.
£					£ s. d.	£		£ s. d.
	Administrative Expenses—					595	*Interest on Investments and Bank Balances*	747 5 2
	Salaries and Travelling Expenses ..	£ 733	s. 6	d. 0			*R.A.N. Central Canteens Fund Contribution Advance reduced* ..	10,000 0 0
750	Sundry Other Expenses	18	4	6		10,000		
					751 10 6	181	*Donations*	4,020 0 11
1,108	*Grants*				962 9 6			
	Bad Debts	339	12	1				
151	*Less* bad debt revived	15	0	0				
					324 12 1			
8,767	*Excess of Income over Expenditure*				12,728 14 0			
10,776					14,767 6 1	10,776		14,767 6 1

(B) Balance Sheet as at 30th June, 1960.

1958–59.	Liabilities.				1959–60.	1958–59.	Assets.				1959–60.
£	*Accumulated Funds—*				£ s. d.	£	*Cash in Hand—*				£ s. d.
	Balance at 1st July, 1959 ..				122,884 4 0	35,208	Bank and Agencies' Advances ..				35,457 16 6
	Add Excess of Income over Expenditure				12,728 14 0	3,067	*Investments at Cost*				3,067 15 4
122,884	*Balance at 30th June*, 1960 ..				135,612 18 0		*Loans Outstanding—*				
33,333	*R.A.N. Central Canteens Fund Contributions received in Advance* ..				23,333 6 8		Balance outstanding at 1st July, 1959	£ 117,941	s. 13	d. 3	
							Add				
							New loans 1.7.59 to 30.6.60 ..	140,014	5	9	
								257,955	19	0	
							Less				
							Repayments 1.7.59 to 30.6.60, less refunds ..	137,098	7	1	
							Loans converted to grants ..	112	7	0	
							Bad Debts, less revival	324	12	1	
								137,535	6	2	
						117,942	*Balance at 30th June*, 1960 ..				120,420 12 10
156,217					158,946 4 8	156,217					158,946 4 8

The above statements have been examined and are in agreement with the books. In my opinion they exhibit a true and fair view of the affairs of the Trustees of the Royal Australian Navy Relief Trust Fund as at 30th June, 1960.

(H. C. NEWMAN)
Auditor-General for the Commonwealth.
15th September, 1960.

A. W. R. MCNICHOLL ..	Rear-Admiral.	Trustees R.A.N. Relief Trust Fund.
J. MCL. ADAMS ..	Acting Captain.	
F. E. IRVINE	Acting Captain.	
C. A. PARKER	Captain (Ret'd.)	*Secretary.*

(*Navy Order* 943 *of* 1959.)

(HPB 212/54/3.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

Registrar.

FOR OFFICIAL USE ONLY. C.N.O. 988/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
5th December, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

9186/60.

UNCLASSIFIED.

988.—Advancement—Half-yearly Extracts of Advancement Rosters on Completion of Advancements Effective 12th August, 1960.

The extracts from advancement rosters in Appendix A of this order are promulgated with the object of giving members an indication of the present state of their rosters.

2. A roster date shown in the extract gives no indication of the time a man has been waiting or his length of service because—

(*a*) it is possible to gain a basic date for advancement some time before being placed on the advancement roster; and

(*b*) recommendations for accelerated advancement also affect the basic dates given in the roster.

3. Requests for information regarding roster positions should be forwarded only as laid down in A.B.R. 10, Article 0117.

4. Before being placed on an advancement roster, a rating must possess the following qualifications—

(*a*) Professional qualifications—where applicable. (*See* A.B.R. 10, Article 0107 (10) *re* provisional examinations.)

(*b*) Service qualifications.

(*c*) Educational qualification—where applicable.

(*d*) Swimming qualification—where applicable.

(*e*) Specialist qualification—where applicable.

(*f*) A.B.C.D. qualification—where separate from professional examination, e.g., Supply and Secretariat.

5. Where a considerable gap occurs between the roster date of the top and second man, the roster dates of the first two or three men are shown in column 4 of the extracts. Column 6 gives the names of a proportion of men on top of their rosters.

6. Names of all ratings advanced during the last six months are shown in Appendix B of this order.

7. Advancements effective from 12th August, 1960, are based on qualifications held on 30th June, 1960, and the rosters shown are based on qualifications held on 31st August, 1960.

8. This order will be reprinted for posting on notice boards.

9. Navy Order 407 of 1960 is hereby cancelled.

Cancelled by CNO. 296/61

APPENDIX A.

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
C.P.O.	116	Nil	1. 1.3.51 2. 1.5.51 3. 1.8.51 4 1.11.51	7	1. Crotty, D. H. 2. Lacks sea service 3. V.G. Conduct broken 4. Gosch, J. W. 5. Baum, E. C. 6. Williams, J. L. 7. Robinson, R. B. 8. Fitzgerald, W. T. 9. Prosser, L. M. 10. Campbell, G. A. C. 11. Smith, S. R. 12. Hope, G. D. M. 13. Taylor, H. 14. Skarstrom, D. R. S. 15. Mackenzie, D. C. 16. Matthews, W. R. 17. Dunn, J. A. 18. Solway, E. J. 19. Voght, R. J. 20. Prain, J. T.
P.O.	8	28	1. 31.3.58 2. 28.2.59	8	1. V.G. Conduct broken 2. Wood, S. R. 3. Smith, F. G.

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
L.S.	15	44	1. 30.11.57	42	1. Not yet recommended 2. Not yet recommended 3. V.G. Conduct broken
C.Slmr.	Nil	Nil	—	Nil	—
Slmr.	1	Nil	1. 26.3.53	Nil	1. Bourke, R. L.
C.C.Y.	15	Nil	1. 1.7.53 2. 1.4.54 3. 1.7.55	Nil	1. Cairns, J. D. 2. Harris, W. C. 3. Duffey, J. R.
C.Y.	4	4	1. 31.12.57 2. 31.7.58	1	1. V.G. Conduct broken 2. Lacks sea service 3. Not yet recommended
L.T.O.	Nil	21	—	3	—
C.R.S.	9	Nil	1. 1.12.56	1	1. Nelson, C. W. 2. Grylls, L. J. 3. Steward, E. G.
R.S.	Nil	1	—	6	—
L.R.O.	2	33	1. 24.1.60 2. 6.4.60	5	1. Collins, S. C. 2. V.G. Conduct broken
C.R.S.(S)	1	Nil	1. 1.2.57	Nil	1. Roland, M. B.
R.S.(S)	2	Nil	1. 31.3.58 2. 30.6.58	2	1. V.G. Conduct broken 2. Not recommended
L.R.O.(S)	5	Nil	1. 30.6.58 2. 31.10.58	3	1. V.G. Conduct broken 2. Not yet recommended
C.E.R.A. .. .. .. C.Mech.	2	Nil	1. 96 points	8	1. V.G. Conduct broken
C.M.(E)	34	Nil	1. 1.6.55 2. 1.9.55	3	1. Devlin, K. R. 2. V.G. Conduct broken 3. Carson, P. M. 4. Campbell, I. K. 5. Fraser, D. G. 6. Bovill, D. H.
P.O.M.(E)	26	Nil	1. 1.4.56 2. 31.3.57	11	1. Not yet recommended 2. O'Connell, J. 3. Not yet recommended 4. Not yet recommended 5. Chapman, J. J.
L.M.(E)	17	48	1. 3.12.51 2. 28.5.57	46	1. Not recommended 2. Not yet recommended 3. V.G. Conduct broken
C.Naval Shpt.	Nil	2	—	2	—
C.O.A.	Nil	2	—	Nil	—

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
C.E.A.	Nil	5	—	1	—
C.R.E.A.					
C.E.A.(Air)					
C.R.E.A.(Air)					
C.El.(P)	20	Nil	1. 1.1.54	Nil	1. Upton, N. 2. Moore, D. D. 3. Johnson, K. A. 4. Graham, D. R. 5. Buckley, J. C.
P.O.El.(P)	12	Nil	1. 31.7.56	5	1. Ferguson, J. M. 2. Evans, L. 3. Carr, C.
L.E.M.(P)	2	13	1. 14.2.59 2. 20.5.60	6	1. V.G. Conduct broken 2. V.G. Conduct broken
C.El.(E)	13	Nil	1. 1.4.54	Nil	1. Robinson, N. M. 2. Halloran, J. M. 3. Nugent, N. C. 4. Bradwell, D. E. 5. V.G. Conduct broken
P.O.El.(E)	2	Nil	1. 30.9.57 2. 30.5.58	Nil	1. Pitt, R. H. 2. V.G. Conduct broken
L.E.M.(E)	6	12	1. 5.2.60	11	1. V.G. Conduct broken 2. Spencer, A. C. 3. Not yet recommended
C.R.El.	1	Nil	1. 2.8.57	Nil	1. Hampton, D. T.
P.O.R.El.	Nil	41	—	Nil	—
L.R.E.M.	2	48	1. 26.2.59	12	1. V.G. Conduct broken 2. Rice, C. D.
C.A.A.(A/E)	5	Nil	1. 76 points	Nil	1. Warfield, T. 2. Stilton, I. H.
C.A.Mech.(A/E)					
C.A.A.(O)	2	Nil	1. 16 points	Nil	1. Hall, H. B. 2. Wade, N.
C.A.Mech.(O)					
C.A.F.(A)	16	Nil	1. 1.9.52 2. 1.4.53	Nil	1. McCarley, K. A. 2. Lambert, R. J. 3. Daniels, D. J. 4. Moloney, R. W.
P.O.A.F.(A)	7	Nil	1. 18.7.56	Nil	1. Connellan, R. L. 2. Ikin, J. W.
L.A.M.(A)	7	Nil	1. 23.10.55 2. 7.2.56	Nil	1. Walter, G. A. 2. Maurice, C. H.
C.A.F.(E)	23	Nil	1. 30.6.49 2. 1.4.51	Nil	1. Matheson, K. J. 2. McQuarie, A. J. 3. Christopher, T. J. 4. Campbell, S. G.

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
P.O.A.F.(E)	14	Nil	1. 18.10.56 2. 28.2.57	1	1. Gault, W. J. 2. Cole, R. C. 3. Dunderdale, S. R.
L.A.M.(E)	2	1	1. 31.8.59	9	1. Gray, G. R. 2. Hafford, H. S.
C.A.F.(O)	8	Nil	1. 1.5.52 2. 1.1.53	Nil	1. Harrison, J. J. 2. Peacock, R. K.
P.O.A.F.(O)	5	Nil	1. 18.11.56 2. 30.11.57	Nil	1. Pascoe, K. L. 2. Healey, A. E.
L.A.M.(O)	Nil	Nil	—	7	—
C.Air.(A.H.)	9	Nil	1. 1.1.53 2. 1.3.54	2	1. Hill, L. W. T. 2. Harris, M.
P.O.Air.(A.H.)..	1	Nil	1. 31.12.57	4	1. Graham, D. R.
L.Air.(A.H.)	3	8	1. 31.12.57	5	1. Not recommended 2. V.G. Conduct broken
C.Air.(S.E.)	4	Nil	1. 1.7.54 2. 1.10.55	Nil	1. Kempnich, K. F. 2. Lee, G. W.
P.O.Air.(S.E.)	1	Nil	1. 9.4.56	Nil	1. Donovan, F. J.
L.Air. (S.E.)	3	Nil	1. 30.9.58	Nil	1. Todd G. McK. 2. Shaw, B. J.
C.Air.(Met.)	1	Nil	1. 1.3.54	Nil	1. Percival, L. N.
P.O.Air.(Met.)	Nil	Nil	—	2	—
L.Air.(Met.)	Nil	Nil	—	2	—
C.Air.(Phot.)	2	Nil	1. 9.11.56 2. 2.8.57	Nil	1. Profitt, L. R.
P.O.Air.(Phot.)	Nil	Nil	—	1	—
L.Air.(Phot.)	Nil	2	—	1	—
C.El.(Air.)	12	Nil	1. 1.6.53	Nil	1. Dun, J. G. 2. Birtles, H. J. 3. Bryant, E.
P.O.El.(Air.)	9	Nil	1. 30.9.55	Nil	1. Shepherd, L. A. 2. Corkhill, W. J. 3. Anning, A. W.
L.E.M.(Air.)	4	Nil	1. 9.1.60	3	1. Cox, G. G. 2. Thompson, R.
C.R.El.(Air.)	1	Nil	1. 30.10.57	Nil	1. Edwardes, D. H.
P.O.R.El.(Air.)	Nil	3	—	3	—
L.R.E.M.(Air.)	2	Nil	1. 17.5.60	2	1. Trew, J. B.

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
S.B.C.P.O.	15	Nil	1. 25.7.53 2. 25.5.54 3. 24.12.54	3	1. V.G. Conduct broken 2. V.G. Conduct broken 3. Monaghan, P. J. 4. Black, R. S.
S.B.P.O.	9	3	1. 21.8.56	1	1. Kildey, N. G. 2. Sawtell, M. L. 3. Passfield, S. A.
L.S.B.A.	2	14	1. 11.10.58 2. 8.3.60	1	1. O'Leary, B. D. 2. Walsh, D. B.
C.P.O.D.A.	1	1	1. 2.7.57	Nil	1. Richards, W. J.
P.O.D.A.	Nil	Nil	—	Nil	—
L.D.A.	Nil	Nil	—	1	—
C.P.O.Wtr.	26	Nil	1. 1.7.53	4	1. Not recommended 2. Cairns, B. D. 3. Connor, D. W. 4. McConnochie, I. P. 5. Murray, B. M. L.
P.O.Wtr.	8	Nil	1. 30.6.58 2. 30.11.58	3	1. Hamilton, J. 2. Hall, E. I. A. 3. Oxley, L. D.
L.Wtr.	8	Nil	1. 30.6.58 2. 31.12.58	10	1. V.G. Conduct broken 2. Not yet recommended 3. V.G. Conduct broken
S.C.P.O.(S)	17	Nil	1. 1.1.52 2. 1.11.52	Nil	1. Johnson, D. C. 2. Sheridan, G. L. 3. Dingle, N. H. A. 4. Lockett, G. F.
S.P.O.(S)	11	Nil	1. 30.6.56 2. 31.5.57	Nil	1. Trew, K. M. 2. Petrie, J. S. 3. Thomas, J. W.
L.S.A.(S)	Nil	13	—	3	—
S.C.P.O.(V)	13	Nil	1. 1.5.53	Nil	1. Pashen, B. W. 2. Churn, F. E. 3. Dwyer, K.
S.P.O.(V)	3	1	1. 31.12.54 2. 30.4.56	5	1. Reverted 2. Quinn, H. L.
L.S.A.(V)	4	9	1. 30.6.57	2	1. Not yet recommended 2. Gardiner, D. R.
C.P.O.Ck.(S)	7	Nil	1. 1.7.54 2. 1.5.55	1	1. Meyer, S. H. 2. McArthur, G. A. V.
P.O.Ck.(S)	11	Nil	1. 31.12.55 2. 31.10.56	1	1. Baranovsky, B. M. 2. Bacon, R. H. 3. Bruce, T. P.
L.Ck.(S)	1	11	1. 30.6.59	12	1. Not recommended

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Man at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Men on Top in Roster Order.*
C.P.O.Ck.(O)	9	Nil	1. 1.10.52	1	1. Wagner, L. A. G. 2. Shepherd, A. A. 3. Bamford, A. L.
P.O.Ck.(O)	13	Nil	1. 31.12.55	1	1. Boxsell, T. L. 2. Matthews, S. G. 3. V.G. Conduct broken
L.Ck.(O)	3	Nil	1. 30.6.59	6	1. Rigg, E. T. 2. Not yet recommended
C.P.O.Std.	24	Nil	1. 1.8.51 2. 1.12.51	1	1. Foley, T. F. 2. Boyle, A. H. 3. Pavletich, S. N. 4. Not yet recommended
P.O.Std.	1	9	1. 30.6.59	Nil	1. McDonald, A.
L.Std.	4	42	1. 30.6.58 2. 30.6.59	11	1. Not recommended 2. Not recommended
M.A.A.	6	Nil	1. 31.5.55	1	1. Slattery, S. O. 2. Lewis, K. R. G.
R.P.O.	4	Nil	1. 24.9.56	1	1. Boyington, G. A. 2. Not recommended
C.P.O.Btchr.	Nil	1	—	Nil	—
C.P.O.Musn.	3	Nil	1. 1.12.54	Nil	1. Coxon, G. D. 2. McDonough, J. H.
P.O.Musn.	2	Nil	1. 1.4.57	Nil	1. Farrell, W. W.
L.Musn.	Nil	9	—	4	—

W.R.A.N.S.

APPENDIX A—*continued.*

For Advancement to—	*No. on Roster.*	*Present No. of Vacancies.*	*Roster Date or Points of Woman at Top of Roster. (Adjusted by "RED" Recommendations as necessary.)*	*No. advanced during last Six Months.*	*Names of Women on Top in Roster Order.*
C.Wr.R.S.	Nil	3	—	Nil	—
Wr.R.S. .. .. .. / Wr.R.S.(S)	1	8	1. 31.8.59	Nil	1. Robertson, D. M.
L.Wr.R.O.	9	8	1. 23.3.60	12	1. Not yet recommended 2. Not yet recommended 3. Not yet recommended
P.O.Wr.S.B.	Nil	1	—	Nil	—
L.Wr.S.B.A.	Nil	3	—	Nil	—
P.O.Wr.Wtr.(G.D.) or (P) ..	Nil	1	—	2	—
L.Wr.Wtr.(G.D.) or (P) ..	3	1	1. 31.12.59	1	1. Not yet recommended 2. Not yet recommended
L.Wr.Wtr.(ST)..	1	1	1. 31.12.59	1	1. Pridmore, J. P.
P.O.Wr.S.(S) or (V)	Nil	Nil	—	Nil	—
L.Wr.S.A.(S) or (V)	Nil	Nil	1. 30.6.59	2	1. Not yet recommended
P.O.Wr.Ck.(S)	Nil	Nil	—	Nil	—
L.Wr.Ck.(S)	2	Nil	1. 15.2.60	Nil	1. Not yet recommended
C.Wr.Std.(G)	Nil	1	—	Nil	—
P.O.Wr.Std.(G)	Nil	1	—	Nil	—
L.Wr.Std.(G)	3	Nil	1. 31.12.58 2. 31.12.59	3	1. Not yet recommended 2. Rose, E.
C.Wr.Reg.	Nil	2	—	Nil	—
P.O.Wr.Reg.	Nil	2	—	1	—
P.O.Wr.R.P.	Nil	1	—	Nil	—
L.Wr.R.P.	1	Nil	1. 31.12.59	2	1. Gulson, J. A.
C.Wr.M.T.D.	Nil	1	—	Nil	—
P.O.Wr.M.T.D.	Nil	3	—	Nil	—
L.Wr.M.T.D.	8	Nil	1. 7.9.58 2. 12.11.58	4	1. Not yet recommended 2. Not yet recommended

APPENDIX B.

LIST OF RATINGS ADVANCED DURING THE LAST SIX MONTHS.

Name.	O.N.
Chief Petty Officer.	
Clark, E. A. F.	R32376
Forsyth, E. G.	R28801
Jessop, K. E.	R29702
Heaney, A.	R38551
Holloway, J. A.	R40025
Cowan, T. M.	R29078
Bilbe, T. J.	R35461
Petty Officer.	
Lind, V. C.	R33217
Ross, N. A.	R47727
Gilchrist, J. J.	R49435
Dollar, J. F. E.	R36395
Lankford, A. W.	R31549
Hannan, R. J.	R48301
King, J. H.	R48287
Stark, A. E.	R54630
Leading Seaman.	
Reynolds, K. W.	R51106
Jamison, J. Z.	R53300
Barnes, R. J.	R52443
Davis, A. R.	R52082
Matthew, M. T.	R52628
Beaverson, E. G.	R51020
Spaulding, B. T. E.	R44031
Dixon, J. C.	R51775
Campbell, J. F.	R52074
Wheeler, P. M. S.	R47663
Golotta, J. D.	R50039
Wilkie, G. M.	R52348
Robinson, P. A.	R52503
Rigby, T. N.	R52805
Gregson, K. A.	R51186
Asher, F. K.	R51110
Jennings, G. P. J.	R46542
Gilligan, F. D.	R37376
Ellis, B. D.	R51814
Moore, R. J.	R50081
Holmes, J. R.	R49904
Wright, J. D.	R52254
Spong, L. G.	R52571
Craven, N. J.	R50641
O'Hara, F.	R41610
Donne, R. A.	R37368
Jackson, W. J.	R50699
Ogden, A. J.	R52319
Leading Seaman—*continued.*	
Smith, R. M.	R52642
Hatter, J. A.	R52029
Smith, G. H. H.	R52508
Doherty, J.	R36912
Hesse, I. C. A.	R52692
Sheehan, G. M.	R50535
Coridas, R. W.	R51267
Squire, J.	R51283
Wyatt, G. R.	R50676
Gramberg, H. W.	R52189
McLaren, R. T.	R52783
Matthews, L. E.	R52787
Duff, G. C.	R52085
Andrews, G. K.	R51410
Communication Yeoman.	
Cullen, K. V.	R36425
Leading Tactical Communication Operator.	
McCarthy, C. R.	R50264
Hall, D. L.	R52763
Gallagher, M. J.	R51094
Chief Radio Communication Supervisor.	
Tuckwell, R. C.	R30279
Radio Communication Supervisor.	
Brindley, D. J.	R44404
Sivyer, G. H.	R37204
Simpson, L.	R41675
Linning, G.	R50356
Symons, H. G.	R49863
Toohey, T. E.	R49864
Leading Radio Communication Operator.	
Cooper, J. W.	R50553
Moonie, P.	R50507
Coomber, K. G.	R52533
Miller, M. E.	R50783
Jones, G. H.	R44260
Radio Supervisor (Special).	
Shaw, E. J.	R37199
Kearney, D. A.	R49518

APPENDIX B—*continued.*

Name.	O.N.
Leading Radio Operator (Special).	
Whyte, M. R.	R51510
Griggs, J. R.	R52473
Frost, R. G.	R52656
Chief Engine Room Artificer.	
Osborne. J. T.	R38449
Woolcott, W. E.	R32445
Anderson, D. G.	R37239
Pollard, C.	R37654
Weir-Smith, R.	R37836
Moore, A. R.	R37551
Gray, E. C.	R29167
Peverell, W. E.	R47941
Chief Engineering Mechanic.	
Minns, F. T.	R50784
Heron, J. M.	R35016
Rosser, N. D.	R30815
Petty Officer Engineering Mechanic.	
Wilks, S. C.	R30294
Smith, J.	R27690
Clarke, R. G.	R38137
Kinkade, J. W.	R36938
Harrison, R. H.	R36571
MacDonald, A. W.	R32872
Williams, D. R.	R56769
Birleson, H. J.	R33140
Keane, P. E.	R28274
Kneale, M.	R46403
Coleman, K. P.	R37364
Leading Engineering Mechanic.	
Murley, N. G.	R36596
Young, C.	R36982
Jarvis, N. H.	R37799
Kennedy, A. G.	R50829
Hews, G.	R52524
Gordon, B. W.	R52388
Keane, P. E.	R28274
Boyer, J. H.	R28486
Moore, D. G.	R52113
Bullen, J. B.	R52371
Butler, K. J.	R50723
Leading Engineering Mechanic—*continued.*	
Aked, J.	R52259
Clark, J. S.	R44630
Landy, K. M.	R52212
Elliott, D. P.	R52383
Jahnsen, B. J.	R51730
Gilbert, J. E.	R51845
Rowe, E. P.	R52122
Baxter, R. J.	R51097
Reading, J.	R47653
Erwin, G. W.	R51204
Lamont, R. J.	R51818
Briggs, J. C.	R52162
Farley, N.	R51487
Viney, L. R.	R51409
Tritton, M. W.	R50470
Russo, F.	R51456
Thomas, A. E.	R51304
Edwards, R. H.	R39881
Dodson, C. M.	R36276
Cowland, C. W.	R50485
Tait, A. M.	R44554
Frimston, F. W.	R41737
Armitt, H. G.	R52260
Dowsett, A. D. McG.	R52178
Hill, R. W.	R52297
McKenzie, S.	R39213
Luckman, A. P.	R50711
Armstrong, E. L.	R52066
Telford, J. M.	R52022
McLaren, J. H.	R51490
O'Neill, K. F.	R46744
Atwell, L. R.	R50501
McLean, R. G.	R38995
Laker, J. A.	R52060
Nicholls, A.	R37722
Chief Painter.	
Nuttall, G.	R41621
Chief Naval Shipwright.	
Maclure, M. O.	R36468
Phillips, R. C.	R45870
Chief Electrical Artificer.	
Cross, G. F.	R36424

APPENDIX B—*continued.*

Name.	O.N.
Petty Officer Electrician (P).	
Hooten, D. W. R.	R36787
Jolly, G. A.	R29228
Howlett, R. J.	R48278
Mills, J. T.	R47143
Dredge, C. A.	R23014
Leading Electrical Mechanic (P).	
Owen, J. E.	R53330
Blad, H. W.	R53258
Williams, G. B.	R53064
Thurkle, D. S.	R46760
Peters, G. J.	R53128
Andrews, T. J.	R53592
Leading Electrical Mechanic (E).	
Watson, R. B.	R53369
Bellamy, W.	R52041
Kirkland, D. G.	R50506
Smith, N. V.	R53744
Stephens, D.	R52342
Burn, R. A.	R53261
Carroll, G. J.	R53599
Kendall, C. J.	R51681
Coustley, J. L.	R52745
Heron, D. C.	R53621
White, B.	R53753
Leading Radio Electrical Mechanic.	
Paul, B. F.	R53030
Griffioen, P. W. M.	R53288
Davis, R. F.	R53275
Varris, F. J.	R53366
Lincoln, G. J.	R53197
Greig, R. J.	R53670
Brimson, S. A.	R52000
McKay, L. I.	R52821
Hedley, B.	R52873
Rowell, P. A.	R52504
Stone, R. C.	R53053
McKenna, K. D.	R52491
Petty Officer Airman Fitter (E).	
McPherson, F. G.	R37961
Leading Airman Mechanic (E).	
Cowgill, N.	R51476
Green, S. R. G.	R51783
Butler, B. J.	R54199
Brown, D. L.	R52457
Greig, D. J.	R51388
Galbraith, L. R.	R52685
Adams, K. R.	R51718
Tuckfield, T. G.	R51715
Day, J. G.	R38488
Leading Airman Mechanic (O).	
McCaskill, D. J.	R52490
Lewis, D. M.	R47084
Bennett, W. C.	R41715
McKenzie, D.	R52492
Johnson, R.	R52207
Pavier, J. S.	R52706
O'Donnell, L. H.	R52726
Chief Airman (A.H.).	
Davis, R. L.	R28185
Cunneen, J. M.	R28168
Petty Officer Airman (A.H.).	
Cotterill, R. S.	R45343
Tite, T. H.	R36359
Mickan, L. W.	R37482
McGuire, T.	R41732
Leading Airman (A.H.).	
Whomes, C. L.	R50872
Jenkins, H. C. O.	R50275
McDonald, L. J.	R50547
Jenkins, A. N.	R51369
Haywood, J. D.	R51926
Petty Officer Airman (Met.).	
McMahon, N. P.	R47095
Watts, H. K.	R49890

APPENDIX B—*continued.*

Name.	O.N.
Leading Airman (Met.).	
Ware, W. R.	R51285
Downing, B. G.	R51777
Petty Officer Airman (Phot.).	
Crisp, S. T.	R47681
Leading Airman (Phot.).	
Hughes, K. C.	R36574
Leading Electrical Mechanic (Air.).	
Russell, D. A.	R51593
Oakley, T. G. F.	R52899
Collins, R. H.	R52378
Petty Officer Radio Electrician (Air).	
Lamb, E.	R41550
Dundas, E. J.	R50504
Hume, S. J.	R49130
Leading Radio Electrical Mechanic (Air).	
Larder, L. R.	R53307
Wade, J. E.	R51867
Sick Berth Chief Petty Officer.	
Hay, D.	R34077
Pope, W. B.	R25158
Nash, J. B.	R31919
Sick Berth Petty Officer.	
Turner, J.	R41664
Leading Sick Berth Attendant.	
Boyd, F. J.	R51721
Leading Dental Assistant.	
Aitken, W. J.	R49535
Chief Petty Officer Writer.	
Cummins, J. G.	R36548
Bryce, R. W.	R37095
Campbell, C.	R35271
Carroll, L. H.	R35825
Petty Officer Writer.	
Sly, R. M.	R38600
Crawford, T. C.	R47054
Bice, J. B.	R49897
Leading Writer.	
Nash, R. J.	R51824
Tilney, G. R.	R52243
Hovey, D. R.	R51704
Fowler, C. W. S.	R50882
Trott, W. J. H.	R51956
Matthews, C. J.	R51987
Blain, J. C.	R51696
Rickard, M. A.	R51795
Fauchon, T. A.	R52864
Sinden, G. H.	R51883
Leading Stores Assistant (S).	
Kilner, K. W.	R52777
Boller, K. E.	R52452
Lingard, P.	R50666
Stores Petty Officer (V).	
Drury, J. L.	R38146
Towers-Hammond, P.	R28074
Holton, N. C.	R47630
Jones, A. C.	R37157
Bolger, B. L.	R39110
Leading Stores Assistant (V).	
McFadyen, R. M. A.	R51451
Bevans, J. J.	R44492
Chief Petty Officer Cook (S).	
Armstrong, R. E.	R35540

APPENDIX B – *continued.*

Name.	*O.N.*
Petty Officer Cook (S).	
Humphris, L. T.	R35991
Leading Cook (S).	
Rushton, E. D.	R49725
Montgomery, R. H.	R51322
Harris, M. N.	R32977
Fenton, L.	R51982
Ferris, G.	R51583
Willis, E. E.	R51228
McClelland, K. F.	R47435
McMahon, K. E.	R51275
Harris, J. L.	R51817
Campbell, J.	R52960
Bernhagen, H. J.	R51913
Cashion, D. K.	R51892
Chief Petty Officer Cook (O).	
Bury, L. W.	R33436
Petty Officer Cook (O).	
Darroch, J. R.	R37942
Leading Cook (O).	
Sugar, R. K.	R51358
Petty, R. G.	R52227
Beasley, N. F.	R51937
Goddard, E. W. C.	R51367
Clenton, T.	R52532
Tate, J. A.	R52664
Chief Petty Officer Steward.	
Cox, E. A.	R25481
Leading Steward.	
Hewat, R.C.A.	R47205
Uppington, R. J.	R51957
Ferguson, B.	R51235
Jeffreys, R. M.	R51929
Sams, E. R.	R49502
Erwich, J. G. C.	R52539
Oliver, L. E.	R52500
Leading Steward—*continued.*	
Skinner, R. J.	R52570
Whitby, K. R.	R52665
Curtis, R. J.	R52603
Dick, T. J.	R52751
Master-at-Arms.	
McLaine, K. H.	R27592
Regulating Petty Officer.	
Terry, B. D.	R35913
Leading Musician.	
Foale, K. J.	R50755
Parkyn, A. S.	R50376
Lowry, D. L.	R41651
Toovey, D. R.	R50562
W.R.A.N.S.	
Leading Wran Radio Communication Operator.	
Field, D. E.	R84831
McKnight, M. A.	R84844
Scarlett, M. L.	R84859
Liversidge, B. M.	R84753
Boundy, T.	R84823
Cottier, M. J.	R84772
Chalmers, M. C.	R84873
Howe, L. M.	R84802
Fry, R.	R84705
Eaton, D.	R84902
Primrose, B.	R84912
Lowe, L. F.	R84840
Petty Officer Wran Writer (G.D.).	
Wilson, M. A.	R85015
Petty Officer Wran Writer (P).	
Rimmington, S. V.	R84651

APPENDIX B—*continued.*

Name.	*O.N.*
Leading Wran Writer (P).	
Fox, P.	R84833
Leading Wran Writer (S.T.).	
Hall, L. M.	R84880
Leading Wran Stores Assistant (S).	
Holmes, R.	R84801
Leading Wran Stores Assistant (V).	
Hayman, G. M.	R84709
Leading Wran Steward (G).	
Evans, J.	R84829
Whyborn, B.	R84765
Walsh, C. J.	R84863
Petty Officer Wran Regulating.	
Freeland, A. R. K.	R84748
Leading Wran Radar Plot.	
Rattray, G.	R84886
Brown, S. D.	R84872
Leading Wran Motor Transport Driver.	
White, S.	R84764
Street, L. A.	R84892
Dreske, K. S. M.	R84877
Thurley, W. P.	R84862

(DDM 316/4/18.)

(*Navy Order* 407 *of* 1960.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
5th December, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

9343/60.

UNCLASSIFIED.

989.—Naval Public Relations.

This order consolidates instructions regarding Public Relations in the R.A.N. It is divided as follows—

Navy Publicity Organization.

It is important that the work and activities of the Royal Australian Navy should receive publicity, and that the public should appreciate and understand the navy's role.

2. The Naval Public Relations Section exists at Navy Office to organize press facilities and exploit all publicity opportunities, whether for press, radio, television or any other media. To keep this section fully informed, captains of establishments and each ship in commission are to detail an officer to carry out the duties of Press Liaison Officer. These officers have an important role if naval matters are to receive their share of favorable publicity and the goodwill of the press is to be preserved. The Naval Board must be informed as soon as possible of any incident or development that might interest news organizations, because if such information is left to follow the usual channels it will almost certainly arrive too late for exploitation.

3. The duties of press liaison officers are—

(*a*) To supply the Naval Public Relations Section with material suitable for the exploitation of all avenues of publicity.

(*b*) To guide and assist members of the press when on board.

(*c*) To warn newsmen against the disclosure of any classified information which may inadvertently be disclosed to them.

4. There should be close liaison between the Naval Public Relations Section at Navy Office and the officers in ships and establishments responsible for press duties.

5. Announcements and statements to the press are normally made by the Minister for the Navy, but unimportant unclassified items of purely local interest (for all media) may be released at the discretion of the administrative authority concerned. (*See also* paragraphs 27–33.)

6. At a port of call ship's captains may authorize the issue of an item of purely local interest (for all media) without reference to their administrative authority if any delay would detract from the value of the local item. Items (unimportant) of immediate local value, but which may have scope for national exploitation, should be signalled simultaneously to the Naval Board.

7. Requests from reputable press organizations for their members to embark for cruises are to be given sympathetic consideration. Approval is to be obtained as follows—

(*a*) *Short Cruises when Overnight Accommodation is Not Required.*—To be referred to the operational authority for approval.

(*b*) *Cruises on the Australia Station when Overnight Accommodation is Required.*—Naval Board to be advised of proposed arrangements.

(*c*) *Cruises Outside the Australia Station.*—Captains of ships outside the Australia Station in company with their operational authority, are to obtain approval from that authority, who is to inform the Naval Board. Captains of ships operating outside the Australia Station under the control of the Naval Board are to obtain approval from the Naval Board.

If there is insufficient time to obtain approval in accordance with the foregoing instructions, Captains are to use their discretion, informing the operational authority or the Naval Board, as appropriate, of the action taken.

8. As the early receipt of news is a matter of great importance to press organizations, messages written in H.M.A. ships by press representatives, should be authorized and transmitted as soon as possible after they have been submitted for the Captain's approval. Care is to be taken that no classified information, error of fact or harmfully irresponsible statement is passed in a message. As the text of a message should not be altered without the agreement of the author, any such message should be discussed with him and if he refuses to alter it the Captain is authorized to decline to send it. No other message should be rejected even though it may contain information or comment which might be unfavourable to the Navy.

Photographic Publicity.

9. Every opportunity should be taken to obtain photographs suitable for publication in newspapers and magazines and for use on television.

10. Before taking publicity photographs it is important to consider the target for which they are aimed. There are three major categories of pictures for Public Relations—

(*a*) The news picture;

(*b*) The timeless general interest picture;

(*c*) The " home-town " picture.

11. The most limited field is for the news picture, because in most circumstances this is useless unless it can be published while the subject is still news. The second category, timeless general interest, is the picture that in itself tells a story and is worth publishing days or even weeks after the event, simply because of its general interest and appeal.

12. The " home-town " photograph is a valuable line of publicity. A " home-town " picture does not necessarily have to tell a story, but it should show clearly the person or persons to be featured, and in an interesting setting. The Press Liaison

Officer with photographic facilities should endeavour to send back to Canberra a steady flow of " home-town " material, even when there is nothing else available.

13. Photographs should be despatched to the Naval Board (attention CNPR). There should be fifteen prints of every worthwhile news and general interest picture for national distribution while " home-town " prints should be restricted to the number of local newspapers involved.

14. All photographs must be accompanied by full details from which captions can be prepared, and people and/or objects in the pictures must be clearly identified. Appropriate personal details (*see* paragraphs 16–19) should accompany " home-town " pictures.

15. Photographs intended specifically for television should be matt finish instead of glossy, and preferably be 12 x 9 inches. The Naval Public Relations Section will normally request pictures specially required for TV. The only regular requirement would be for press packs.

" Home-town " Publicity.

16. While Press Liaison Officers should be alert for activities that will be of national interest, they should not overlook the importance of smaller items of interest to local " home-town " newspapers. Personal stories about officers and ratings can make very valuable local publicity. With any " home-town " material, the following basic facts are essential—

(*a*) full name and rating of personality featured;

(*b*) identification details of his family in the area where the story is to be published (i.e., " son of Mr. and Mrs. T. J. Jones ");

(*c*) full address of family (street number and name). If his parents live in his former " home-town " and his own family lives elsewhere, his wife's address should also be given so that the story can be offered to both areas.

(*d*) association with some particular area (e.g., went to school there, &c.).

17. If known, the name of the " home-town " newspaper should also be indicated.

18. Training establishments offer particular scope for this type of publicity. There are opportunities for personal items when people start training and graduate.

19. Stories of " home-town " interest should be despatched to ACNB (attention CNPR) by mail unless they rely on immediacy of publication to be of value. In the latter case the details should be sent by signal in the same way as a normal news release.

Television Publicity.

20. Full advantage should be taken of television as a medium for naval publicity. It must be ensured, however, that the material to be televised—

(*a*) does not contravene security regulations;

(*b*) does not involve Government or Naval Board policy;

(*c*) is not introduced as being " by courtesy " of any commercial undertaking.

21. Also, administrative authorities using TV for publicity under paragraphs 5 and 6 (items of purely local interest) should ensure that the material does not contain information that should first be announced by the Minister. Otherwise, the administrative authority concerned should use TV for local publicity to the same extent as press and radio. TV newscameramen should be invited to cover local events, and the TV stations should be provided with any material that might publicise forthcoming

local naval activities. TV specialist departments (youth programmes; womens' interest; education; features; programme continuity) should also be kept in mind for possible exploitation of local naval publicity.

22. Apart from matters of purely local interest, television publicity should be arranged through the Public Relations Section at Navy Office. This section will arrange programmes on subjects that are of Australia-wide interest, and suggestions for such national TV publicity should be sent to the Naval Board.

23. Film of naval activities shot by naval photographers offers widest scope for exploiting national TV publicity. Such film should be shot whenever the subject is likely to appeal to TV (news, newsreel and documentary programmes). Film coverage should, whenever possible, be planned in conjunction with Navy Office. Guidance can be obtained from personnel with TV film production experience and advance planning will permit prior contact with television channels to assess their interest in subjects being filmed, thus speeding distribution.

24. The following procedure has been instituted to achieve the widest possible distribution of film—

(*a*) All film is to be despatched to FOICEA, attention Public Relations Officer, Naval Board being informed. (The cinefilm processing facilities are in Sydney.)

(*b*) PRO Sydney is to view the film and then report to Navy Office (CNPR). The scale of distribution will then be determined and arrangements made accordingly.

Press Packs.

25. Press Liaison Officers should ensure that their ship or establishment has current " press packs " for distribution to visiting newsmen. Such packs, containing facts and figures about the ship or establishment together with appropriate illustrations, are of considerable importance. They are not only in themselves an appreciated public relations gesture, but the provision of information in writing ensures accurate reporting.

26. Each pressman visiting a ship or shore establishment should receive a press pack containing the following basic material—

(*a*) Pamphlet giving relevant details about the ship/establishment itself;

(*b*) Notes on the current cruise/open day and associated activities;

(*c*) Story suggestions for press, radio and TV. (This applies particularly to ships at a port of call; the suggestions could range from local people in the crew to human interest stories associated with the visit or a crew member with an unusual hobby.)

(*d*) Programme of activities while in port/at establishment.

(*e*) Brief biography of the captain.

(*f*) Photograph of the ship/establishment and the captain. (TV representatives should preferably be given press packs containing matt finish instead of glossy pictures.)

Reports of Occurrences Liable to Parliamentary or Press Comment.

27. The Naval Board is to be given the earliest possible official information of any serious accident or important occurrence which involves H.M.A. ships or members of the Navy and which may be liable to form the subject of comment in parliament or in the press (including newspaper, radio, television or any other agency of publicity). It is most important that the Naval Board be in a position to confirm or correct the

press reports, to explain the naval action taken, and to ensure as far as possible that the names of any casualties do not appear in the press before official notification has been received by their next-of-kin.

28. Reports are always to be made of—

(*a*) Considerable damage to or loss of government property.

(*b*) A collision or grounding involving any of H.M.A. ships.

(*c*) Disciplinary matters which are likely to attract public attention.

(*d*) The despatch of any of H.M.A. ships or members of the Navy to render assistance to any civil authority.

(*e*) A disturbance on the high seas in a merchant vessel with a request to H.M.A. ships for assistance.

For instructions for reporting aircraft accidents *see* Instructions for the Fleet Air Arm.

29. The Captain is to make his report by " Priority " signal, classified if necessary, addressed to the Naval Board with his administrative authority as an information addressee, quoting this order.

30. When it is impossible for a full account of any occurrence to be rendered before the facts have been thoroughly examined, it is most important that even an incomplete account be signalled at the earliest moment, followed in due course by any detailed report considered necessary.

31. Reports of accidents should state whether or not anyone was injured and, if so, whether the provisions of R.I. article 1623 apply. On the forwarding of a subsequent detailed report, *see* R.I. article 1623. Should the accident involve serious injury or death, notification to next-of-kin and the Naval Board should be made as directed in R.I. Chapter 16, Section 1, in addition to the signal reporting the accident.

32. If members of the Press witness or learn of an accident or other unusual occurrence, the Captain may, after consulting his administrative authority if possible, give them sufficient factual details to prevent the publication of incorrect or distorted reports. He should tell them that if they require any other information they should seek it from the Minister for the Navy. In all other cases no information is to be given to the press.

33. Operational and administrative authorities and Captains should bear in mind, and do what they can to allay the natural anxiety of wives and other next-of-kin and the curiosity of the press. For example, if a ship is unexpectedly despatched or kept at sea, operative authorities, administrative authorities or Captains should, if the press or relatives inquire, give some simple explanation of what has happened and, when possible, the expected time of return to harbour ensuring that no security information is divulged. Similar action is to be taken in the event of accidents or incidents, in ships or shore establishments. Care should be taken in the event of death or injuries that names are not revealed until next-of-kin has been informed.

Statements Dealing with Public Policy, Naval Matters, &c.

34. Naval Board permission must always be obtained before naval personnel make public statements relating to the Navy, or make comments of a controversial nature affecting other departments of the public service or relating to matters of public policy. This applies whether the statement, opinion or information is for publication in the press or elsewhere, directly or indirectly, or by broadcasting, televising or public speech. No fee may be accepted without the prior approval of the Naval Board.

35. Off the Australia Station, approval for a local broadcast should be obtained from the Naval Board if time permits or, if this is not possible, from the British naval Commander-in-Chief. Approval for the text of the broadcast should be obtained from the Commander-in-Chief.

36. Officers and ratings are not to attempt to prejudice questions under investigation by the publication, anonymously or otherwise, of their opinions, and they are not to attempt to raise a discussion in public about orders, regulations or instructions issued by their superiors.

37. Officers and ratings are at all times to use discretion in speaking or writing privately of naval matters, particularly those of public policy. They will be held responsible for all statements in private correspondence and conversations which may subsequently be published in the press.

38. Permission will not generally be given for the publication of books of memoirs or reminiscences of their naval careers by authors who are still serving. Authors are advised to consult the Naval Board before embarking on the preparation of such accounts with a view to publication.

39. Matter from individuals for publication must be submitted to the Naval Board through the usual Service channels in duplicate and typescript. Captains are not to amend drafts of matter for publication nor are they to refuse to forward them for Naval Board consideration. They are to scrutinize drafts and forward any remarks they may wish to make, taking care that attention is invited to any undesirable reference to local events or personalities, the significance of which would not necessarily be apparent to the Naval Board. To avoid delay, Captains may at their discretion forward the draft and their remarks direct to the Naval Board, provided the draft does not appear objectionable or deal with current local matters or with any question with which the administrative authority is likely to be concerned. Copies of articles are not to be sent to prospective publishers before the Naval Board approves publication.

40. Navy Orders 431 432, and 433 of 1959 and 208 and 729 of 1960 are hereby cancelled.

(HNB 4142/1/101.)

(*Navy Orders* 431, 432 *and* 433 *of* 1959 *and* 208 *and* 729 *of* 1960.)

By Authority: A. J. Arthur, Commonwealth Government Printer Canberra.

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C.N.O.'s 990-1001/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
6th December, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

9344/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED. Cancelled N.O. 745/62

990.—Home Ports for H.M.A. Ships for Electoral Purposes.

With reference to R.I. Article 2521, the following revised list shows the home ports to which R.A.N. ships and H.M.A.S. TARANGAU have been allocated—

Home Port at Melbourne.	*Home Port at Sydney.*
Commonwealth Division—Flinders.	Commonwealth Division — West Sydney.
Electoral Subdivision—Dromana.	Electoral Subdivision—King.
State District—Mornington.	State District—King.
ANZAC.	KIMBLA.
MELBOURNE.	QUEENBOROUGH.
PALUMA.	QUIBERON.
QUICKMATCH.	TARANGAU.
SWAN.	VAMPIRE.
GASCOYNE.	VENDETTA.
BARCOO.	WARREGO.
BANKS.	DIAMANTINA.
YARRA.	PARRAMATTA.
VOYAGER.	BASS.

2. This order will be reprinted for posting on notice boards.

3. Navy Order 752 of 1959 is hereby cancelled.

(HPB 31/1/1.)

(*Navy Order* 752 *of* 1959.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

991.—Instructional Films and Film Strips—E.1105, " High Speed Flight " (Part 3) " Beyond the Speed of Sound "—Distribution.

(*A.F.O.* 2293/1960.)

Copies of the commercially produced instructional film, Serial No. E.1105, " High Speed Flight " (Part 3) entitled " Beyond the Speed of Sound " are being obtained and the initial distribution will be made without demand by the SNSO Sydney on the following scale—

H.M.A. Naval Establishments.	*No. of Copies.*
R.A.N. Air Station, Nowra	1
R.A.N. Film Library, Sydney	1

2. This film, produced by Shell, is the last of a series of three films on high speed flight. It deals with the behaviour of airflow at supersonic speeds, present day design problems and indications of future trends.

3. The film, which is in colour, has a running time of nineteen minutes and is issued on one spool.

(DNAS 519/56/127.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

992.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2532/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service, having reached the age limit—

Propellant lots and sub-lots affected.	*Type.*	*Nature of ammunition, &c., which may be involved.*
RNC 989 ..	SC 061 ..	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1006 ..		
RNC 1127XA ..		
RNC 1130XA ..		
RNC 2836XJ ..		
RNC 3545XL ..		
RNC 3551XL ..		
RNC 3580XL ..		
RNC 1126XA ..	SC 103 ..	Q.F. 5.25-in.; Q.F. 4-in.
RNC 1134XA ..		
RNC 1133XA ..	SC 122 ..	Q.F. 4.7-in.; Q.F. 4.5-in.
RNC 996 ..	SC 140 ..	Q.F. 5.25-in.; Impulse torpedo.
RNC 1123XA ..		
RNC 995 ..	SC 150 ..	Impulse torpedo.
KA 1037 ..	FNHP 022 ..	Q.F. 40/60.
KA 1040 ..		
KA 1044 ..		
KA 1049 ..		
KA 1052 ..		
KA 1056 ..		
SPDN 5727 ..	FNHP 020 ..	Q.F. 40/60.
SPDN 5797 ..		
SPDN 5798 ..		
SPDN 5960 ..	FNHP 022 ..	Q.F. 40/60.
SPDN 5962 ..		

Action to be taken by H.M.A. Ships, &c.	Return to nearest R.A.N.A. Depot as early as practicable; if unable to comply within three months from the date of this order, report specially to Navy Office for instructions. N.M. and E.R. B.R. 862, Article 211 and N.C.R. B.R. 862A, Article 53, paragraphs 6, 7 and 9 refer.
Action to be taken by R.A.N.A. Depots	Separate instructions have been issued.

(DW 729/57/51.)

UNCLASSIFIED.

993.—Alteration and Addition Item—Daring Class Destroyers.

The following alteration and addition item is approved for Daring Class Destroyers—

Class List Item No. 41. *Classification* " *A* ".

Item: " To fit Radar installation Type 978 and remove Radar installation Type 974 ".

References:

(*a*) Navy Order 1122 of 1958.

(*b*) Navy Office letter No. 5200 of 24th February, 1960.

(*c*) FOICEA's message DTG. 200556Z, September, 1960.

(DCNTS 1211/51/124.)

(*Navy Order* 1122 *of* 1958.)

UNCLASSIFIED.

994.—Alteration and Addition Item—H.M.A.S. MELBOURNE.

The following alteration and addition item is approved for H.M.A.S. MELBOURNE—

Class List Item No. 137. *Classification* " *A* ".

Item: " To remove the oxygen producing plant and convert the oxygen charging room 3E2 to a breathing oxygen store ".

References:

(*a*) H.M.A.S. MELBOURNE's proposed A. and A. Item TDL " AX ".

(*b*) F.O.C.A.F. memorandum No. A.F. 1998/6 (2782) dated 29th January, 1959.

(*c*) Navy Office Letter No. 1941 of 18th February, 1960.

Note.—Variation in weight to be reported to Navy Office on completion of item.

(DCNTS 1213/52/1.)

UNCLASSIFIED.

995.—Naval Stores (General) (Class F, Group 1C, Part 2)—Crimping Tool and Dies—Introduction and Allowances.

Although Crimping Tool, Pattern B11C/14837 and Dies, Pattern B11C/14838 have been introduced in the R.N. *vide* A.F.O. 1861/60 it has been decided to introduce the following item, which is a satisfactory substitute, in the R.A.N. for ships fitted with silicone insulated cables (i.e., Frigates Type 12)—

Class/ Group.	*Patt. or Ref. No.*	*Description.*
F1C/2 ..	N.P.	Kits tool No. 3 complete in box for crimping " Breeze " type plugs, pins, sockets, inserts and tag. Cat. No. CZ.50125/5X/3186.

2. The above Tool Kit No. 3 consists of the following—

Cat. No.		*Description.*
CZ50124/5X/3187	..	Boxes, tool, empty.
Z50101/5X/3189	..	Dies, Type " A ".
Z50102/5X/3190	..	Dies, Type " B ".
Z50100/5X/3191	..	Dies, Type " C ".
Z50103/5X/3192	..	Dies, Type " D ".
CZ50088/5X/3188	..	Tools, hand, less dies.

3. The first outfit allowance will be one Tool Kit No. 3 complete for the Electrical Department of each Frigate Type 12.

4. Supply to ships under construction will be arranged by the Storing Yards in the normal manner.

(DNAS 506/71/105.)

996.—This Order will not be Issued.

UNCLASSIFIED.

997.—Naval Stores (General) (Class E, Group 11), Brush, Tapered Wire, Pattern 4320—Introduction.

(*A.F.O.* 1238/1959.)

The following brush has been introduced as an item of Naval Stores under class E, group 11—

Pattern.	*Description.*		*Accounting Classification.*
4320	Brush for butt weld cleaning tapered wire	..	Consumable

2. Trials have shown that this tapered wire brush is more efficient for cleaning out the Vee-preparation used for butt welds of thick plate than Brush Pattern C.5141. The latter will continue to be used on general welding on lighter scantlings.

3. Admiralty has advised that the relevant publications will be amended.

(DNAS 514/56/10.)

Section 4.

DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

UNCLASSIFIED.

998.—Accounting—Victualling Stores.

Audit examinations of Victualling Store Accounts, both in Navy Office and in ships and establishments, disclose numerous errors and discrepancies, indicating that more stringent supervision is required by the responsible officer, and that insufficient care is being taken by persons preparing and maintaining the accounts.

2. The main points noted are—

(*a*) *Provisions Accounts*—

(i) Provisions issued and recorded in the ledger have not been included in form A.S. 462a when forwarded to Navy Office.

(ii) Digits have been transposed, and total quantities issued entered against a different item when transcribed from the ledger to form A.S. 462a.

(iii) The prices of items not included in the Fixed Issuing Price List have not been computed in accordance with C.O.R. Article 420, paragraph 2.

(*b*) *Loan Clothing*—

(i) From the numerous discrepancies in this account, especially Loan Bedding, it is apparent that more supervision is necessary in regard to the internal receipts, issues and entries in form A.S. 101.

(ii) In many instances forms A.S. 101 show items of Loan Clothing and Bedding on issue to persons who have left the ship or establishment. Action is to be taken to ensure that the draft " in " and " out " routine is rigidly adhered to by all concerned.

(iii) The requirements of Navy Order 254 of 1959 have not been fully implemented especially in regard to the ledger action required.

(iv) The method of stowage of bedding items in ships is generally not satisfactory, which makes it difficult to muster stock accurately. It is appreciated that in ships, space for the stowage of bedding presents a major problem. However, if bedding were bundled and stowed in a " unit pile " system, maximum use would be made of the space available and regular musters could be effected with a minimum of difficulty.

(DV 910/51/18.)

(*Navy Order* 254 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

999.—Books—A.B.R. 5013—R.A.N. Motor Transport Instructions.

R.A.N. Motor Transport Instructions have been revised and are in course of distribution to authorities concerned.

2. These instructions are now published in book form as A.B.R. 5013 and supersede all previous instructions.

(DNAS 465/52/288.)

UNCLASSIFIED. Cancelled N-O- 773/62

1000.—Books—Libraries—Central Reference Libraries.

In order to make available to naval personnel a wider range of reference books and textbooks than can be provided in Ships' Libraries, Central Reference Libraries are maintained by the Director, Naval Education Service in H.M.A.S. ALBATROSS, CERBERUS and WATSON. These libraries are under the immediate control of the Senior Instructor Officer of the respective establishments.

2. The Central Reference Libraries contain books covering a wide variety of subjects and are intended for the use of both officers and ratings who desire to improve their technical knowledge, to study subjects which may be of value to them on return to civil life, or to extend their general knowledge. A catalogue is held by all Senior Instructor Officers and Education Officers.

3. Applications to borrow books from a Central Reference Library should be addressed to the Senior Instructor Officer of the establishment in which the library is located. Books will normally be issued singly for short period loans but may also be borrowed in batches or for long periods by arrangement with the Senior Instructor Officer in charge of the library. The officer in charge of the library is to keep a detailed record of all issues and returns. Books should be recalled when the periods for which they have been held by borrowers appear excessive.

4. Officers or ratings serving in the establishment where a Central Reference Library is located may borrow books individually on application to the officer in charge of the library. Such books are to be returned by the borrower before he leaves the establishment in the event of his being appointed or drafted away.

5. Officers or ratings in other ships or establishments must apply for the loan of books through the Instructor Officer (or Education Officer) of their own ship or establishment. The Education Officer will forward a Book Order Form (stocks of which are obtainable from D.N.E.S.) to the library concerned. Books will then be issued from the library to the Instructor Officer (or Education Officer) of the ship or establishment concerned for re-issue on loan to the individual. The Instructor Officer (or Education Officer) will then be responsible to the library for the eventual return of the book and he is to ensure that all Central Library Books are recovered from officers or ratings who are appointed or drafted away from the ship or establishment.

6. A six-monthly muster by title of Central Reference Libraries is to be carried out on or about 30th June and 31st December each year as for Ships' Libraries. An additional muster is to be carried out on change of custody. Books on loan need not be recalled for the purpose of muster but the officer in charge of the library is to obtain a certificate of muster from each Instructor Officer (or Education Officer) to whom books have been issued, covering the books which are on loan at the time of the muster. A standardized Certificate of Muster for this purpose will be supplied to Central Reference Libraries by Director, Naval Education Service.

7. Losses detected either at the muster or at other times are to be dealt with as for losses from Ships' Libraries and are to be covered by forms A.S. 126 approved in each case by the Captain.

8. On each occasion of muster a certificate of muster is to be forwarded, through the Captain to the Director, Naval Education Service in the following form—

H.M.A.S.....

Date.....

CENTRAL REFERENCE LIBRARY—CERTIFICATE OF MUSTER.

The Central Reference Library has been mustered on (*date*).....

* has been found complete.

against the approved catalogue of books and * Forms A.S. 126 are forwarded herewith to cover all losses.

* Delete as necessary.

Signed.....

Senior Instructor Officer.

Approved and forwarded.

Signed.....

Captain.

Date...../...../.....

The Director, Naval Education Service,
Navy Office,
CANBERRA, A.C.T.

9. A list of new books added to the Central Reference Libraries is published every quarter in a Navy Order which is reprinted for posting on notice boards.

10. Navy Order 1069 of 1958 is hereby cancelled.

(DNES 451/51/1.)

(*Navy Order* 1069 *of* 1958.)

Section 6.
ESTABLISHMENTS.

UNCLASSIFIED.

1001.—Accounting for Furniture in Commissioned Establishments.

The procedure to be followed in future, in regard to accounting for furniture in commissioned establishments is set out in the following paragraphs.

2. Furniture is to be taken on charge in the Naval Store ledgers on ledger pages, forms A.S. 153 or A.S. 146 as appropriate, and issued on permanent loan in the same manner as other Naval Stores. (*See* A.B.R. 4, Chapter 12.)

3. Items of Rate Book pattern are to be recorded in the normal manner, a separate ledger page being used for each pattern number.

4. Furniture of a specialized and costly nature, or of historic significance whose identity is required to be retained, e.g., billiard tables, items of furniture in the nature of relics of H.M.A. ships or presentations, is to be recorded under a full and detailed description.

5. Furniture other than that detailed in paragraphs 3 and 4 above is to be grouped for internal accounting purposes under the general descriptions set out in the appendix to this order each description being accounted for on one ledger page.

6. Vouchers for external transactions for items at paragraph 5 above, e.g., supplies from Department of Works, returns to a Naval Store Depot or transfers to other establishments, are, however, to contain full descriptions, sizes, &c., of the items concerned.

7. The above arrangements are to be implemented in the course of the next furniture muster, using forms A.S. 127 to record the amended descriptions, any net discrepancies in quantity being adjusted on Report of Stocktaking, form A.S. 148.

8. Instructions are to be issued that the movement, alteration, &c., of furniture is not to be arranged without the advice or concurrence of the Storekeeping Officer, and that unserviceable items, no matter how badly damaged or worn, are invariably to be returned to the Storekeeping Officer for disposal.

9. The foregoing instructions do not apply to built-in articles which are to continue to be recorded in the appropriate Lists of Equipment, &c.

Appendix.

Furniture—General Descriptions.

Chairs.

Easy, wood.
Easy, tubular steel.
Wood, various, with arms.
Tubular steel, various, with arms.
Wood, various, without arms.
Tubular steel, various, without arms.

Kit Lockers.

Steel, various.
Wood, various.
Flying clothing.

Wardrobes.

Officer's, wood, various.
Rating's, wood, various
Steel, various.

Chest of Drawers and Dressing Chests.

Officer's, wood, various.
Rating's, wood, various.
Steel, various.

Forms and Stools.

Stools, office, wood, various.
Stools, mess, wood, various.
Stools, tubular steel, various.
Forms, wood, various.

Bookcases.

Wood, various.
Steel, various.

Glasses, Looking.

Various.

Settees.

Wood, various.
Tubular steel, various.

Lamps, Table.

Wood, various.
Metal, various.

Boards, Key.

Various.

Appendix—*continued.*

Tables and Desks.

Dining, officer's.
Writing, kneehole, wood.
Writing, kneehole, steel.
Wood, various, not folding.
Tubular steel, various, not folding.
Mess, plastic topped, folding.
Galley, metal topped.

Cupboards.

Wood, various.
Steel, various.

Cabinets.

Card index.
Filing.

Mats and Rugs.

Mats, coir or sisal.
Rugs, woollen, 6 ft. x 3 ft.
Rugs, various.

Beds.

Metal, single.
Wooden ends.
Fixed, double tier.

Bookshelves.

Wood, various.
Steel, various.

Boards, Notice.

Various.

Mattresses.

Rubber.
Inner Spring.
Various.

Shades for Table Lamps.

Various.

Sideboards.

Wood, various.
Steel, various.

Letter, &c., Racks.

Wood, various.
Steel, various.

Bedside Cabinets.

Various.

Work, &c., Benches.

Wood, various.
Steel, various.

(DNAS 501/51/14.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

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FOR OFFICIAL USE ONLY.

C.N.O.'s 1002-1010/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
7th December, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

9504/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

1002.—Combination of Navy and Army Apprentices Schools.

The Navy and Army Apprentices Schools are to be partially integrated and re-located at the R.A.N. Air Station, Nowra.

2. Action is being taken in consultation with the Department of the Army to complete the move to Nowra at the end of 1963 or as soon as possible thereafter.

(Sec. 1605/201/12.)

UNCLASSIFIED.

1003.—Interdepartmental Transfers of Stores without Financial Adjustment.

Financial adjustment is not required in respect of—

(*a*) transfers of surplus stores between Service Departments;

(*b*) transfers of surplus stores between Service and Production Departments, with the exception of raw materials or aids to manufacture of Service requirements;

(*c*) Issues of maps, charts, photographs and Service publications by one Service Department to another.

(DNA 400/51/76.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

1004.—Home Ports.

The following home ports apply for officers and ratings of the Permanent Naval Forces—

Brisbane, Sydney, Melbourne, Adelaide, Fremantle and Hobart.

2. On entry to the Permanent Naval Forces, a member will normally be allocated to the home port of the State from which he is appointed or recruited.

3. Changes of home port require Naval Board approval and applications should clearly state the reasons why the change is desired. Changes of home ports will not be approved unless the next-of-kin of the applicant is actually residing in the State in which the proposed home port is located.

4. Applications to change home port are always to be made immediately an officer or rating becomes eligible to do so. Requests to change appointments or drafts on the ground that application to change home port has been overlooked, will not be considered unless supported by evidence that failure to report the change has been beyond the member's control.

5. A change in home port will not automatically entitle a member to a removal of family, but the new home port will govern his entitlement on subsequent occasions of appointment or draft qualifying the member for removal at Departmental expense.

6. Election of home ports in the case of ex-Royal Navy ratings who intend to apply for free passages to Australia for their dependants may be deferred until necessary arrangements for accommodation have been made.

7. All other ex-Royal Navy ratings are to elect their home ports within three months of arrival in Australia, but should be informed that they may apply to change home port at a later date under the normal rules.

8. Subject to the exigencies of the Service, ex-Royal Navy ratings and Royal Australian Navy ratings who marry abroad will be appropriated to the establishment nearest to the port of disembarkation of dependants, at least one week before their arrival. They will be considered available for draft in the ordinary course one month after the date of disembarkation. Ratings concerned are to be informed accordingly and instructed to report to their Commanding Officer, for transmission to the Naval Board, details of passage arrangements made for their dependants as soon as they are known.

9. Ratings who are serving at sea with home ports of Fremantle, Brisbane, Hobart and Adelaide, may select Sydney or Melbourne as a preference locality for drafting purposes in accordance with Navy Order 229 of 1959.

10. This order will be reprinted for posting on notice boards.

(HPB 301/1/6.)

(*Navy Order* 229 *of* 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED. — Cancelled N.O. 683/62

1005. Shore Wireless Stations—Masts and Towers—Restrictions to be Observed when Carrying out Maintenance.

(*A.F.O.* 1924/1960.)

The following instructions are to be observed by personnel carrying out maintenance duties on masts and towers at R.A.N. Shore Wireless transmitting stations. These precautions cover hazards likely to be caused by the presence of Radio Frequency power in the aerial system, they are additional to, and not a substitute for, any regulations normally observed when working at a high level concerning wind speed, low cloud, proximity of thunderstorms, the use of safety belts, &c.

2. Masts and towers supporting aerial systems associated with high power Low Frequency transmitters.

(*a*) Masts and towers **must not** be climbed without the written permission of the Officer-in-Charge of the Wireless Station.

(*b*) All work requiring the use of temporary stays, bosun's chair, jury rig halyards or other wires not part of the permanent structure may only be undertaken with Radio Frequency power to the associated aerial system switched OFF and the aerial system earthed. Typical of this type of work is replacement, maintenance and greasing of stays and halyards and the inspection of stay insulators.

(*c*) Painting of mast and tower structures may not be undertaken without switching off Radio Frequency power.

(*d*) Obstruction lighting system maintenance, lamp replacement and inspection may only be undertaken when Radio Frequency power is switched off and the associated aerial system is earthed.

(*e*) A warning notice is to be placed in a prominent position at the base of each mast station—

" MASTS MUST NOT BE CLIMBED WITHOUT PERMISSION OF THE OFFICER-IN-CHARGE."

" C.N.O. 1005/60."

3. Masts and towers supporting High Frequency aerial systems associated with High Frequency transmitters of 50 watts and not exceeding 30 kW.

(*a*) Masts and towers **must not** be climbed without the written permission of the Officer-in-Charge of the Wireless Station.

(*b*) All work requiring the use of temporary stays, bosun's chair, halyards or other wire not part of the permanent structure may only be undertaken with Radio Frequency power switched OFF and the aerial system earthed.

(*c*) Painting of mast and tower structures may be carried out without switching off the Radio Frequency power to the associated aerial system, except when access for painting involves the use of temporary halyards for painters' platforms and the like, when paragraph 3 (*b*) above applies.

(*d*) Maintenance of obstruction light fittings, lamp replacement and inspection may be undertaken without restriction except when temporary halyards are necessary for access, when paragraph 3 (*b*) above applies.

4. A glass-fronted key-box is to be provided at each Transmitter Station, suitably marked with a position for Aerial Interlock Keys for each aerial. Before permission is given to work on a mast or tower for which the nature of the work requires the Radio Frequency power to be switched off, the appropriate aerial interlock keys (which must be in position in the aerial exchange to enable the E.H.T. to be switched on) are to be removed and deposited in the key-box. The key-box is then to be locked and its key held by the senior member of the maintenance or painting party all the time work is being carried out on the mast(s) or tower(s).

5. The Officer-in-Charge of the Wireless Station is to ensure that all personnel are clear of a mast or tower and all temporary rigging of any kind removed or made secure before authorizing re-connection of Radio Frequency power to the associated aerial system.

6. Station Standing Orders are to include a notice to all station staff that masts are not to be climbed other than as authorized by the Officer-in-Charge, and drawing attention to this order.

7. It should be noted that masts supporting aerial systems listed below do not constitute a hazard—

(*a*) Reception in any frequency band.

(*b*) Those associated with V/UHF transmitters whose power output does not exceed 50 watts.

(*c*) Any other transmitters whose output does not exceed 50 watts.

8. The restrictions outlined in paragraphs 2 and 3 above, and the relaxations outlined in paragraph 6 only apply to aerial systems which have been approved. *Ad hoc* aerials which have been attached to masts or towers by other authorities must be removed whilst maintenance is being carried out.

9. Arrangements are being made for aerial exchanges at Darwin Naval Transmitting Station to be modified to include aerial interlock key operated safety switches.

(DEE 1424/1/11.)

UNCLASSIFIED.

1006.—Machinery—Turbines—Main Turbine—Continuous Turning by Turning Gear.

(*A.F.O.* 2676/1960.)

There has been recent evidence to suggest that for the " older type " of main steam turbine where long bearings are fitted (L/D ratio approximately equal to 1), damage to the bearing surface is likely to occur if they are subjected to prolonged continuous turning by turning gear. Such a practice may have been considered desirable because of its known advantage in minimizing rotor distortion when " warming through " or " shutting down ". However, continuous turning by turning gear is only to be used in those ships where it is specifically authorized by the operating instructions for the class, i.e., at present—

Daring Class	B.R. 1996.
Type 12 Frigates	T.P.S./21.

2. In steam turbine driven ships where specific instructions have not been issued, the procedure outlined in B.R. 16—Engineering Manual, Article 122, is to be followed on all occasions when circumstances require precautions to be taken against rotor distortion, e.g., when warming through partially cooled turbines.

(DME 1102/51/11.)

UNCLASSIFIED.

1007.—Ammunition—Cartridges, Q.F. 40/60 H.E., of Propellant Lot K.A. 1141—Removal of Restriction.

(*A.F.O.* 2530/1960.)

Ammunition item ..	Cartridges, Q.F. 40/60 H.E. Tracer, of propellant lot K.A. 1141.
Purpose	Restriction in use and supply imposed by Navy Order 158 of 1960 is hereby removed.
Action by R.A.N. Armament Depots	All 40/60 H.E. rounds of propellant Lot K.A. 1141 held on restricted charge *vide* Navy Order 158 of 1960 to be merged into unrestricted stock.
Remarks	Investigations into the prematures that occurred with Cartridges, Q.F., 40/60, H.E., of propellant lot RNP 1634 are still proceeding and further instructions *re* final disposal of this lot will be issued in due course.

(DW 726/66/41.)

(*Navy Order* 158 *of* 1960.)

UNCLASSIFIED.

1008.—Fire Fighting Equipment—Allowances for H.M.A. Ships.

Navy Order 528 of 1960 is to be amended as follows—

Page 16—

Against Breeching piece No. 2 R.A.N.(F) to 2—No. 2 R.A.N. (M), *amend* column 9 to read " bvg ".

Against Breeching piece No. 3 R.A.N.(F) to 2—No. 2 R.A.N.(M) amend column 9 to read " fh ".

Page 17—*Notes*—

add " g—Two additional to allow extra hoses to be run as required during an emergency.

h—Two additional as spares."

(DNAS 1624/2/5.)

(*Navy Order* 528 *of* 1960.)

UNCLASSIFIED.

1009.—Naval Stores (Air) R.A.F. Vocabulary—Transfer of Section 27BM to Section 27Q (30,000 Series) and Introduction of Joint Service Catalogue Nos. under Section 28FP, S and W.

(*A.F.O.* 2544/1960.)

Air Stores at present dealt with under Vocabulary Sections 27BM will in future be dealt with under Vocabulary Section 27Q and on transfer will be re-numbered in a 30,000 series, e.g.—

Old Ref. No.	*New Ref. No.*
Section 27BM	Section 27Q
18	30018
115	30115
2023	32023

2. The undermentioned items dealt with under Vocabulary Sections 28FP, 28S and 28W will in future be dealt with under the Joint Service Catalogue Numbers shown—

Old Ref. No.	*New Ref. No.*
Section 28FP	Section 28FP
466	100–4891
551	100–4892
592	100–4893
Section 28S	Section 28S
2078	999–2520
2084	999–2519
2115	999–2526
2116	999–2527
2132	999–2523
2760	941–9194
2827	999–2521
2828	999–2531
2857	999–2525
2863	999–2522

Old Ref. No.	*New Ref. No.*
2868	999–2533
3501	999–2524
14545	999–2532
Section 28W	Section 28W
6718	944–0351
11040	948–0019
11043	941–8839
16817	943–7757

3. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with Article 1812(*b*) or (*g*) as appropriate of A.B.R. 4 (Naval Storekeeping Manual).

(DNAS 601/52/6.)

UNCLASSIFIED.

1010.—Pulling, Sailing and Power Boats for H.M.A. Ships—Provision of Slings.

(*A.F.O.* 2369/1960.)

When demands for pulling and sailing boats are forwarded to storing yards, or when requests are made for power boats, it is important to ensure that the slinging arrangements on board are suitable for the boats demanded.

2. All demands or requests for boats should, therefore, be endorsed with the answers to the questions given below, quoting this order. The questions need not be repeated on the demands.

(*a*) Whether boat slings are required and, if so, the particular type required.

(*b*) If bridle slings (for lifting by crane or derrick)—

(i) The maximum height of the main ring above the underside of the keel.

(ii) Size of the hook.

(iii) The working load of the lifting appliance (shown on the test plate).

(*c*) If two-point davit lift—

(i) Overhang of davits.

(ii) Spread of davits at head and keel.

(iii) Working load of davits (shown on test plate).

(iv) Whether slings are required complete with disengaging gear.

(DNC 3211/1/216.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar

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FOR OFFICIAL USE ONLY.

C.N.O.'s 1011-1029/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
12th December, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

9831/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

RESTRICTED.

1011.—Replenishment at Sea—Maximum Approved Facilities in H.M.A. Ships.

The appendix to this order shows the maximum approved facilities for replenishment at sea for various classes of H.M.A. ships.

2. Where necessary, Commanding Officers of ships concerned are to raise forms A.S. 1182 for an alteration and addition item worded as follows and quoting this order as authority—

" To be fitted with the maximum approved facilities for replenishment at sea given in the appendix to the order quoted."

3. Replenishment drills are to conform to A.T.P. 16, " Replenishment at Sea ".

4. Destroyers, frigates and smaller ships are to receive fuel by the jackstay method only when it is not possible to receive by the derrick or astern methods, or for trial purposes.

5. Owing to the large jackstay angles subtended and since their strong points are tested only for reception at right angles to the middle line of ship, small ships are on no account to receive more than one heavy jackstay at a time for fuelling or storing.

6. Navy Order 1099 of 1958 is hereby cancelled.

APPENDIX.

REPLENISHMENT AT SEA.

Classification.	*Maximum Approved Facilities—Supplying.*	*Maximum Approved Facilities—Receiving.*
MELBOURNE	1a/b, 4b, 5h/i, 6b, 7h/i, 8i	1a/b/e, 3b/e, 4a/b/e, 5h/i, 7h/i, 8i
Darings	7h	1a/d, 6d, 7h/k, 8k
Battles	7h	1a/d, 6d, 7h/k, 8k
Tribals	7h	1a/d, 6d, 7h/k
Type 15 Frigates	7h	1a/d, 6d, 7h/k, 8k
Type 12 Frigates	7h	1a/d, 6d, 7h/k, 8k
Frigates (Sloop) (except WARREGO)	7h	1a/d, 6d, 7h/k
A/S Frigates (Modified River) ..	7h	1a/d, 6d, 7h/k

Materials—

1. Furnace fuel oil.
2. Diesel oil.
3. Aviation fuel (Low Flash Point) LFP.
4. Aviation fuel (High Flash Point) HFP.
5. Avlub (in drums).
6. Water.
7. Stores/Ammunition.
8. Torpedoes.

Method—

Fuelling ..
- a Astern.
- b Abeam derrick rig, starboardside.
- c Abeam derrick rig, port side.
- d Abeam derrick rig, both sides.
- e Abeam jackstay rig, starboard side.
- f Abeam jackstay rig, port side.
- g Abeam jackstay rig, both sides.

Storing ..
- h Light jackstay rig, both sides.
- i Heavy jackstay rig, starboard side.
- j Heavy jackstay rig, port side.
- k Heavy jackstay rig, both sides.
- l Light jackstay rig, starboard side.
- m Light jackstay rig, port side.

(DTSR 1211/251/33.)

(*Navy Order* 1099 *of* 1958.)

Section 2.

PERSONNEL.

UNCLASSIFIED.

1012.—Application for Furlough/Extended Leave or Payment in lieu.

All personnel are reminded that should they have any prior service which may be admissible in respect of furlough or extended leave entitlements they should, in their own interests, apply, as early as possible in their Naval careers, to have such service admitted.

2. Failure to do so until applying for a grant of furlough or extended leave or pay in lieu thereof could make it impossible for the leave to be approved by the desired date for commencement, or alternatively, cause delay in payment of moneys due following discharge.

3. Provided all prior service has been previously admitted as above and no other unusual circumstance exists, applications for furlough or extended leave or pay in lieu thereof should, in future, be forwarded to reach Navy Office not later than one month before leave is desired or payment is due, as appropriate.

4. In cases where at the time of application prior service not previously admitted is being claimed or some other unusual circumstance is known to exist, e.g., the member's service includes a period or periods in civil power, desertion or of leave without pay which are not admissible for furlough or extended leave purposes, the application should be forwarded as early as possible in order to avoid possible delay in determining entitlement.

5. True extracts of Certificates of Service are to continue to accompany all applications from ratings.

6. I.P.I. 246/3 (notes) and 250/4 are relevant.

(HPB 267/1/7.)

amended ~~Corrected~~ under C.N.O. 577/62

UNCLASSIFIED.

1013.—Commonwealth Employees' Compensation Act—Repatriation Institution Charges.

808/61

Navy Order 426 of 1960 is to be amended as follows—

Paragraph 1—Delete and substitute—

"The Repatriation Department has agreed that cases where liability is accepted under the Commonwealth Employees' Compensation Act and which are admitted to Repatriation institutions for treatment will be charged a maximum rate of £5 17s. 5d. per day."

(Sec. 125/1/6.)

(*Navy Order* 426 *of* 1960.)

UNCLASSIFIED.

1014.—Examination for Lieutenant-Commander (Supply and Secretariat Specialization).

865/61 and 803/62.

Examination for the rank of Lieutenant-Commander (Supply and Secretariat Specialization) during 1961 will be held as follows—

Part I. ..	Monday, 28th August Thursday, 31st August ..	Returns due at Navy Office on 31st July.
Part II. ..	Monday, 27th February Thursday, 2nd March ..	Returns due at Navy Office on 2nd February.

2. Navy Order 107 of 1960 is hereby cancelled.

(HPB 312/6/5.)

(*Navy Order* 107 of 1960.)

UNCLASSIFIED.

1015.—Laundering of Clothing and Mess Linen.

The cost of laundering the following items is to be accepted as a charge to public funds—

(*a*) *Items of compulsory kit*—

(i) *Cooks and Sick Berth Attendants:*
- Shirts, white, with collar (S.B.A. and C.P.O. and P.O. Cook Ratings only).
- Singlets, cotton, style I. (Leading Cooks and below only).
- Trousers, white drill.

(ii) *Stewards:*
- Tunics, white drill, with blue facings.

(iii) *Motor Transport Drivers* (*W.R.A.N.S.*):
- Dresses, white (when summer dress is worn).

Note.—A maximum of two of each garment per rating will be laundered weekly.

(*b*) *Items issued on personal loan*—

(i) *Cook Ratings:*
- Aprons, cooks'.
- Caps, cooks'.

(ii) *Stewardesses:*
- Jackets, white drill.

(iii) *W.R.A.N. Cooks and Sick Berth Attendants:*
Aprons, white.
Gowns, cooks'.
Caps.
Dresses, blue.

Note.—A maximum of two of each garment per rating will be laundered weekly.

(*c*) *Loan clothing* (*including hospital clothing*) *and loan bedding* will be laundered at Departmental expense except that officers and ratings will be responsible for the laundering of their loan bedding whilst borne.

(*d*) *Mess linen*, including table cloths, table mats, tea/glass cloths and napkins.

(DV 900/51/2.)

UNCLASSIFIED.

1016.—Lay-out of Kit—Men Dressed as Seamen.

To ensure that a rating is fully kitted up, and that his kit is in good condition, all junior ratings may be required to lay out their kits for inspection by their Divisional Officers.

2. The method of laying out a kit for inspection is shown in the appendix to this order.

3. Items of kit laid out for inspection are now to be folded and not rolled and taped as hitherto.

4. Navy Order 796 of 1959 is hereby cancelled.

Additional Items to be included in Lay-out.

(*a*) 2 caps, blue working (Air Maintenance ratings and Engineering Mechanics).
(*b*) 1 knife with marline spike. (Seamen and Naval Airmen employed as Seamen.)
(*c*) 1 pair shoes, gymnastic. (Air Maintenance ratings.)
(*d*) 2 suits, blue overall. (Engine Room ratings, Air Maintenance ratings, Electrical Branch ratings.)
(*e*) 3 singlets, cotton, style 1. (Cooks.)
(*f*) 3 trousers, white drill, class I. and III. (Cooks and Sick Berth Attendants.)
(*g*) 3 shirts, white, with collar. (Sick Berth Attendant only.)
(*h*) 3 pairs gloves, cotton, white. (Stewards only.)
(*i*) 3 tunics, white drill, with blue facings. (Stewards only.)

Items to be omitted from Lay-out.

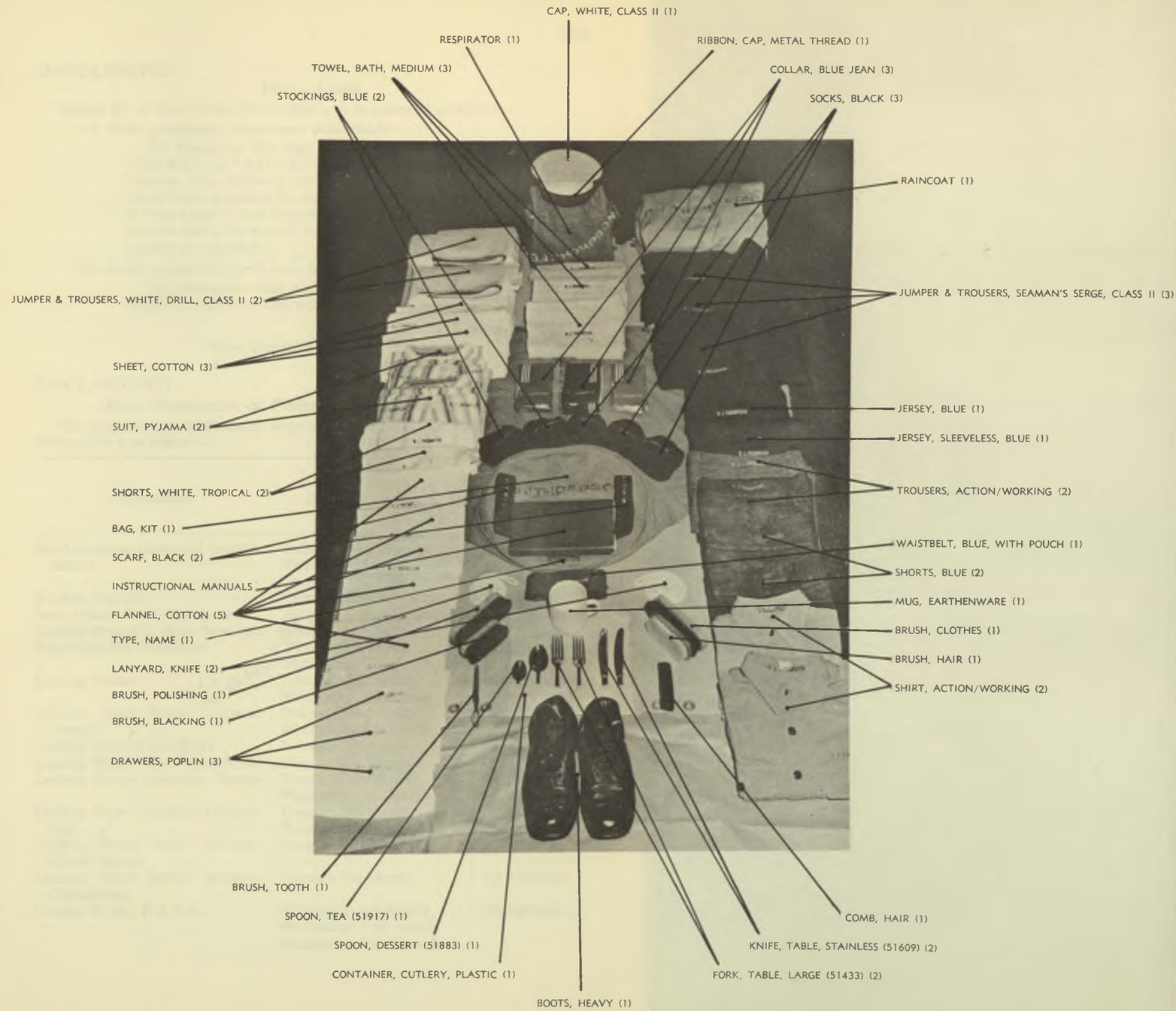
1 shirt, action working .. .. } Engine Room ratings, Air Maintenance ratings, Electrical Branch ratings, Cooks and Sick Berth Attendants.
1 pair trousers, action working ..

Items Rating is assumed to be Wearing.

1 cap, white, class II.
1 ribbon, cap.
1 pair drawers.
1 shirt, action working.
1 pair socks, black.
1 pair trousers, action working.
1 pair shoes, black.

(DV 930/51/9.)

(*Navy Order* 796 *of* 1959.)



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UNCLASSIFIED.

1017.—Leave.

Section III. of Navy Order 753 of 1960 is to be amended as follows—

(*a*) *Delete* paragraph 75 and *insert* in its stead—

" 75. Leave and Pay when Invalided—Members who are discharged " B.N.P.S." or " P.U.N.S." are entitled to pay and allowances for fourteen days following the date that discharge is approved by the Naval Board provided the periods prescribed in paragraph 3, A and D of Navy Order 774 of 1960 are not exceeded. Living Out Allowance is payable during this period, subject to the normal rules, except when the member is victualled."

(*b*) *Delete* paragraph 54 and *insert* in its stead—

" 54. Sick leave—Sick leave is additional to home service leave and foreign service leave—*See* paragraph 5 of Navy Order 774 of 1960."

(HPB 319/1/18.)

(*Navy Orders* 753 *and* 774 *of* 1960.)

UNCLASSIFIED.

1018.—Programme of Professional Examinations—1961.

The programme of professional examinations to be conducted from Navy Office during 1961 is as follows—

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Sub-Lieutenant (Electrical Specialization)	Tuesday, 7th February Wednesday, 8th February Thursday, 9th February	9th January
Leading Steward	Tuesday, 14th February	16th January
Petty Officer Wran Sick Berth	Tuesday, 14th February	16th January
Leading Wran Sick Berth Attendant	Tuesday, 14th February	16th January
Shipwright Sub-Lieutenant	Tuesday, 7th March Wednesday, 8th March	6th February
Leading Writer	Tuesday, 7th March Wednesday, 8th March	6th February
Leading Wran Writer (General Duties)	Tuesday, 7th March Wednesday, 8th March	6th February
Leading Wran Writer (Pay)	Tuesday, 7th March	6th February
Leading Wran Writer (Shorthand)	Tuesday, 7th March	6th February
Leading Stores Assistant (Stores)	Tuesday, 7th March Wednesday, 8th March	6th February
Leading Stores Assistant (Victualling)	Tuesday, 7th March Wednesday, 8th March	6th February
Leading Wran Stores Assistant (Naval Stores)	Tuesday, 7th March	6th February
Leading Wran Stores Assistant (Victualling)	Tuesday, 7th March	6th February
Leading Writer, R.A.N.R.	Wednesday, 8th March Wednesday, 15th March Wednesday, 22nd March	6th February

864/61

leave

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Leading Stores Assistant (Stores) R.A.N.R.	Wednesday, 8th March ..	6th February
	Wednesday, 15th March	
	Wednesday, 22nd March	
Leading Stores Assistant (Victualling) R.A.N.R.	Wednesday, 8th March ..	6th February
	Wednesday, 15th March	
	Wednesday, 22nd March	
Sick Berth Chief Petty Officer ..	Tuesday, 7th March ..	6th February
Sick Berth Petty Officer.. ..	Tuesday, 7th March ..	6th February
Leading Sick Berth Attendant ..	Tuesday, 7th March ..	6th February
Leading Wran Steward (General)	Tuesday, 14th March ..	13th February
Leading Steward R.A.N.R. ..	Wednesday, 15th March ..	13th February
	Wednesday, 22nd March	
Petty Officer Dental Assistant ..	Tuesday, 14th March ..	13th February
Leading Dental Assistant ..	Tuesday, 14th March ..	13th February
Wardmaster Sub-Lieutenant ..	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Writer	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Wran Writer (General Duties)	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Wran Writer (Pay) ..	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Stores Petty Officer (Stores) ..	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Stores Petty Officer (Victualling) ..	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Wran Stores (Naval Stores)	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Wran Stores (Victualling)	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Steward	Tuesday, 18th April ..	20th March
	Wednesday, 19th April	
Petty Officer Wran Steward (General)	Tuesday, 18th April ..	20th March
Petty Officer Writer R.A.N.R ..	Wednesday, 12th April ..	13th March
	Wednesday, 19th April	
	Wednesday, 26th April	
	Wednesday, 3rd May	
Stores Petty Officer (Stores) R.A.N.R.	Wednesday, 12th April ..	13th March
	Wednesday, 19th April	
	Wednesday, 26th April	
	Wednesday, 3rd May	
Stores Petty Officer (Victualling) R.A.N.R.	Wednesday, 12th April ..	13th March
	Wednesday, 19th April	
	Wednesday, 26th April	
	Wednesday, 3rd May	
Petty Officer Steward R.A.N.R. ..	Wednesday, 12th April ..	13th March
	Wednesday, 19th April	
	Wednesday, 26th April ..	

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Leading Steward	Tuesday, 9th May ..	10th April
Engineer Sub-Lieutenant (Mech.)	Wednesday, 7th June ..	1st May
Engineer Sub-Lieutenant (M.E.) ..	Wednesday, 7th June ..	1st May
Leading Steward	Tuesday, 1st August ..	3rd July
Sub-Lieutenant (Engineering Specialization)	Tuesday, 15th August ..	17th July
	Wednesday, 16th August	
Petty Officer Wran Sick Berth ..	Tuesday, 15th August ..	17th July
Leading Wran Sick Berth Attendant	Tuesday, 15th August ..	17th July
Leading Writer	Tuesday, 12th September ..	14th August
	Wednesday, 13th September	
Leading Wran Writer (General Duties)	Tuesday, 12th September ..	14th August
	Wednesday, 13th September	
Leading Wran Writer (Pay) ..	Tuesday, 12th September ..	14th August
Leading Wran Writer (Shorthand)	Tuesday, 12th September ..	14th August
Leading Stores Assistant (Stores)	Tuesday, 12th September ..	14th August
	Wednesday, 13th September	
Leading Stores Assistant (Victualling)	Tuesday, 12th September ..	14th August
	Wednesday, 13th September	
Leading Wran Stores Assistant (Naval Stores)	Tuesday, 12th September ..	14th August
Leading Wran Stores Assistant (Victualling)	Tuesday, 12th September ..	14th August
Leading Writer, R.A.N.R. ..	Wednesday, 13th September	14th August
	Wednesday, 20th September	
	Wednesday, 27th September	
Leading Stores Assistant (Stores) R.A.N.R.	Wednesday, 13th September	14th August
	Wednesday, 20th September	
	Wednesday, 27th September	
Leading Stores Assistant (Victualling) R.A.N.R.	Wednesday, 13th September	14th August
	Wednesday, 20th September	
	Wednesday, 27th September	
Leading Wran Steward (General)	Tuesday, 12th September ..	14th August
Leading Steward R.A.N.R. ..	Wednesday, 13th September	14th August
Sick Berth Chief Petty Officer ..	Tuesday, 12th September ..	14th August
Sick Berth Petty Officer.. ..	Tuesday, 12th September ..	14th August
Leading Sick Berth Attendant ..	Tuesday, 12th September ..	14th August
Petty Officer Dental Assistant ..	Tuesday, 12th September ..	14th August
Leading Dental Assistant ..	Tuesday, 12th September ..	14th August
Petty Officer Writer	Tuesday, 10th October ..	11th September
	Wednesday, 11th October	
Petty Officer Wran Writer (General Duties)	Tuesday, 10th October ..	11th September
	Wednesday, 11th October	
Petty Officer Wran Writer (Pay) ..	Tuesday, 10th October ..	11th September
	Wednesday, 11th October	
Stores Petty Officer (Stores) ..	Tuesday, 10th October ..	11th September
	Wednesday, 11th October	
Stores Petty Officer (Victualling) ..	Tuesday, 10th October ..	11th September
	Wednesday, 11th October	

Examination.	*Date of Examination.*	*Return of Candidates Due at Navy Office.*
Petty Officer Wran Stores (Naval Stores)	Tuesday, 10th October .. Wednesday, 11th October	11th September
Petty Officer Wran Stores (Victualling)	Tuesday, 10th October .. Wednesday, 11th October	11th September
Petty Officer Steward	Tuesday, 10th October .. Wednesday, 11th October	11th September
Petty Officer Wran Steward (General)	Tuesday, 10th October ..	11th September
Petty Officer Writer R.A.N.R. ..	Wednesday, 11th October .. Wednesday, 18th October Wednesday, 25th October Wednesday, 1st November	11th September
Stores Petty Officer (Stores) R.A.N.R.	Wednesday, 11th October .. Wednesday, 18th October Wednesday, 25th October Wednesday, 1st November	11th September
Stores Petty Officer (Victualling) R.A.N.R.	Wednesday, 11th October .. Wednesday, 18th October Wednesday, 25th October Wednesday, 1st November	11th September
Petty Officer Steward R.A.N.R. ..	Wednesday, 11th October .. Wednesday, 18th October Wednesday, 25th October	11th September
Wardmaster Sub-Lieutenant ..	Tuesday, 17th October .. Wednesday, 18th October	18th September
Electrical Sub-Lieutenant (L) (R) (AL) (AR)	Tuesday, 7th November .. Wednesday, 8th November	9th October
Leading Steward	Tuesday, 7th November ..	9th October
Supply Sub-Lieutenant (S) ..	Tuesday, 21st November .. Wednesday, 22nd November	23rd October
Supply Sub-Lieutenant (W) ..	Tuesday, 21st November .. Wednesday, 22nd November	23rd October
Engineer Sub-Lieutenant (A/E) ..	Monday, 4th December .. Tuesday, 5th December	6th November
Engineer Sub-Lieutenant (A/O) ..	Tuesday, 5th December ..	6th November
Engineer Sub-Lieutenant (O/E) ..	Monday, 4th December .. Tuesday, 5th December	6th November

2. It should be ensured that candidates are qualified in all respects before submitting returns to Navy Office.

3. No application received after the closing date will be considered unless it is evident that it has been delayed through no fault of the candidate. The circumstances should be reported to the Naval Board for consideration.

4. This order will be reprinted for posting on notice boards.

5. Navy Order 110 of 1960 is hereby cancelled.

(HPB 312/6/5.)

(*Navy Order* 110 *of* 1960.)

UNCLASSIFIED.

1019.—The Ian Macdonald Memorial Prize.

The Ian Macdonald Memorial Prize for 1959 has been awarded to Acting Sub-Lieutenant G. R. Stiles (L) R.A.N.

2. Navy Order 157 of 1960 is hereby cancelled.

(HPB 38/6/6.)

(*Navy Order* 157 *of* 1960.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

1020.—Gun Mountings—4.5-in., R.P. 41, Marks 6, 6* and 6* Mod. 1—Fixed and Moving Coils in Oil Servo Units, Marks 5 and 5*.

Oil servo units with maker's serial numbers up to and including 816597 when filled with oil O.M. 33 and subsequently fitted with new fixed coils should be stamped with the letter " F " in the top right-hand corner of the maker's nameplate for which a ⅛-in. letter will suffice.

2. Oil servo units subsequent to No. 816597 have been tested in oil O.M. 33 at the maker's works but are not stamped with the letter " F ".

3. Moving coils currently being produced are subjected to a test to eliminate those coils which might subsequently fail prematurely. Coils which pass this test are stamped with the letter " T " on the copper web. It is emphasized that this mark is stamped and is not to be confused with any other marking.

4. When a servo unit moving coil is replaced by one bearing this mark, the letter " T " must be stamped in the top right-hand corner of the external nameplate next to the letter " F " when applicable.

5. Ships concerned are to maintain a record of weekly resistance reading of the moving coils, these being taken only when the oil of the servo has reached its controlled temperature: coil resistance should be as follows—

F1–F2 .. 2,200–2,800 ohms.
F1–C .. Lower than F2–C by 25–60 ohms.

6. Resistances of defective coils are to be reported on forms A.S. 2022 in accordance with Navy Order 687 of 1959.

7. Navy Order 1129 of 1958 is hereby cancelled.

(DW 736/59/47.)

(*Navy Orders* 1129 *of* 1958 *and* 687 *of* 1959.)

UNCLASSIFIED.

1021.—Life-Saving—Use of A/S Smoke Markers for Man Overboard.

(*A.F.O.* 2429/1960.)

A new lifebuoy marker to replace the present Light Indicating Lifebuoy is under development in the U.K. Trials have shown promising results and it is hoped that the marker will be ready for issue to the Fleet in 1961.

2. As a temporary measure meanwhile, white A/S smoke markers may be used for " Man Overboard " and for exercising this emergency; provided satisfactory stowage conforming with N.M.E.R. is available, Item 114 of Article 335 in B.R. 862/56 applies, except that these markers may be treated as Group 11 instead of Group 13. New lockers are not to be provided, nor are existing ones to be altered, solely for carrying the extra markers.

3. Aircraft Carriers, Destroyers and Frigates may, accordingly, embark ten markers, smoke white, additional to their present outfits.

4. The annual practice allowance for " Man Overboard " exercises is extra to any existing allowance, and is forty.

5. Where possible, the ready-use markers are to be stowed in lockers near the lifebuoys on the quarterdecks of large ships and on the bridges of smaller ones. It is suggested that the outfit could be stowed in a ready-use 40/60 ammunition locker. Where this is not practicable, a ready-use supply of two markers should be provided in an ammunition box.

6. The A/S smoke marker should not be attached to the lifebuoy as it has been known to explode upon ignition or when burning in the water. The light indicating lifebuoy (calcium flare) should therefore be used in addition.

7. The A/S smoke marker and the light indicating lifebuoy (calcium flare) are to be used only when there is no possibility of oil being in the water.

8. Admiralty has advised that C.B. 4419(B) will be amended.

(DTSR 728/58/47.)

UNCLASSIFIED.

1022.—Naval Reserve Training—Allowances of Ammunition Pyrotechnics and Underwater Stores.

The authorized allowances of ammunition, pyrotechnics, and underwater stores for Naval Reserve training are shown in the appendix to this order.

2. The allowances of 4-in. and 40/60 ammunition and underwater stores, as shown in the appendix, are for all ratings undergoing their first period of annual continuous training only.

3. The ammunition allowances for Reserve ratings being trained for SG(C), SG(Q) and UW.3 rates are given in the appropriate training syllabuses.

4. The following are the allowances during annual continuous training for ratings holding specialist qualifications—

Per SG(Q)—Cartridges Q.F. 4-in. Mk. 16* and 21 gun S.U. Practice ..	5
Cartridges Q.F. 2 pdr. practice and sub-calibre ..	12
Per SG(C)—Cartridges Q.F. 40/60 H.E. Tracer	20

5. The following is the additional allowance for R.A.N.R. (g) officers—

Per (g) Officer—Cartridges Q.F. 4-in. Mk. 16* and 21 gun—S.U. Practice	10
Cartridges Q.F. 2 pdr. practice and sub-calibre ..	12

6. The following only should be trained in the use of small arms—

Pistol	Officers.
	Petty Officers (Seaman).
	Petty Officers Engineering Mechanic.
	All Communications ratings.
Rifle	All ratings.
Sub-machine Gun ..	All Seaman ratings.
	All Engineering Mechanic ratings.
	All Communication ratings.
Machine Gun ..	All Seaman ratings.

7. For the purpose of this order, a training period for Naval Reserves will be deemed to be the obligatory thirteen days annual continuous training.

8. Training ships and establishments are required to furnish to Navy Office a half-yearly return of expenditure in accordance with Navy Order 930 of 1959.

APPENDIX.

Item.	*Allowance.*	
	Per Man.	*Per Training Period.*
Gun Ammunition—		
Cartridges Q.F. 4-in. Mk. 16* and 21 gun—SU practice	1	—
Cartridges Q.F. 2 pdr. practice and sub-calibre ..	3	—
Cartridges Q.F. 40/60 H.E. tracer	5	—
Small Arms Ammunition—		
.38-in. Ball revolver	50	—
.303-in. Ball in chargers	40	—
.45-in. Ball for Thompson S.M.G.	20	—
.22-in. Rimfire	40	—
.303-in. Ball in cartons	35	—
.303-in. Tracer in cartons	15	—
.303-in. Blank	20	—
Pyrotechnics—		
Smoke Floats, Mk. 6	—	1
Igniters, Smoke Float, Mk. 9	—	1
Cartridges, Signal 1-in., Red	—	1
Cartridges, Signal 1-in., Green	—	1
Cartridges, Signal 1-in., White	—	1
Flares, Signal Red	—	1
Lights, Short, G.S.	—	1
Portfires, Common..	—	1
Rockets, Signal, 1-lb. service	—	1
Rocket Sticks, 5 ft. with notch	—	2
Tubes, Friction, M.R.S.	—	1
Underwater Stores—		
Projectile A/S Mk. 6 H.E. filled and fuzed	—	1
Projectile A/S Light	—	6

(DW 700/255/71.)

(*Navy Order* 930 *of* 1959.)

RESTRICTED.

1023.—A/S Mortar, Mark 10—Depth Setting Control Panel, Mark 2 and Spare "Jack-In" Unit—Correction of Operation of Control Relays GRS and GRP.

(*A.F.O.* 2538/1960.)

(*a*) *Ships, establishments and authorities concerned* — Ships and establishments so fitted and Gunnery Equipment Depots.

(*b*) *Equipment affected* .. Depth Setting Control Panel, Mark 2, and spare removable frame fitted in stowage box for "Jack-In" unit. (Index 72—B.R. 227 (2), Section F.)

(*c*) *Modification number* .. To be known as Modification No. 6 to the Depth Setting Control Panel, Mark 2 Mod. O. (Assembly "F".)

(*d*) *Purpose of modification* .. To correct the operation of the control relays GRS and GRP. It has been brought to notice that it is impossible under certain circumstances for one mounting to be brought to the LOAD position when the other mounting is in the TRAIN position.

(*e*) *Nature of modification* ..

(i) Obtain from N.S.O. 2 in No. Rectifiers A.P.W. 1024, 6 feet of Pink Equipment wire 14/.0076 to DEF.12A—J.S. 6145—100185. 4 in No. 4 B.A. x $\frac{7}{16}$-in. long Ch.Hd. Phosphor Bronze screws A.P. 2954, 4 in No. 4B.A nuts Naval Brass A.P. 2987 and 4 in No. 4B.A. Washers Naval Brass A.P. 3009, quoting this order as the authority.

(ii) Remove the Relay Frame from the Depth Setting Control Panel.

(iii) *Relay GRS.*—Remove the connections from Relay GRS after checking that the cable colour codes are in accordance with the ships officers drawing D.E.E. E.50580 and noting the connections of the linking wires. Remove the GRS relay from its present position and fit it in the space immediately below the GRP relay. Rewire the GRS relay according to the ships officers drawing except for the two leads colour coded R.B.G. which were connected to the negative terminal (*e*) of the GRS relay coil. It will be found that the existing wiring will be of suitable length for the new position of the relay.

(iv) In the space now available on the R.H. side of the relay bank No. 4 a rectifier A.P.W. 1024 is to be fitted as follows. Place the rectifier in the best position on the relay plate having regard to clearance of the relay cover and mark through the two fixing holes. Drill the two holes using a No. 27 drill, taking great care that the wiring is not damaged when the drill pushes through. The rectifier is to be secured using the 4B.A. screws, nuts and locking washers. This rectifier will be referred to as "MR.B".

(v) The remaining rectifier A.P.W.1024 is to be fitted in the same manner as above on the capacitor bank No. 5 in the space adjacent to capacitors QT and QU paying particular attention to clearances. This rectifier will be referred to as "MR.C".

(vi) The two leads colour code R.B.G. formerly connected to the negative terminal (*e*) of the GRS relay are to be passed through a convenient hole in the relay plate and connected to the red terminal of the rectifier MR.B. Using a portion of the Pink equipment wire connect the black terminal of the rectifier MR.B to the negative terminal (*e*) of the GRS relay coil passing the wire through the same hole as before.

(vii) *Relay GRP.*—Disconnect the two leads, colour code R.B.BN. from the negative terminal (*e*) of the relay coil and the R.B.BN. lead from the jack terminal U30. Check by means of an ohmmeter or similar instrument which of the two R.B.BN. leads disconnected from the GRP coil was connected to the Jack U30. Cut off the bared portions of each end of this lead and lace the ends securely to the cable form. The remaining R.B.BN. lead from the GRP coil is to be pulled back through the cable form so that it emerges in line with the Capacitor Plate No. 5. Using a portion of the Pink equipment wire connect a new lead to the jack terminal U30 and lace it to the cable form so that its remote end emerges adjacent to the R.B.BN. lead in line with Capacitor Plate No. 5. Pass the two wires through a convenient hole in the Capacitor Plate and connect them to the red terminal on the rectifier MR.C. Using the Pink equipment wire connect an additional lead from the black terminal of the rectifier MR.C. to the negative terminal (*e*) of the GRP relay coil and lace into the cable form.

(*f*) *Supply of modification parts* — No kit of parts supplied, *see* (*e*) (i) for stores.

(*g*) *Drawings* .. .. .. Relevant ships officers drawings should be amended as above, pending the issue of revised prints.

(*h*) *By whom to be carried out* — By ships staff. Equipment in store to be modified by the authorities concerned.

(*j*) *When to be carried out* .. As soon as possible.

(*k*) *How to be treated* .. As a defect.

(*l*) *Books affected* .. .. B.R. 1709 (3) and B.R. 1709 (1), Chapter I.—"List of all Modifications". Admiralty has advised that these publications will be amended in due course.

(*m*) *Report on completion of modification* — When this modification has been introduced into the equipment, a report, which is to include the maker's name and serial number of the Depth Setting Control Panel, Mark 2, is to be forwarded to—

Director of Weapons,
Department of the Navy,
Victoria Barracks,
MELBOURNE.

2. Navy Order 1033 of 1959 is relevant.

(DW 707/51/49.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

1024.—A/S Weapons—A/S Mortar, Mark 10—Mountings.

The following modification is approved—

(*a*) *Ships, establishments and authorities concerned*	Ships and establishments so fitted and Gunnery Equipment Depots.
(*b*) *Part of equipment affected*	CH.616 Joint and Joints, Brush Covers of CH.025 Units.
(*c*) *Purpose of modification* ..	To prevent ingress of moisture to CH.025 units.
(*d*) *Nature of modification* ..	Fitting of joints manufactured from $\frac{3}{32}$-in. thick neoprene rubber.
(*e*) *Drawing*	CX.121304 Items 39 and 47.
(*f*) *Modification No.* ..	A.N. 6.
(*g*) *By whom to be done* ..	R.A.N. Armament Depots.
(*h*) *When to be done*	At earliest opportunity.

2. Spare CH.025 Units held in store are to be modified concurrently.

3. Navy Order 1033 of 1959, Section (A) is to be noted accordingly.

(DW 707/251/10.)

(*Navy Order* 1033 *of* 1959.)

UNCLASSIFIED.

1025.—A/S Weapons—Recovery of Light A/S Projectiles—Use of Recovery Line.

Successful trials have been carried out for the rapid recovery of light A/S projectiles fired from Squid or A/S Mark 10 Mortars, and the following method is recommended for general use.

2. *Description.*—The recovery line consists of a 17-fathom length of $1\frac{1}{2}$-in. sisal, fitted with six tails, each 3-ft. 6-in. long at 10-ft. intervals, the sixth tail being the end of the main strop. The tails are eye spliced into the main strop, then each eye and the end of each tail is fitted with a pattern 101 Inglefield clip.

3. *Operation.*—After firing a pattern of light projectiles, the motor cutter is slipped as the ship approaches the edge of the circle of projectiles. The motor cutter follows the circle, slowing down alongside each projectile. Two U.W.'s in the stern sheets clip one of the recovery line tails round the tail of each projectile, the end clip being the first used. The projectiles are then towed astern from the after cleat of the motor cutter where they tow easily without affecting the boat's manoeuvrability. On return to the ship the inboard end of the recovery line is passed up to a suitable hoist on the quarter deck. Three hands hoist the projectiles singly, the length between tails being sufficient to hoist only one projectile at a time clear of the water. On reaching the deck, the projectiles are quickly released from the line.

4. Navy Order 582 of 1959 is hereby cancelled.

(DW 714/51/51.)

(*Navy Order* 582 *of* 1959.)

UNCLASSIFIED.

1026.—Naval Stores (Air) R.A.F. Vocabulary Sections 28S and 33C—Introduction of Joint Service Catalogue Numbers.

(*A.F.O.* 2683/1960.)

The following Air stores at present dealt with under R.A.F. Vocabulary Sections 28S and 33C will in future be dealt with under the Joint Service Catalogue numbers shown—

Old Stores Ref. No.	*New Stores Ref. No.*
Section 28*S*—	*Section* 28*S*—
2061	999-3003
6525	999-3159
Section 33*C*—	*Section* 33*C*—
1371	220-2077
1372	220-2078
1117	100-4457
766	220-2075

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with A.B.R. 4 (Naval Storekeeping Manual), Article 1812 (g).

(DNAS 601/52/7.)

UNCLASSIFIED.

1027.—Naval Stores (General)—Demands.

In recent years there has been a tendency particularly in destroyers and other small ships to depart from the correct procedure in connection with demands for consumable naval stores.

2. Existing procedure *vide* A.B.R. 4, Article 0304, is for First Outfit Schedules detailing the stores which have been assessed as being necessary for the ship to maintain itself for its normal function for a specified period to be prepared on commissioning. Subsequent requirements of consumable stores included in the schedules should be demanded at the intervals and for the periods specified in A.B.R. 4, Article 0402.

3. On introduction of the First Outfit Schedule procedure some years ago Commanding Officers were requested to make any recommendations they saw fit in the light of experience as to amendment of the First Outfit Schedules and this requirement has been included in A.B.R. 4 (Article 0304 (9)). Such recommendations were

expected to be of considerable benefit in maintaining the First Outfit Schedules as a realistic assessment of requirements under service conditions. However, practically no recommendations have been forthcoming. It is desired that more attention be paid to this requirement in future.

4. Any items not included in the schedules are required to be demanded separately and such demands are required to—

(*a*) Indicate details of the service for which the stores are required.

(*b*) Certify that other items or materials available on board cannot be used in lieu or adapted for the purpose.

(*c*) Be approved by the Commanding Officer.

5. Complaints have been received recently that it should not be necessary for the Commanding Officer to be required to approve the many casual demands that are prepared. However, examination of these casual demands indicates that many of them become necessary because the procedure as set out in paragraph 3 above has not been carried out. In some instances it is observed that items included in schedules would appear to be suitable for use in lieu of items specially demanded and, either stocks of the items included in the schedules have not been properly maintained or insufficient effort has been made to ascertain whether such alternative items are in fact held on board. In other cases recurring demands for items not included in the schedules indicate that it may have been desirable for steps to be taken to have such items included in the schedules. It is considered that if closer attention is paid to the foregoing matters in future, the number of demands requiring the approval of the Commanding Officer would diminish considerably. The requirements for ensuring that items already held would not suit the purpose and the obtaining of the approval of the Commanding Officer are intended to ensure that such demands receive appropriate consideration on board, and are limited to essential requirements.

6. There is no objection to the Captain at his discretion delegating his responsibility for approving casual demands for new items to other Senior Officers.

7. Another matter which has come to notice is that items which are included in the schedules and of which stocks are held or of which there has been expenditure are included in demands without particulars of present stocks and past expenditure being shown. There has been a disinclination in the past on the part of authorizing officers at Naval Store Depots to delay supply to ships by rejecting such demands out of hand. Instead of the quick and straight-forward review which is possible when the necessary stock and expenditure data are given, authorizing officers have had to expend considerable time and effort in verbal inquiry and other investigation in order to determine whether the demands are reasonable. This is an unsatisfactory situation and in future demands which are not correctly prepared will be rejected by authorizing officers.

8. The foregoing principles apply also to commissioned establishments but as First Outfit Schedules are not provided, the articles currently on charge and of which there has been previous expenditure are regarded as the " first outfit " and new items demanded are regarded as casual demands to which the provisions of A.B.R. 4, Article 0304 referred to in paragraph 4 apply. However, once an item is obtained and there is a recurring requirement, subsequent replenishment may be effected in the normal manner.

(DNAS 501/51/10.)

UNCLASSIFIED.

1028.—Naval Stores (General)—Demand Forms A.S. 134 and A.S. 134S—Marking of Stowages.

(*A.F.O.* 1681/1960.)

When considered desirable, the stowage location of items on board ships and establishments may be shown on forms A.S. 134 and A.S. 134S, when the forms are being prepared by the Supply Staff, as follows—

(*a*) *Forms A.S.* 134*S*, " *Shopping Lists* ". The stowage location may be inserted in the spare column at the extreme right of the form, but is to be restricted to a maximum of five characters; e.g., Storeroom No. 1, Cabinet No. 18, Drawer B, would be indicated as " 1–18B ".

(*b*) *Forms A.S.* 134. The stowage location may be inserted in the right hand column of copies Nos. 3, 4 and 5, but care is to be taken to ensure that the information is not included on copies Nos. 1 and 2.

2. A.B.R. 4, Naval Storekeeping Manual, Chapter 6, will be amended.

(DNAS 408/51/2.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

1029.—Form A.S. 1246—Tactical Communication History Sheet—Form A.S. 1246H—Radio Communication History Sheet.

Revised forms A.S. 1246—Tactical Communication History Sheet and A.S. 1246H —Radio Communication History Sheet are now available, on demand, from the Superintending Naval and Air Store Officer, Sydney.

2. Instructions regarding the basis of demands to be raised, and use of the revised forms are contained in Navy Order 1093 of 1959.

(DNAS 464/54/103.)

(*Navy Order* 1093 *of* 1959.)

With reference to Navy Order 1094 of 1959, Navy Orders 987 to 1034 of 1958 are now over two years old and may be disposed of.

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

Registrar Jan 6/1961

FOR OFFICIAL USE ONLY. C.N.O. 1030/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
19th December, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos J Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

10003/60.

1030.—Commonwealth Employees' Compensation Act 1930-1959—Application to Members of the Naval Forces.

The *Commonwealth Employees' Compensation Act* 1930–1959, is an Act relating to compensation for employees of the Commonwealth for injuries or diseases caused by their employment. The Act applies to serving members of the Naval Forces in respect of injuries or diseases occurring on or after 3rd January, 1949.

2. The purpose of this Navy Order is to make known the benefits available under the Act. The order contains no authority for the admission of claims, for which there is power only under the Act itself.

Administration of the Act.

3. The Commonwealth Employees' Compensation Act is administered by the Commissioner for Employees' Compensation. There is a Delegate of the Commissioner at Navy Office with certain specified powers under the Act.

Circumstances in which compensation is payable.

4. The Act provides for payment of compensation in any of the following circumstances—

(*a*) Where a member suffers personal injury or death by accident arising out of or in the course of his employment by the Commonwealth. Injury here can also mean the aggravation of a pre-existing injury or condition.

(*b*) Where a member suffers personal injury or death by accident while he is travelling to or from his employment by the Commonwealth. For this purpose " travelling " means travelling by the shortest convenient route for the journey and does not include travelling during or after any substantial interruption to the journey or deviation from the route for a reason unconnected with the member's employment.

(*c*) Where a member is incapacitated or his death is caused by a disease and the disease is due to or aggravated by the nature of his employment by the Commonwealth.

Nature of compensation payments.

5. Compensation is paid as a lump sum or as weekly payments, as follows—

(*a*) *In cases of death.*—Where a member's death results from any of the causes stated in paragraph 4 and he leaves dependants who were wholly or partly dependent on his earnings, compensation is payable in a lump sum. In some cases the sum payable is administered under trustee arrangements. The amount payable is specified in the First Schedule to the Act, which is summarized in Appendix A to this order.

(*b*) *Specified disabilities.*—Lump sum payments are also made in respect of claims admitted for certain specified disabilities such as loss of a part of the body or loss of hearing. These disabilities and the amounts payable are contained in the Third Schedule to the Act, which is reprinted as Appendix B to this order. Compensation for specific disabilities may be paid to a member while still serving.

(*c*) *Other disabilities.*—Compensation otherwise takes the form of weekly payments, payable during the period of incapacity, at rates specified in the First Schedule to the Act which is summarized in Appendix A to this order. It is payable only where the employee is totally or partly incapacitated and is unable to earn the rate of pay he was earning at the time of the occurrence which caused his disability. Payment of weekly compensation would not normally arise in the case of a serving member as he would usually continue on service pay during periods of incapacity. Payments can be made, however, where a compensable condition causes incapacity after discharge from the service.

6. After payment of a lump sum has been made a member cannot normally receive any further weekly payments.

7. Where there is a Third Schedule injury and the member is also totally and permanently incapacitated, a lump sum payment under the Third Schedule is not made and the member receives weekly payments in accordance with the First Schedule.

8. Where lump sum compensation is awarded to a minor, the usual procedure is to hold the amount awarded in trust until the member attains the age of 21 years.

Medical expenses.

9. The Act provides for payment of reasonable medical expenses resulting from an injury or disease in respect of which a claim is admissible.

10. As serving members of the Naval Forces are normally afforded medical treatment at Departmental expense and in most cases are retained on full pay, the question of the reimbursement of medical expenses privately incurred while still serving does not normally arise.

Where a member makes a claim for damages from another person.

11. Under the Act a member may take proceedings to recover damages from another person, including the Commonwealth, even though he is claiming compensation under the Act.

12. If the member does not personally claim damages from the other person, he may be requested by the Commissioner for Employees' Compensation to take such proceedings. Where the member takes such proceedings on the request of the Commissioner, the proceedings are conducted on the member's behalf at the expense of the Commonwealth.

13. Where the member receives both compensation under the Act and damages from another person, he is required to repay to the Commonwealth such amount of the compensation as does not exceed the amount of damages recovered.

Where Repatriation pension is payable.

14. It is not permissible to receive compensation under the Commonwealth Employees' Compensation Act if a war pension has been granted under the Repatriation Act in respect of the same disability.

Statutory requirements regarding notifications and claims for service-caused injuries or diseases.

15. The Act provides, except in a particular case where the Commissioner otherwise determines, that—

(*a*) *a notice of accident* or disease must be given as soon as practicable after the accident occurs or the effects of the disease become apparent;

(*b*) *a claim for compensation* must be made on the proper form within six months of either the date of injury, manifestation of the disease, or death.

Procedure for notification.

16. Provision is made in the Daily Medical Record Book (Form A.M. 209z) for members to give notification of an accident or disease. It is imperative for any member who suffers any disability to report as soon as practicable to the Sick Bay where particulars of the disability will be recorded in Form A.M. 209z. The recording in Form A.M. 209z replaces the Notice of Accident previously provided for in Navy Order 201 of 1958.

Procedure for making claims.

17. Forms are provided by Regulation for making claims under the Act; these are—

Form A—Claim for compensation by a member.

Form B—Claim for compensation by dependant of deceased member.

18. If a member is desirous of making a claim for compensation the following additional forms are provided to assist in the investigation of his claim—

Form 1—Statement in support of claim for compensation.

Form 2—Report by Medical Officer.

Form 3—Report by witness.

19. The forms will be supplied on demand from SNSO, Sydney.

20. It should be noted that a Form A should be accompanied by Forms 1 and 2 in every case, and also by Form 3 where appropriate. The completed forms are in each case to be forwarded to Navy Office through Administrative channels.

21. It is to be noted that another form provided under the Act, namely Form D, is to be completed in future only at the specific request of the Naval Board as it is a particular report by a Medical Referee or Medical Board appointed under the Act.

22. Members of the Naval Forces who consider that they are eligible for compensation under the provisions of the Act in respect of a disability resulting from an injury or disease, should make a claim through their Commanding Officer using claim Form A and Form 1. The claim should be made within six months of the date of the injury or within six months of the member first becoming aware that he was suffering from a disease; but it is in the member's interest not to delay making a claim for compensation as an early claim facilitates investigation of the claim and makes the member's task of proving his case far easier.

23. It is necessary to prove either that the injury arose out of or in the course of the member's employment, or that the disease was due to or aggravated by the nature of the employment.

24. In cases of death where the circumstances are such that it appears possible the dependant of the deceased member may have a claim for compensation, the usual reports concerning the death of the member should, where possible, indicate whether in the opinion of the reporting authority, the death arose out of or in the course of employment. The report should indicate the facts on which the opinion is based.

25. Once a claim has been received it should be forwarded to Navy Office; it certainly should not be delayed while extensive investigations are made. In many cases the principles involved in a particular case would not be known to the reporting authority, and unnecessary delay may be caused in the finalization of the claim.

Guidance for Medical Officers.

26. It will be appreciated from the nature of many of the matters associated with the administration of the Act that medical officers play an important part in it. The succeeding paragraphs are, therefore, particularly for the attention of medical officers, although they will also be of interest to divisional officers.

27. If in the opinion of the medical officer liability for payment of compensation should be accepted, he is to arrange for the completion of Forms A and 1 by the member concerned and he himself should complete Form 2. It should be noted that the Act does not envisage the encouragement of personnel to make claims for accidents of trivial consequence. It is especially desired that in advising members, medical officers should use their judgment and endeavour to avoid unnecessary claims while ensuring the prompt submission of proper claims. At the same time they should not in any sense put obstacles in the way of a member who of his own volition desires to lodge a claim.

28. It must be understood that because a member suffers from an injury or disease which occurs during the period of his naval service it does not necessarily mean that the Commonwealth is liable to compensate him for such an injury or disease. It remains for the member to show that such injury or disease was due to his employment and not merely that it arose during the period of his naval service.

29. Cases occur fairly frequently where it is necessary to assess percentage disablement for the purposes of the Third Schedule to the Act. To assist medical officers in this, the following points are brought to notice—

(*a*) when an injury specified in the Third Schedule has been sustained a sketch of the affected part should be given in Form 2;

(*b*) when giving an assessment of the loss of efficient use of a part of the body, care should be taken to relate the assessment to the actual injury sustained. For example, if a member injures the distal phalanx of a finger, the assessment should be in terms of the loss of efficient use of the distal phalanx and not of the whole finger;

(*c*) in all cases of injuries to fingers or hands, a test for dexterity should be carried out and the examining medical officer should indicate whether the injured member is naturally left- or right-handed. Finger injuries are to be described in the manner shown in the Third Schedule to the Act and not referred to as first, second or third digits, &c.;

(*d*) where an employee suffers an injury to a knee, the assessment of percentage loss of efficient use is to be related to the leg above the knee and not to the leg below the knee.

Citizen Naval Forces.

30. The Act applies to members of the Citizen Naval Forces during and in respect of periods of continuous training and drills.

31. Special rules have been made to provide for the circumstances of a member of the Citizen Forces who is injured or becomes ill during a period of training or at drill. A member of the Citizen Forces may be retained on naval pay for the period of incapacity not exceeding 28 days from the date of injury or contraction of illness or until the termination of the period of training for which he was called up (whichever last occurs), provided that a claim for compensation under the Act has been admitted.

32. In such cases the naval pay rate is reduced as necessary to ensure that such payments plus any moneys received from his civil employment for the period do not exceed his normal earnings in civil employment. Where, however, the amount of compensation under the Act is in excess of naval pay, the claimant is entitled to payment at the appropriate (i.e., higher) rate of weekly compensation.

33. For these purposes " Naval Pay " means active pay plus marriage, separation, provision and/or living out allowance being received at the date of injury, but does not include meal allowances and fares allowances. However, in the case of a married member who is injured whilst not eligible for marriage and separation or provision allowance, e.g., during a night parade, but who is carried on pay during his period of incapacity and this lasts for over four or ten days as the case may be (*vide* Naval Reserve Regulations and Instructions, Article 245 (Provisional)) marriage and separation (or provision) allowances, though not receivable at the time of injury, may be paid in accordance with normal conditions.

34. For example, if a member who is called up for a period of training from 1st to 31st March, inclusive—

(*a*) is injured on 2nd March, and a claim for compensation is admitted, he would receive naval pay until 31st March, inclusive, and then, if still totally incapacitated, would be entitled to weekly compensation under the Commonwealth Employees' Compensation Act from 1st April;

(*b*) is injured on 10th March, and totally incapacitated until 30th April, he would be entitled, subject to admission of a claim for compensation, to naval pay until 7th April, subject to paragraph 31, and from 8th April, he would be entitled to weekly compensation under the Act. Extension of naval pay beyond 31st March would, however, be subject to specific Naval Board approval.

Appendix A.

The First Schedule to the Act shows the amount of compensation payable in the case of death and during periods of incapacity. Where a loss of a limb, &c., results, provision is made in the Third Schedule to the Act for the payment of a lump sum when the condition is permanent and static.

2. Payments of compensation under the First Schedule are summarized hereunder, but reference must be made to the Schedule itself to obtain full details.

3. *In cases of death*—

(*a*) If the member leaves any dependants wholly dependent upon his earnings —the sum of three thousand pounds and, in addition, an amount of one hundred pounds in respect of each child who, being a dependant under the age of sixteen years at the date of either the injury or death of the member, was at the date of the injury wholly or mainly dependent upon the earnings of the member.

(*b*) Provision also exists for payment of reasonable and proportionate compensation where the member leaves dependants partly dependent upon his earnings.

Appendix A—*continued.*

4. *In cases of total incapacity*—

(*a*) Compensation payable to an adult member is ten pounds per week during his incapacity, and, in addition, the sum of—

(i) Two pounds ten shillings in respect of—

(1) the wife of the member, if she was married to the member at the date of the injury and is wholly or mainly dependent upon his earnings; or

(2) if he has no wife, or if compensation is not payable in respect of his wife—one female, over the age of sixteen years, who is wholly or mainly dependent upon the earnings of the member and was, at the date of the injury, a member of his family or caring for a child who was at that date, and is, under the age of sixteen years and wholly or mainly dependent upon the earnings of the member; and

(ii) One pound two shillings and sixpence in respect of each child, born before or after the date of the injury, who, not being a child of a marriage contracted, or an ex-nuptial relationship formed, after the date of the injury, is under the age of sixteen years and wholly or mainly dependent upon the earnings of the member.

(*b*) Compensation payable to members under 21 years of age who are not in receipt of adult rates of pay is seven pounds five shillings per week.

(*c*) A member is not entitled to weekly payments whilst he continues to receive his naval pay. In addition, any moneys he receives from Commonwealth sources in respect of the incapacity, e.g., Social Services pension or the Commonwealth portion of D.F.R.B. fund pension, will be deducted from the weekly compensation entitlement. In any case a member cannot receive weekly compensation payment which exceeds his rate of pay (as varied) at the date of injury.

(*d*) In the cases of total and permanent incapacity no lump sum is payable but weekly payments continue indefinitely.

5. *In cases of partial incapacity*—

(*a*) The compensation payable will be the amount by which the pay the member earns or is able to earn is less than his naval pay (as varied) at the date of injury; the maximum payable is ten pounds per week.

(*b*) In cases of partial incapacity liability is limited to three thousand pounds but the Commonwealth, with the member's consent, can redeem its liability to make weekly payments by payment of a lump sum.

Appendix B.

THE THIRD SCHEDULE.

Compensation for Specified Injuries—

Nature of Injury.	*Amount Payable.* £	*s.*	*d.*
Loss of both eyes	3,000	0	0
Loss of an only useful eye, the other being blind or absent	3,000	0	0
Loss of one eye, with serious diminution of the sight of the other	2,250	0	0
Loss of one eye	1,200	0	0
Loss of hearing	2,100	0	0
Complete deafness of one ear	600	0	0
Loss of both hands	3,000	0	0
Loss of right arm or greater part of right arm	2,400	0	0
Loss of left arm or greater part of left arm	2,160	0	0
Loss of lower part of right arm, right hand or five fingers of right hand	2,100	0	0
Loss of lower part of left arm, left hand or five fingers of left hand	1,890	0	0
Loss of right thumb	900	0	0
Loss of left thumb	810	0	0
Loss of right forefinger	600	0	0
Loss of left forefinger	540	0	0
Loss of right middle finger	480	0	0
Loss of left middle finger	450	0	0
Loss of right ring finger	420	0	0
Loss of left ring finger	390	0	0
Loss of right little finger	390	0	0
Loss of left little finger	360	0	0
Loss of total movement of joint of right thumb	420	0	0
Loss of total movement of joint of left thumb	390	0	0
Loss of distal phalanx or joint of right thumb	480	0	0
Loss of distal phalanx or joint of left thumb	450	0	0
Loss of portion of terminal segment of right thumb involving one-third of its flexor surface without loss of distal phalanx or joint	420	0	0
Loss of portion of terminal segment of left thumb involving one-third of its flexor surface without loss of distal phalanx or joint	390	0	0
Loss of two phalanges or joints of right forefinger	360	0	0
Loss of two phalanges or joints of left forefinger	330	0	0
Loss of two phalanges or joints of right middle or ring finger	330	0	0
Loss of two phalanges or joints of left middle or ring finger	300	0	0
Loss of two phalanges or joints of right little finger	300	0	0
Loss of two phalanges or joints of left little finger	270	0	0
Loss of distal phalanx or joint of right forefinger	300	0	0
Loss of distal phalanx or joint of left forefinger	270	0	0
Loss of distal phalanx or joint of other finger of right hand	240	0	0
Loss of distal phalanx or joint of other finger of left hand	216	0	0
Loss of hand and foot	3,000	0	0
Loss of both feet	3,000	0	0
Loss of leg above the knee	2,250	0	0
Loss of leg below knee	1,950	0	0
Loss of foot	1,800	0	0
Loss of great toe	600	0	0

Schedule B—*continued.*

Nature of Injury.	*Amount Payable.* £	*s.*	*d.*
Loss of any other toe	240	0	0
Loss of two phalanges or joints of any other toe	192	0	0
Loss of phalanx or joint of great toe	300	0	0
Loss of phalanx or joint of any other toe	180	0	0

Note.—If an employee habitually uses his left hand and arm to perform work usually done with the right hand and arm read " left " for " right " *and* " right " for " left " with all injuries relating to the hand and arm.

PARTIAL INCAPACITY FOR WORK.

4.—Paragraph 1 (*c*) of the First Schedule to the Act provides for payment of compensation in respect of partial incapacity and the Medical Report is used when determining the weekly rate of compensation payable.

(Sec. 125/1/10.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

10003/60.—2

REGISTRAR

FOR OFFICIAL USE ONLY. C.N.O. 1031/60.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
13th December, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

9832/60.

UNCLASSIFIED.

1031.—Advancement—Syllabuses for the Examination in Seamanship of Candidates for Leading Seaman and Petty Officer.

The syllabuses for the examination in Seamanship of candidates for Leading Seaman and Petty Officer have been revised to bring them up-to-date with current practice in the Fleet. At the same time the opportunity has been taken to standardize the marking system. The new syllabuses and marking system are to be brought into force on 1st January, 1961.

2. The standard marking system to be introduced will enable a specific pass mark to be retained for record purposes. It will still allow for variations in standards which may be necessary from time to time, but it avoids the need to alter History Sheets when standards are varied.

3. The new marking system is to be explained to candidates preparing for Seamanship Boards. The variable marking scale with a fixed pass mark is to be used, and the following is an explanation of it—

> " A steady pass mark is set (usually at 50 per cent.) and the marking scale is adjusted so that the candidate who achieves the necessary standard will pass, and the others will fail. For example, if a subject is worth 40 marks and it is decided to ask 50 questions to cover the syllabus and that a candidate needs to get 40 of these right to be acceptable, all that is needed is to deduct 2 marks for each incorrect answer. If at any time it is desired to alter the standard all that is necessary is to amend the penalty scale."

4. Revised questionnaires for the examination for Leading Seaman and Petty Officer will be distributed as follows—

FOCAF	3
FOICEA	4
CSTFND	2
NOICNA	2
NOIC WA	2
NOIC VIC	2
NOIC NG	2
NOIC Q'LD	1
NOIC SA	1
NOIC TAS.	1
H.M.A.S. MELBOURNE	3
CAPTAIN D	1
CAPTAIN F	1
DESTROYERS	1 each
FRIGATES	1 each
NAVY OFFICE (DMT)	1
(DTSR)	1

5. Captains are to make an officer responsible for the safe custody of the questionnaires between Seamanship Boards and to ensure that the questionnaires are not used as the basis of Higher Rates training.

6. When reprinted, blank spaces will be provided to record subjects and marks in all History Sheets. In the interim History Sheets are to be amended as necessary.

7. A.B.R. 10 will be amended.

8. Navy Order 1055 of 1959 is hereby cancelled.

Appendix A.

SYLLABUS FOR EXAMINATION OF ABLE SEAMAN FOR LEADING SEAMAN.

Section 1—*Ability to Take Charge.*

(*a*) The examination by the Board will consist of tests of candidate's ability to take charge. Among suitable tasks are the following—

(i) Squad Drill and taking a class in P.T.

(ii) Taking charge of a party to deal with an A.B.C.D. problem. (Ability to take charge is to be assessed here and not A.B.C.D. knowledge. Tasks should be set which do not overlap with the practical sections of the A.B.C.D. Examination in Section 2.)

(iii) Taking charge of a party for a small evolution.

Note.—To avoid these tasks becoming stereotyped, the Presidents of Boards are to ensure that the evolutions to be carried out are suitable. Equal emphasis should be placed on the tasks chosen and Squad Drill should not be accepted as the principal criterion.

(*b*) Marks are not to be given in Section 1, but candidates are to be assessed as follows—

A—Very Good.
B—Good.
C—Fair.
D—Borderline.
E—Fail.

Note.—On completion of the individual parts of this section, examining officers are to compare assessments. If a candidate receives one " E " or two or more " D's " he is to be failed.

(*c*) Candidates for Leading Seaman should not be expected to possess the ability to take charge of a confirmed Leading Seaman. Due allowance must be made for this to be developed with practice as a Leading Seaman.

Section 2.—*Professional Knowledge.*

In Section 2 the knowledge required of candidates in practical subjects is primarily that which they can have reasonably acquired in the type of ship in which they are serving or, if serving ashore, in which they were last serving.

1. *Rigging*—(Rope, Hawsers and Rigging).

A knowledge of and practical work in—

The contents of Manual of Seamanship, Volume I., Chapter V., and VI. (excluding pages 160 to 170).

The following sections of the Manual of Seamanship, Volume II., Chapter V., VI., and XV.—

Chapter V. (i) Seizings.
(ii) Worming, Parcelling and Serving.
(iii) Splicing wire rope.
(iv) Hawsers.

Chapter VI. Miscellaneous rigging; the following sub-sections only:
Rigging Warrants, Dressing Lines,
Guardrails, Boats Booms, Ladders,
Fenders, Stages.
Awnings.
Sailmaking (sewing and repair of canvas only).

APPENDIX A—*continued.*

Chapter XV. Maintenance of rigging, pages 518.
The gear required for transfer by light jackstay and the warship rigs for fuelling at sea (Manual of Seamanship, Volume II., Chapter XII.).

2. *Boatwork.*

(*a*) Capable of handling a whaler under oars and a power boat.

Note.—Presidents of Boards of Examination are to make the necessary arrangements for boats appropriate to the ships and establishments from whence the candidates are drawn, to be provided.

(*b*) Knowledge of—

(i) Manual of Seamanship, Volume I., Chapter VII.—" Ship's Boats ".
Note.—Omitting reference to Cutters.

(ii) Manual of Seamanship, Volume II., Chapter VII.—" Boatwork ". Pages 241–271, 295–318, 341–343, 346, 350–352.

(iii) Manual of Seamanship, Volume II., Chapter VIII.—" Life Saving Appliances ". Pages 353–365, page 371, and B.R. 1977 (1) " Operation Handbook for 20-man Inflatable Life Raft ".
(Knowledge of Maintenance of I.L.R.'s is not required.)

(iv) Sufficient knowledge of the following to be coxswain of a boat:—Compass lead and line, chart-reading, buoyage (basic colours and shapes only of Port and Starboard hand, Middle Channel, Middle Ground and Wreck-buoys), running a transit, Manual of Seamanship, Volume I, Chapters IX., XI. and XII., and Volume II., page 673.

3. *Rule of Road.*

A practical knowledge of the Regulations for Preventing Collisions at Sea (1948) so as to ensure that the candidate could be entrusted, as coxswain, with the safe navigation of ship's boats.

Reference: Queen's Regulations and Admiralty Instructions, Chapter 35; Manual of Navigation, Volume I., Chapter XV.; Manual of Seamanship, Volume II., Appendix IV.

4. *Anchorwork.*

(*a*) A knowledge of the Manual of Seamanship, Volume I., Chapter VIII.

(*b*) A knowledge of the Manual of Seamanship, Volume II., Chapter IX., pages 375 to 394 (anchors, chain cable; cable lockers, cable gear, capstan, cable holders and windlasses), pages 400 to 405. (Terms, anchoring, shortening in, weighing single anchor, coming to and slipping from a buoy, precautions in bad weather.)

(*c*) To be able to rig and lay a danbuoy. (Manual of Seamanship, Volume II., pages 451 to 453.)

5. *General Duties.*

To know the general duties of a Leading Seaman.

Part 1.—*Messing and Action Messing*

(*a*) Outline knowledge of victualling and the issue of provisions.

(*b*) Outline knowledge of Action Messing.

APPENDIX A—*continued.*

Part 2.—*Duties of Quartermaster and Ceremonial.*

(*a*) Quartermaster at sea and in harbour; the use of the Boatswain's Call and knowledge of sea and harbour routines and organization. (Manual of Seamanship, Volume I., Chapters IV. and X.; Volume II., Chapter IV., pages 58–74 and Chapter XXVII., pages 731–736.)

(*b*) Writing up Deck Log, Barometer and Thermometers. Writing up the Deck Log and reading Aneroid Barometer, Barograph, Thermometer and Hygrometer. (Manual of Seamanship, Volume II., Chapter XXV., pages 688–689, and Fig. 394, Chapter XXVII., pages 731–736 and front cover of log.)

(*c*) Ceremonial. A knowledge of—

(i) Manual of Seamanship, Volume I., Chapter XIV.

(ii) The following Sections of Manual of Seamanship, Volume II., Chapter XVII. Wearing of Colours; Piping the Side; Ceremonial Receptions; Salutes between Ships; Ceremonial in boats.

(iii) Marks of Respect, and Ranks of Officers (B.R. 1938—Naval Ratings' Handbook, Chapter I.). Section 4 and Fig. 2.

Part 3.—*Ship Husbandry.*

(*a*) Outline knowledge of the issue of Naval Stores.

(*b*) Care and maintenance of stores and portable fittings in part of ship.

(*c*) Paint and Painting. (Reference 1 of Painting Instructions.)

(*d*) Elements of planned maintenance.

(*e*) Cleaning and painting gear provided in the Service.

(*f*) Use of hand operated powered tools for ship husbandry.

(*g*) Duties of 2nd Captain of Top.

Part 4.—*Duties of Leading Hand.*

(*a*) Duties and privileges of Leading Ratings. (Q.R. and A.I. Article 1854.)

(*b*) Leading Hand of the Mess.

(*c*) Responsibilities when in charge of a patrol or escort. (Q.R. and A.I. Articles 2082 and 3222.)

6. *Signals.*

(*a*) To be able to read and decode any boat signal with the aid of the Minor Landing Craft and Boats Signal Book.

(*b*) To be able to switch on and operate a current type of portable radio set, and to be able to change the batteries of this set.

(*c*) Have a knowledge of the Phonetic Alphabet and elementary voice procedure.

7. *A.B.C.D.*

(*a*) *Damage Control*—

(i) Organization—to include—location of Control Centres (H.Q.1, H.Q.2, E.P.1, E.P.2, and Section Bases); State Boards in Control Centres; Personnel; Stationing and duties.

(ii) 1950 System of Markings.

(iii) Watertight Integrity—nature and significance of markings.

(iv) D.C. States of Readiness.

APPENDIX A—*continued.*

(v) Location of D.C. and Firefighting equipments.
(vi) Emergency Lighting.
(vii) D.C. Communications.
(viii) Practical use of Fire Fighting equipment including—
Principles of extinction.
Fire Fighting methods.
Fire Fighting Installations and Appliances.
Breathing Apparatus.
Protective Clothing.
Reduction of Fire Hazards.
(ix) Simple damage control including zones of damage, types of damage and countermeasures.
(x) Elementary knowledge of ventilation systems.

(*b*) *Chemical Warfare*—
(i) War and accidental gases.
(ii) Anti-Gas Respirator—method of donning, care and maintenance.
(iii) Protective clothing.
(iv) Personal cleansing.
(v) Duties of Gas Sentries, elementary knowledge of methods of detection.
(vi) Decontamination.

(*c*) *Atomic Warfare*—
(i) Types of explosion.
(ii) Radiation Hazard, elementary knowledge of Radiation Instruments including practical use of Quartz Fibre and Dosimeter.
(iii) Monitoring.
(iv) Decontamination.
(v) A.B.C. Organization—
States of Readiness.
Markings.
Personnel.
Collective protection.

(*d*) *First Aid*—
A basic knowledge of first aid.

APPENDIX B.

SYLLABUS FOR EXAMINATION OF LEADING SEAMAN FOR PETTY OFFICER.

Section 1.—*Ability to Take Charge.*

(*a*) The examination by the Board will consist of tests of the candidate's ability to take charge. Amongst suitable tasks are the following—

(i) Instructing a squad in any section of Part one of B.R. 1834. (R.N. Handbook of Parade and Rifle Drill.)
(ii) Taking charge in preparing for or dealing with an A.B.C.D. Problem. (Ability to take charge is to be assessed here and not A.B.C.D. knowledge. Tasks should be set which do not overlap with the practical Sections of the A.B.C.D. Examination in Section 2.)

APPENDIX B—*continued.*

(iii) Telling off a party of men for an evolution and carrying it out.

Note.—To avoid these tasks becoming stereotyped, the Presidents of Boards are to ensure that the evolutions to be carried out are suitable. Equal emphasis should be placed on the tasks chosen and Squad Drill should not be accepted as the principal criterion.

(*b*) Marks are not to be given in Section 1, but candidates are to be assessed as follows—

A—Very Good.
B—Good.
C—Fair.
D—Borderline.
E—Fail.

Note.—On completion of the individual parts of this section, examining officers are to compare assessments. If a candidate receives one " E " or two or more " D's " he is to be failed.

Section 2.—*Professional Knowledge.*

In Section 2 the knowledge required of candidates should cover any type of ship and be such that they are able to instruct in practical aspects.

1. *Rigging.* (Rope, Hawsers and Rigging.)

A knowledge of—

(*a*) Manual of Seamanship, Volume I., Chapter V. and VI. (excluding pages 160 to 170).
(*b*) Manual of Seamanship, Volume II., Chapter V., VI., and VII., pages 249 to 255.
(*c*) Manual of Seamanship, Volume II., Chapter XII.
(*d*) Manual of Seamanship, Volume II., Chapter XV., pages 518 to 519.

Note.—In these references particular importance is attached to the following—

(i) All knots and splices, bends, hitches and other practical rigging in normal use.
(ii) Types and uses of all hawsers. " Bringing to " and tending wire.
(iii) Calculation of working and breaking strains of wire rope and cordage.
(iv) Different types of tackles, their uses, and how to fit them.
(v) Boats falls; fittings, reeving and securing. All davit fittings.
(vi) Care and maintenance of all hawsers and blocks.
(vii) Warship rigs for all replenishment at sea.
(viii) Repair of canvas gear and elementary sailmaking.
(ix) Awnings.

2. *Boatwork.*

(*a*) The candidate is to be examined practically to assess his professional knowledge as coxswain of a boat under oars and power, and in particular, must be capable of instructing an inexperienced boat's crew (either oars or power).

Note.—The Presidents of Boards of Examination are to make the necessary arrangements for boats appropriate to the ships and establishments from whence the candidates are drawn, to be provided.

APPENDIX B—*continued.*

(*b*) Hoisting, lowering, and securing a seaboat and instructing in these duties.

(*c*) A good knowledge of—

(i) Manual of Seamanship, Volume I., Chapter VII., " Ship's Boats ", Chapter XI. " Sounding by Lead Line " and Chapter XII. " Buoyage and Lights ".

(ii) Manual of Seamanship, Volume II., Chapter VII., " Boatwork ", pages 241–272, 279, and Figures 185, 295–333, 341–343 and 345–352.

(*d*) Manual of Seamanship, Volume II., Chapter VIII., " Life Saving Appliances ", pages 353–365 and 271. B.R. 1877 (1) " Operational Handbook for 20-Man Inflatable Life Raft ". (Knowledge of Maintenance of I.L.R.'s is not required.)

(*e*) Compass, deviation and variation, Manual of Seamanship, Volume II., Chapter XX., pages 595–603.

(*f*) Measurement of speed and streaming a log. (Hand log to be disregarded.) Manual of Seamanship, Volume II., Chapter XXI., pages 608–613.

(*g*) Latitude and Longitude; the more general " Conventional signs " used on charts. Manual of Seamanship, Volume I., Chapter XXIII., pages 632–634 and Figures 631–634.

Note.—Instructions should be carried out from Chart 5011.

(*h*) Tides and Tidal Streams, high and low water, the use of Part I of the Admiralty Tide Tables. Springs and Neaps; tidal information on charts. Manual of seamanship, Volume II., Chapter XXIV.

(*i*) Laying off courses and bearings; allowance for tidal streams; position lines; transits, leading marks and clearing marks. Manual of Seamanship, Volume II., Chapter XXV., pages 665–676.

3. *Anchorwork.*

The candidate must be able to take charge of an anchor watch and instruct the watch in their duties. He must have a knowledge of—

(*a*) Manual of Seamanship, Volume I., Chapter VIII.

(*b*) Manual of Seamanship, Volume II., Chapter IX.

(*c*) Laying out of hawsers and light anchors, towing and taking in tow, target work Twin floats and Larne Targets, Pattern 2 and high speed targets only, Manual of Seamanship, Volume II., Chapter X., pages 415 to 417 and 420 to 428.

(*d*) Rigging, laying out and recovering danbuoys. Manual of Seamanship, Volume II., pages 451 to 453.

4. *Rule of Road.*

A practical knowledge of the Regulations for Preventing Collision at Sea (1948) so as to ensure that the candidate could be entrusted, as coxswain, with the safe navigation of ship's boats and small craft such as General Purpose Vessels and Motor Stores Lighters.

Reference: Queen's Regulation and Admiralty Instructions Chapter 35; Manual of Navigation, Volume I., Chapter XV., and Manual of Seamanship, Volume II., Appendix IV.

5. *General Duties.*

APPENDIX B—*continued.*

Part 1.—Messing and Action Messing.

(*a*) Outline knowledge of victualling and the issue of provisions.

(*b*) Outline knowledge of Action Messing.

Part 2.—Duties of Quartermaster and Ceremonial.

(*a*) Quartermaster at sea and in harbour; the use of the Boatswain's Call and knowledge of sea harbour routines and organization. (Manual of Seamanship, Volume I., Chapters IV. and X.; Volume II., Chapter IV., pages 58–80 and Chapter XXVII., pages 731–736.) A detailed knowledge of gyro and steering failures and action to be taken. (Manual of Seamanship, Volume II., Chapter XIX.)

(*b*) Ceremonial. A knowledge of—

(i) Manual of Seamanship, Volume I., Chapter XIV., and Volume II., Chapter XVII.

(ii) Marks of Respect, and Ranks of Officers (B.R. 1938—Naval Rating's Handbook, Chapter K, Section 4 and Figures 2).

(iii) Ratings Uniform Regulations (Appendix to the Navy List—Sections I., II., IV., V. and VI.).

(iv) The following sections of Manual of Seamanship, Volume II., Chapter XVII. Wearing of Colours; Piping the Side; Ceremonial Receptions; Salutes between ships; Ceremonial in boats.

Part 3.—Ship Husbandry.

(*a*) Outline knowledge of issue of Naval Stores.

(*b*) Care and maintenance of stores and portable fittings in part of ship.

(*c*) Paint and painting (reference part 1 of Painting Instructions).

(*d*) Elements of Planned Maintenance.

(*e*) Cleaning and painting gear provided in the Service.

(*f*) Use of hand operated powered tools for ship husbandry.

(*g*) Duties of Captain of Top.

Part 4.—Petty Officer of the Watch of Day, Duty Petty Officer, &c.

At sea and in harbour; being fully conversant with the procedure for dealing with requests, complaints and defaulters. (Q.R. and A.I. Articles 1850, 1851 and 3229.)

Part 5.—Regulations, Patrol and Sentry Duties.

Responsibilities when in charge of a patrol or escort. (Q.R. and A.I. Articles 2082, 3222.)

Part 6.—Duties of Petty Officer.

Duties and privileges of Petty Officers. (Q.R. and A.I. Article 1853.)

6. *Signals.*

(*a*) To be able to read and decode any boat signal with the aid of the Minor Landing Craft and Boats Signal Book.

(*b*) To be able to switch on and operate a current type of portable radio set, and be able to change the batteries of this set.

(*c*) Have a knowledge of the Phonetic Alphabet and elementary voice procedure.

APPENDIX B—*continued.*

7. *A.B.C.D.*

(*a*) *Damage Control*—

(i) Organization—to include—location of Control Centres (H.Q.1, H.Q.2, E.P.1, E.P.2, and Section Bases); State Boards in Control Centre; Personnel, Stationing and duties.

(ii) 1950 System of Marking.

(iii) Watertight Integrity—nature and significance of marking.

(iv) D.C. States of Readiness.

(v) Location of D.C. and Firefighting equipments.

(vi) Emergency Lighting.

(vii) D.C. Communications.

(viii) Practical use of Firefighting equipment including—

(1) Principles of Extinction.
(2) Fire Fighting Methods.
(3) Fire Fighting Installations and Appliances.
(4) Breathing Apparatus.
(5) Protective Clothing.
(6) Reduction of Fire Hazards.

(ix) Simple Damage Control including zones of damage, types of damage and counter-measures.

(x) Elementary knowledge of ventilation systems.

(xi) Elementary Stability—

(1) Factors affecting stability.
(2) List of Roll.
(3) Damage of free surface and counter-measures.

(xii) Magazine flooding, and Spraying arrangements.

(xiii) Isolation of Fire-main.

(xiv) Rigging of Portable Pumps.

(xv) Shoring—purpose, principles and methods.

(xvi) Running emergency electrical leads.

(*b*) *Biological and Chemical Warfare*—

(i) War and accidental gases.

(ii) Anti Gas Respirator—method of donning, care and maintenance.

(iii) Protective Clothing.

(iv) Personnel Cleaning.

(v) Duties of Gas Sentries, Elementary knowledge of methods of detection.

(vi) Decontamination.

(vii) Elementary knowledge of Biological Warfare.

(viii) Detailed knowledge of methods of Chemical Warfare. Detection and practical use of detection instruments and equipment.

APPENDIX B—*continued.*

(*c*) *Atomic Warfare*—

(i) Types of explosions.

(ii) Radiation Hazards, Elementary knowledge of Radiation Instruments including practical use of Quartz Fibre and Dosimeter.

(iii) Monitoring.

(iv) Decontamination.

(v) A.B.C. Organization—

States of Readiness.
Markings.
Personnel.
Collective Protection.

(*d*) *First Aid*—

A basic knowledge of first aid.

(HPB 311/3/6.)

(*Navy Order* 1055 *of* 1959.)

By Authority: A. J. ARTHUR, Commonwealth Government Printer, Canberra.

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C.N.O.'s 1032-1052/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
20th December, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

9967/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

1032.—H.M.A.S. BASS—Commissioning.

H.M.A.S. BASS commissioned on Tuesday, 15th November, 1960, under the command of Lieutenant G. T. Kennedy, R.A.N.

2. H.M.A.S. BASS is a tender to H.M.A.S. KUTTABUL for accounting purposes.

(HNB 1436/1/36.)

Section 2.
PERSONNEL.

UNCLASSIFIED.

1033.—Compensation for Loss of Uniform Clothing by Theft.

Claims are occasionally made by Naval personnel for compensation for the loss by theft of articles of kit. It is general policy that the Commonwealth does not act as the insurer of the personal belongings of its servants or tenants and the possibility of loss or damage due to fire, burgulary or accident, is a normal risk applicable to members in common with the community generally. Each member is therefore responsible for providing any protection he desires against such loss or damage.

2. Compensation cannot be approved under any circumstances for payment to members who sustain loss of kit by theft.

3. Instruction 177 of Interim Pay Instructions will be amended in due course.

(DV 930/51/56.)

UNCLASSIFIED.

1034.—Programme of Educational Tests in the R.A.N.—1961.

The following is the programme for Educational Tests in the Royal Australian Navy during 1961—

(*a*) *Educational Test* 1—

Tuesday, 21st February.
Tuesday, 13th June.
Tuesday, 10th October.

(*b*) *Higher Educational Test*—

Monday, 10th April ..	Afternoon—English Expression.
Tuesday, 11th April ..	Forenoon—General Knowledge.
	Afternoon—English History.
Wednesday, 12th April ..	Forenoon—Geography.
	Afternoon—Navigation.
Thursday, 13th April ..	Forenoon—Practical Mathematics.
	Afternoon—Mechanics.
Friday, 14th April ..	Forenoon—Magnetism and Electricity.
Monday, 18th September ..	Afternoon—English Expression.

Cancelled 850/61

Tuesday, 19th September ..	Forenoon—General Knowledge.
	Afternoon—English History.
Wednesday, 20th September	Forenoon—Geography.
	Afternoon—Navigation.
Thursday, 21st September ..	Forenoon, Practical Mathematics.
	Afternoon—Mechanics.
Friday, 22nd September ..	Forenoon—Magnetism and Electricity.

2. This order will be reprinted for posting on notice boards.

3. Navy Order 47 of 1960 is hereby cancelled.

(HPB 325/1/25.)

(*Navy Order* 47 *of* 1960.)

UNCLASSIFIED.

1035.—R.A.N. Central Canteens Fund—Annual Report.

Canteen sales in the R.A.N. now total more than £900,000 a year and it is the accepted principle that the profits from these sales shall be used to provide amenities for the customers. There are, however, three distinct types of amenity, namely—

(*a*) Those peculiar to the ship (sporting gear, hire of TV sets, ship's company dances, &c.).

(*b*) Those for the benefit of Naval ratings generally (short leave facilities ashore, Command sports meetings, &c.).

(*c*) R.A.N. Relief Trust Fund, whose main business now consists of making interest free housing and furniture loans.

2. Items in paragraph 1 (*a*) can obviously best be provided directly from the ship and canteen profits are channelled into the ship's fund for this purpose. Items in paragraph 1 (*b*), however, must be administered by a central authority, the R.A.N. Central Canteens Board, but in order that the Board is aware of the wishes of ships and establishments, a Central Canteens Committee is formed. This committee comprises representatives from all areas and commands and meets twice a year.

3. The R.A.N. Central Canteens Fund derives its income from a levy of 3½ per cent. imposed on total sales from all canteens. This provides some £30,000 annually, from which £10,000 is at present transferred to the R.A.N. Relief Trust Fund (paragraph 1 (*c*) above). A small income is also derived from interest on money at credit in the Fund's Commonwealth Savings Bank account and from a small holding of Commonwealth Bonds. The division of canteen profits, so that the best value can be obtained from them for the benefit of all concerned, is the aim of the formula used.

4. The accounts of the R.A.N. Central Canteens Fund for the year ended 31st July, 1960, are attached as appendix to this order. The following remarks are made in amplification of these accounts—

(*a*) One-third of the year's income went to the R.A.N. Relief Trust Fund, as the annual contribution. Another third was used in constructing married quarters at R.N. House, Sydney. These quarters, with their separate entrance, have proved very popular and are to be extended.

(*b*) The grant to LEEUWIN was the cancellation of the ship's canteen debt. It was decided that this debt was an unfair burden on the canteen on its re-establishment, with the commencement of junior rates training.

(*c*) Grants to sports funds for inter-service sports meetings are regular commitments. These grants are usually supplemented when the R.A.N. is the host service.

(*d*) The grant to the White Ensign Club, Melbourne, is at present fixed at £600 annually.

(*e*) The Central Canteens Fund pays insurance premiums on all canteen stores shipped to TARANGAU and MELVILLE. These charges are additional to expenses usually to be met by ships' canteens.

(*f*) The item "Loans to Canteens, &c." £56,650, contains the following. (These loans are of course interest free.)

(i) An advance of £20,000 to A.S.C.O. It is part of the integration agreement that an amount equal to one month's purchases by Naval Canteens shall be lodged with A.S.C.O. These purchases, in fact, amount to some £50,000 a month, so that it will be necessary to increase the amount at present lodged. The advance is made because A.S.C.O. supply goods on monthly terms to Naval Canteens but pass on discounts received from traders for payment by themselves in cash or, in some cases, on terms of seven days. This advance, therefore, represents an investment of Central Canteen Funds for the benefit of Naval Canteens generally.

(ii) An advance of £20,000 to the R.A.N. Relief Trust Fund. So that this fund could keep up with the increasing demand for housing and furniture loans it was paid a three years advance of its annual subsidy. (£10,000 a year—a total of £30,000.) It has been possible to reduce this to its present level and it will be further reduced in November, 1960, by an amount of £5,000.

(iii) £4,500 to the Editorial Committee of "Navy News".

(iv) £1,350 to the R.A.N. Ski Club.

(v) £10,800 advances to enable newly formed canteens and welfare funds to become established.

5. This order will be reprinted for posting on notice boards.

APPENDIX.

R.A.N. CENTRAL CANTEENS BOARD.

REVENUE ACCOUNT FOR YEAR ENDED 31ST JULY, 1960.

	£	s.	d.
Levy on Sales in Service System Canteens including Chief Petty Officers and Petty Officers Canteens ..	30,543	6	8
Australian Army Canteens Service	11	6	0
Interest	238	8	9
	30,793	1	5

	£	s.	d.
Grants, Relief Trust Fund	10,000	0	0
Grant LEEUWIN	260	4	5
Recruits Sports Fund F.N.D.	260	5	0
Inter-Service Sports Fund MELVILLE and Vic. Command	250	0	0
" Navy News "	30	0	0
Sporting Gear, HARMAN and MORETON ..	62	13	10
Royal Naval House—Sydney—Married Quarter ..	10,500	0	0
White Ensign Club, Melbourne..	600	0	0
Freight on Films	828	0	9
Freight on Stationery	0	13	11
Insurance TARANGAU and MELVILLE ..	136	0	10
Depreciation and Equipment	14	0	0
Write Down—Souvenirs of Australia	14	19	9
Stationery	84	10	9
Audit Fees	31	10	0
Surplus Income	7,720	2	2
	30,793	1	5

BALANCE-SHEET AS AT 31ST JULY, 1960.

(All amounts adjusted to nearest £1.)

	£	£
Accumulated Funds as at 31st July, 1959 ..	77,270	
Add Surplus Income to 31st July, 1960	7,720	
		84,990
		84,990

	£	£
Cash at Bank		25,853
Balance in Hand, Recreational Film Account		251
Loans to Canteens, &c.		56,650
Bonds (at cost)		2,130
Billiard Tables		3
Office Equipment	117	
Less Depreciation	14	
		103
		84,990

(Sgd.) O. E. WILLIAMS,
A/Supply Commander, R.A.N.,
Secretary.

WE CERTIFY that we have audited the books and accounts of the R.A.N. Central Canteens Board for the year ended 31st July, 1960, and in our opinion the above Revenue Account correctly sets forth the transactions for the period under review, and the Balance-Sheet is properly drawn up and is in accordance with the books. We have received all the information and explanations that we have required.

(Sgd.) GOODE, MORRIS & TONER,
Chartered Accountants,
340 Little Collins-street,
MELBOURNE, C.1.

(HPB 212/53/8.)

UNCLASSIFIED.

1036.—Rules for Leave.

The regulations regarding leave entitlements are contained in Navy Order 753 of 1960. The following instructions are issued in amplification of paragraph 25 of that order. These instructions are consequent upon the introduction of the twelve monthly operational cycle for ships, and are necessary to standardize leave organization.

Seagoing Ships.

2. (*a*) *General.*—Ratings remaining in a ship for further sea service after a long self maintenance period or a refit are to take leave as follows—

(i) During long self maintenance—10 days.

(ii) During refit—32 days.

(*b*) *Ships Returning from Strategic Reserve*—

(i) Those remaining in the ship are to take leave as in (*a*) above. arduous service leave being taken during a refit leave period,

(ii) Those proceeding on draft may take all leave due or defer such leave as is necessary to enable them to fit in with the leave pattern of the ship or establishment to which they are drafted.

(*c*) *Ships Proceeding to the Strategic Reserve.*—Advanced seasonal leave is to be taken when either—

(i) The period to be spent on the Far East Station would preclude the granting of leave in the normal cycle (Christmas and mid-year); or

(ii) The deferment of leave would accrue an amount of leave which could not all be taken in the subsequent normal leave cycle on return to the Australia Station.

(*d*) *Ships Operating on the Australia Station*—

(i) Those drafted to another ship or a shore establishment during the mid-year or Christmas period are to take all leave due. If drafted at other times they are to take leave in accordance with the leave cycle of the next ship or establishment.

(ii) When it is known that a rating will be drafted to an establishment after a ship's refit but prior to the establishment's Christmas leave period, leave may be deferred at the Captain's discretion during the refit period to allow fourteen days leave at Christmas.

Shore Establishments.

3. Ratings drafted from shore establishments—

(*a*) at the mid-year or Christmas period are to take all leave due.

(*b*) at other times are to take leave in accordance with the leave cycle of the next ship or shore establishments.

(*c*) to a ship taking advanced seasonal leave before proceeding to the Strategic Reserve are to take such leave in addition to the normal shore service leave due.

4. Where travel to a member's home town would involve more than 48 hours travelling time (including waiting time) the member may be granted fourteen days leave during a long self-maintenance period. The provisions of I.P.I. 212/1 (*f*) (i) should be fully understood.

5. The deferment of leave either beyond a leave period or leave year should only be granted in exceptional circumstances or to cover the situation in paragraph 2 (*d*) (ii) above. Such deferment will not entitle a member to more than the allowed scale of leave concession warrants in a leave year. When deferment of leave is granted Navy Office, Canberra, and the appropriate ship or establishment are to be informed.

(DMT 319/1/15.)

(*Navy Order* 753 *of* 1960.)

UNCLASSIFIED.

1037.—Uniform—Cloth Superfine (Australian) for Made-to-Measure Uniforms for Officers.

A superfine cloth of Australian manufacture, to be known as Cloth, Superfine (Australian) is now available, as an alternative to imported superfine cloth, for the making of made-to-measure uniforms for officers.

2. The cloth is invariably to be used for the manufacture of made-to-measure uniforms for R.A.N.R. officers and may also be taken up on repayment by R.A.N. and W.R.A.N. officers, at their option.

3. Uniforms made from this material may be purchased under the Period Contracts currently operating.

4. The prices to be charged for items of uniform made from cloth superfine (Australian) until 30th June, 1961, are as follows—

(*a*) *Made-to-Measure Uniforms for R.A.N. Officers.*

	Undress Coat.	*Mess Jacket.*	*Trousers Plain.*	*Waistcoat Mess Blue.*
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Melbourne—Commonwealth Government Clothing Factory—				
Midshipmen (gorget patches extra)	13 10 0	12 10 0	4 15 0	4 0 0
Sub-Lieutenant	15 16 0	14 16 0		
Lieutenant	16 19 0	15 19 0		
Lieutenant-Commander ..	17 16 0	16 16 0		
Commander	18 2 6	17 2 6		
Captain	19 5 6	18 5 6		
Commodore 2nd Class	18 2 6	17 2 6		
Commodore 1st Class	18 19 6	17 19 6		
Rear Admiral	18 19 6	17 19 6		
Vice-Admiral	20 4 6	19 4 6		

Note.—(i) Above prices include distinction cloth between lace where required.

(ii) The above prices are applicable to R.A.N.R.(S), R.A.N.R. and R.A.N.V.R. officers with the addition of 10s. per garment or per pair of shoulder straps for the addition of letter " R ". Where letters " SC " are added, additional cost is 15s. per pair.

	Made-to-Measure Uniforms for R.A.N. Officers. Undress Coat. £ s. d.	Trousers Plain. £ s. d.
Canberra—" Joseph " (G. Aloisi)—		
Sub-Lieutenant	19 16 6	8 17 4
Lieutenant	20 6 6	
Lieutenant-Commander	20 12 6	
Commander	22 1 6	
Captain	22 11 6	
Sydney—Evers and Cohen Pty. Ltd.—		
Cadet Midshipmen	11 4 0	4 18 7
Fremantle—Jackmans—		
	12 19 10	5 19 3

Cost of fixing gold lace to Undress Coat is as follows:—
Distinction cloth between lace—9d. per strip.

	Machine Sewn. £ s. d.	Hand Sewn. £ s. d.
Sub-Lieutenant	2 10 3	3 5 3
Lieutenant	3 12 10	4 7 10
Lieutenant-Commander	4 9 1	5 9 1
Commander	4 15 6	5 15 6
Captain	5 18 2	6 18 2

(b) Made-to-Measure Uniforms for W.R.A.N.S. Officers.

	Jacket.	Skirt.
Melbourne—Commonwealth Government Clothing Factory—		
Chief Officer	13 5 0	3 10 0
1st Officer		
2nd Officer		
3rd Officer		
Canberra—" Joseph " (G. Aloisi)—		
1st Officer	20 14 5	7 15 4
2nd Officer	20 4 5	
3rd Officer	19 14 5	
Sydney—Evers and Cohen Pty. Ltd.—		
Chief Officer	12 19 7	5 4 3
1st Officer		
2nd Officer		
3rd Officer		

5. The scale of prices for made-to-measure uniforms made from imported superfine cloth are promulgated in Navy Orders 757 and 760 of 1960.

(DV 917/80/23.)

(Navy Orders 757 and 760 of 1960.)

Section 3.
HULL, MACHINERY, EQUIPMENT AND STORES.

RESTRICTED.

1038.—Replenishment at Sea—6-in. Elbow Adaptor, Pattern 6023—Modification.

(*A.F.O.* 2181/1960.)

Defects have occurred whereby the union nut retaining ring of the female end of Pattern 6023 Elbows have become unscrewed from the Main Elbow casting.

2. As a short term preventive measure the elbows should be modified by the provision of 4 No. $\frac{5}{16}$-in. B.S.F. Set bolts generally in accordance with Navy Order Diagram issue 16/60.

3. Elbows in service should be modified by ship's staff.

4. Elbows in stock at dockyards and depots should be modified by dockyard authorities.

(DME 1623/51/9.)

UNCLASSIFIED.

1039.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2611/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service having reached the age limit—

Propellant lots and sub-lots affected.	*Type.*	*Nature of ammunition, &c., which may be involved.*
RNC 1010	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.)
RNC 1020		
RNC 1024		
RNC 1029		
RNC 1269XB	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 1274XB		
RNC 1286XB		
RNC 1411XC		
RNC 1145XA	SC 109	Q.F. 4.7-in.
RNC 1156XA		
RNC 3618XL		
RNC 1147XA	SC 048	Q.F. 4.7-in.; Q.F. 4-in.
RNC 1155XA	SC 150	Impulse torpedo
KA 1063	FNHP 022	Q.F. 40/60
KA 1065		
KA 1066		
KA 1068		
KA 1070		
KA 1078		
KA 1082		
KA 1085		
KA 1086		
KA 1089		
KA 1093		
KA 1097		

Propellant lots and sub-lots affected.	*Type.*	*Nature of ammunition, &c., which may be involved.*
SPDN 4381 ..		
SPDN 5965 ..		
SPDN 5990 ..		
SPDN 6024 ..		
SPDN 6031 ..		
SPDN 6032 ..		
SPDN 6069 ..		
SPND 6078 ..	FNHP 019–021 ..	Q.F. 40/60
SPDN 6081 ..		
SPDN 6113 ..		
SPDN 6120 ..		
SPDN 6138 ..		
SPDN 6146 ..		
SPDN 6148 ..		

Action to be taken by H.M.A. Ships, &c. Return to nearest N.A. Depot as early as practicable; if unable to comply within three months from the date of this order, report specially to Navy Office for instructions. N.M. and E.R., B.R. 862, Article 211 and N.C.R., B.R. 862A, Article 53, paragraphs 6, 7 and 9 refer.

Action to be taken at R.A.N.A. Depots Separate instructions have been issued.

(DW 729/57/55.)

RESTRICTED.

1040.—Guns (Other than Aircraft)—Q.F. 40/60, Marks 9, 10, 11 and N1 Series—Keys Extractor Spindle—Modification.

(*A.F.O.* 2614/1960.)

The following modification has been approved—

Gun .. .. .. Q.F. 40/60, Marks 9, 10, 11 and N1 Series.

Parts affected .. AT 272 KEY, extractor spindle, Mark 1.
AT 285 KEY, Mark 2, extractor spindle, Mark 2—Assembly.
AT 350 KEY, Mark N3, extractor spindle, Mark 2—Assembly.

Purpose .. .. To provide an easily visible mark on the key, removing and inserting extractor spindle, to line up with the side of the breech casing when the spindle is fully home, to ensure proper assembly of the extractor spindle.

Nature of modification Cut a groove $\frac{1}{16}$-in. wide x $\frac{1}{32}$-in. deep at $1\frac{5}{8}$-in. from face of major diameter at operating end of key. Fill in the groove with red paint or red wax.

Drawing .. .. None.

New parts required .. None.

By whom to be done H.M.A. ships and R.A.N. Armament Depots.

When to be done .. As soon as possible.

2. Schedule of Modifications, Part 1—
   Q.F. 40/60 Gun, Mark N1, and Accessories.
   Add Serial No. 43 (Part affected AT 272 KEY).
   Q.F. 40/60 Gun, Mark 9, and Accessories.
   Add Serial No. 31 (Parts affected AT 350 KEY; AT 285 KEY).
   Q.F. 40/60 Gun, Mark 10, and Accessories.
   Add Serial No. 43 (Part affected AT 350 KEY).
   Q.F. 40/60 Gun, Mark 11, and Accessories.
   Add Serial No. 34 (Parts affected AT 350 KEY; AT 285 KEY).

3. *R.A.N.A.D.'s only.*—This modification is to be applied to Mark N1/5 Guns.

(DAS 708/51/47.)

RESTRICTED.

1041.—A/S Weapons—A/S Mortar, Mark 10—CJ 038 Tool, Withdrawing Projectile—Modification.

(*A.F.O.* 2750/1960.)

The following modification has been approved—

Weapon .. .. A/S Mortar Mark 10.

Item affected .. CJ 038 TOOL, withdrawing Projectile.

Drawing No. .. UCW 20440/21.

Modification .. Torch retaining clips to be removed.

Reason .. .. Clips no longer required. In future the CJ 038 TOOL is to be used with a hand held torch—Joint Service No. 6230–105033.

By whom to be done Staff of H.M.A. ships.

When to be done .. First convenient opportunity.

R.A.N.A.D.'s only Stocks of CJ 038 TOOLS are to be modified before issue.

(DAS 707/51/53.)

UNCLASSIFIED.

1042.—Floor Covermgs—Linoleum—Cleaning and Polishing.

(*A.F.O.* 1674/1960.)

The cleaning and polishing of linoleum in H.M.A. ships and establishments is to be carried out in accordance with the following instructions.

Cleaning.

2. The floor should be swept free of dust and grit with a soft brush daily or as required. Surface dirt which will not brush off should be removed by using like Pattern E/8/862 detergent. Loose water should never be applied and floors that have been wiped over with a damped cloth should be throughly dried. Obstinate marks remaining should be removed by the careful use of blunt scraper or the finest grade steel wool. Cleaning powders, coarse abrasives, strong caustic soaps, &c., must not be used.

Polishing.

3. Normal floor polishes are to be used on all linoleums pending further investigation into a more suitable plastic polish than " Bourne " (withdrawn from service *vide* Navy Order 22 of 1959). Wax polish must be buffed either by hand or with a polishing machine at the time of its application. Wax emulsion polish dries with a semi-lustre but if desired it may be buffed to obtain a high gloss.

4. In general, wax polish should not be applied to linoleum treated with plastic polish. Where a general breakdown of plastic coating has occurred, there is no objection to the use of wax polishes for maintenance purposes.

5. Gum shellac is not to be used in H.M.A. ships or establishments for surfacing and colouring linoleum.

(DNAS 512/69/103.)

(*Navy Order* 22 *of* 1959.)

UNCLASSIFIED.

1043.—Naval Stores (Air), R.A.F. Vocabulary Section 28S—Introduction of Joint Service Catalogue Numbers.

(*A.F.O.* 2617/1960.)

The undermentioned reference numbers under Section 28S of the R.A.F. Vocabulary have been replaced by the Joint Service Catalogue Numbers shown—

Old Stores Ref. No.	*Joint Service Catalogue No.*
7596	999–2529
2121	999–2528
2757	999–5193
3422	999–5194

2. Stocks and records are to be adjusted accordingly. H.M.A. ships and establishments are to adjust their ledgers in accordance with A.B.R. 4, Article 1812 (g).

(DNAS 603/78/122.)

UNCLASSIFIED. — N.O. 556/62 is relevant

1044.—Naval Stores (General) (Class E, Group 3)—Automatic Water Activated Life Jacket, Type AN (D1)—Introduction and Allowances.

It has been decided to adopt the undermentioned lifejacket in the R.A.N. for use in the following roles—

(*a*) by Sweepdeck Personnel;
(*b*) by men working in exposed positions on the upper deck during Replenishment Operations;
(*c*) by men working over the side;
(*d*) by buoy jumpers; and
(*e*) by boats crews.

Class/ Group.	*Pattern No.*	*Description.*	*Ship's Accounting Classification.*
E3	N.P.	Automatic Water Activated Life Jacket, Type AN (D1) (Boom Man Life Jacket)	P.

2. Allowances of this item to H.M.A. ships will be as follows—

H.M.A.S. MELBOURNE	10 No. per ship.
Daring Class Ships	10 No. per ship.
Frigates (Type 12)	10 No. per ship.
Frigates (Type 15)	10 No. per ship.
Frigates (River Class)	5 No. per ship.
H.M.A.S. PALUMA	5 No. per ship.
H.M.A.S. KIMBLA	5 No. per ship.

3. The following ships spares will also be allowed as follows—

Ships Spares—

CO^2 Cylinders, 34 grm.	1 per jacket.
Expancel Charges	1 per jacket.
Resetting Tool	2 per ship.

4. Supply will be effected without demand by the SNSO Sydney when stocks are available; supply to ships under construction, restoring after refit, &c., will be arranged by the Storing Yard in the normal manner.

(DNAS 1275/58/17.)

UNCLASSIFIED.

1045.—Naval Stores (General) (Class F2B and F21)—Fuse Links, Fuse Carriers, Fuse Holders, &c.—Revised Rate Book Classification.

(*A.F.O.* 1787/1960.)

As from the date of this order, the undermentioned Fuse links, Fuse carriers, Fuse holders, &c., hitherto dealt with under Class F, Group 2B, Part 3, are to be transferred to Class F, Group 21 (N.A.T.O. Supply Classification Group 5920).

2. In accordance with article 1812 (*a*) of A.B.R. 4 H.M.A. ships and establishments are to amend existing ledger pages and records to show the revised Class/Group, re-grouping ledger pages as necessary.

3. Admiralty has advised that the relevant publications will be amended—

Pattern No.	*Description.*	*Pattern No.*	*Description.*
5504	Fuse link, 8 amp.	18506	Fuse link, 10 amp.
5504	Fuse link, 10 amp.	18507	Fuse link, 15 amp.
5504	Fuse link, 20 amp.	18508	Fuse link, 30 amp.
5504	Fuse link, 30 amp.	18509	Fuse link, 60 amp.
5505	Fuse link, 40 amp.	18510	Fuse link, 100 amp.
5505	Fuse link, 60 amp.	18511	Fuse link, 150 amp.
5505	Fuse link, 80 amp.	18512	Fuse link, 200 amp.
5541	Fuse link, 5 amp.	18513	Fuse link, 300 amp.
5542	Fuse link, 7 amp.	18514	Fuse link, 400 amp.
6773	Fuse link, 30 amp.	18523	Fuse link, 3 amp.
18502	Fuse link, 125 amp.	18525	Fuse link, 100 mA.
18503	Fuse link, 160 amp.	18526	Fuse link, 150 mA.
18504	Fuse link, 200 amp.	18527	Fuse link, 3 amp.
18505	Fuse link, 5 amp.	18528	Fuse link, 16 amp.

Pattern No.	Description.
19236	Fuse link, 600 amp.
19239	Fuse link, 6 amp.
19240	Fuse link, 10 amp.
19269	Fuse link, 5 amp.
19270	Fuse link, 10 amp.
19271	Fuse link, 15 amp.
19272	Fuse link, 20 amp.
19276	Fuse link, 600 amp.
19280	Fuse link, 2 amp.
19281	Fuse link, 5 amp.
19282	Fuse link, 10 amp.
19283	Fuse link, 15 amp.
19284	Fuse link, 30 amp.
19285	Fuse link, 60 amp.
19286	Fuse link, 100 amp.
19287	Fuse link, 160 amp.
19288	Fuse link, 200 amp.
19289	Fuse link, 300 amp.
19290	Fuse link, 400 amp.
19291	Fuse link, 500 amp.
19292	Fuse link, 600 amp.
20634	Fuse link, 1,150 amp.
20635	Fuse link, 950 amp.
20636	Fuse link, 600 amp.
26614	Fuse link.
9050	Fuse carrier.
9887	Fuse carrier.
18500	Fuse carrier.
18501	Fuse carrier.
18515	Fuse carrier.
18516	Fuse carrier.
18517	Fuse carrier.
18520	Fuse carrier.
19250	Fuse carrier.
19258	Fuse carrier.
19277	Fuse carrier.
19296	Fuse carrier.
19297	Fuse carrier.
18529	Fuse link, 40 amp.
18530	Fuse link, 90 amp.
18531	Fuse link, 60 mA.
18532	Fuse link, 400 amp.
18533	Fuse link, 500 amp.
18535	Fuse link, 15 amp.
19205	Fuse link, up to 250 amp.
19206	Fuse link, up to 250 amp.
19207	Fuse link, up to 250 amp.
19208	Fuse link, up to 250 amp.
19209	Fuse link, up to 250 amp.
19210	Fuse link, 500 amp.
19211	Fuse link, 500 amp.

Pattern No.	Description.
19212	Fuse link, 500 amp.
19217	Fuse link, 200 amp.
19218	Fuse link, 40 amp.
19219	Fuse link, 60 amp.
19220	Fuse link, 80 amp.
19221	Fuse link, 100 amp.
19222	Fuse link, 125 amp.
19223	Fuse link, 160 amp.
19224	Fuse link, 200 amp.
19225	Fuse link, 250 amp.
19226	Fuse link, 300 amp.
19227	Fuse link, 400 amp.
19228	Fuse link, 500 amp.
19229	Fuse link, 600 amp.
19230	Fuse link, 800 amp.
19248	Fuse carrier.
19299	Fuse carrier.
20696	Fuse carrier.
593A	Fuse holder.
6934	Fuse holder.
8602	Fuse holder.
9049	Fuse holder.
636	Fuse clip.
638	Fuse clip.
2661	Fuse clip.
6938	Fuse clip.
6939	Fuse clip.
6940	Fuse clip.
18519	Fuse contacts.
19300	Base contacts for fuse carriers.
19301	Base contacts for fuse carriers.
19155	Retaining Stop and clip for fuse clips.
19155	Retaining Stop and clip for fuse clips.
19156	Retaining Stop and clip for fuse clips.
19157	Retaining Stop and clip for fuse clips.
19160	Retaining Stop and clip for fuse clips.
19231	Adaptor for fuse links.
19232	Adaptor for fuse links.
19233	Adaptor for fuse links.
19234	Adaptor for fuse links.
19235	Adaptor for fuse links.
19241	Adaptor for fuse links.
19242	Adaptor for fuse links.

(DNAS 517/51/167.)

UNCLASSIFIED.

1046.—Naval Stores (General) (Class F2B and F28)—Heaters, Fires, Radiators, Elements, &c.—Revised Rate Book Classification.

(*A.F.O.* 2189/1960.)

As from the date of this order, the undermentioned Heaters, Fires, Radiators, Elements, &c., hitherto dealt with under Class F, Group 2B, Part 4, are to be transferred to Class F, Group 28 (N.A.T.O. Supply Classification Group 4250).

2. In accordance with article 1812 (*a*) of A.B.R. 4 H.M.A. ships and establishments are to amend existing ledger pages and records to show the revised Class/Group, regrouping ledger pages as necessary.

3. Admiralty has advised that the relevant publications will be amended—

Coils, spare for elements

Pattern	Pattern
4477	4626
4478	4753
4625	

Creda Bars

Pattern	Pattern
6246	6249

Elements

Pattern	Pattern	Pattern	Pattern
1861	5022	19519	19628
1862	5051	19520	19635
1944	7694	19535	19637
1945	7695	19537	19639
4413	8636	19539	19641
4419	8677	19541	19648
4474	19463	19555	19652
4474A	19464	19573	19653
4475	19476	19577	19655
4476	19487	19588	19661
4751	19488	19596	19664
4752	19497	19597	19666
5009	19498	19602	19671
5011	19508	19620	19672
5017	19509	19623	19693
5018	19517	19625	19695
5021	19518	19626	

Fires, Panel

Pattern	Pattern
19530	19538
19532	19540
19534	19554

Heaters, Immersion

Pattern	Pattern
19638	19575
19572	19576

Heaters

Pattern	*Pattern*	*Pattern*	*Pattern*
19425	19486	19559	19649
19457	19490	19559A	19680
19458	19492	19566	19681
19472	19494	19567	19683
19473	19496	19568	19686
19480	19521	19569	19687
19481	19522	19584	19688
19483	19557A	19629	

Radiators

Pattern	*Pattern*
5049	19622
7886	19634
19594	19636
19595	19640

Spirals

Pattern	*Pattern*
1868	19542
1869	19543
5053	19544
6248	19545
6250	19553
7696	19556
7697	19603
8638	19621
8678	

(DNAS 517/51/175.)

UNCLASSIFIED.

1047.—Naval Stores (Musical Instruments) (Class E, Group 4, Part 111)—Rod Tension Drums—Introduction.

(*A.F.O.* 1952/1960.)

The following rod tension drums, drum heads and drum sticks have been added to the Rate Book and Authorized List of Naval Stores under Class E, Group 4, Part III—

Pattern.	*Description.*
	Drums, rod tension:—
9968	side, Military.
6895	side sticks for.
6898	side heads, batter for.
6899	side head, snare, for.
9969	tenor.
6900	tenor head for.
9970	bass.
6901	bass head for.

2. These drums are more efficient and easier to maintain than the existing rope tension drums, Patterns 6649 (side) and 6666 (tenor) and 6638 (bass) which they will eventually replace.

3. Supply of the new drums will be made only as replacements for unserviceable drums.

4. The following accessories are suitable for use only with rope tension drums—

Pattern.	*Description.*
6645	Braces buff for Bass Drum.
6644	Cords for Bass Drum.
6640	Head for Bass Drum.
6847	Head batter for Military Side Drum.
6848	Head snare for Military Side Drum.
6657	Thumbscrew for Military Side Drum.
6662	Mount clamping for Military Side Drum.
6666	Slide Card for Military Side Drum.
6653	Braces, buff for Military Side and Tenor Drums.
6652	Cords for Military Side Drum.
6668	Head for Tenor Drums.

5. The remaining accessories detailed in the Rate Book for Naval Stores are inter-changeable between the rod and rope tension drums.

(DNAS 512/69/109.)

RESTRICTED.

1048.—Closing Down Trial Reports.

For ships fitted with pressurized citadels the efficiency of the closing down arrangements will be checked by the tests detailed in Confidential Navy Order 13 of 1959. Closing down trials with the aid of lachrymatory floats are to be carried out for the realistic training of personnel under closed down positions.

7. Reports in accordance with B.R. 2170, Chapter 32, should in future be forwarded in form A.S. 230.

(DTSR 1211/204/2.)

(*Confidential Navy Order* 13 *of* 1959.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

1049.—A.P. 4487A, B, D and E, Vol. 5, Pt. 2 (N) Gannet Aircraft First Line Servicing Schedule.

A.P. 4487A, B, D and E, Vol. 5, Pt. 2 (N) has become unsuitable for R.A.N. requirements owing to alteration to the trade structure occasioned by the incorporation of Air Ministry Amendment List Nos. 5 and 6.

2. Spare copies of this publication held at the Air Store Depot, Randwick, have been suitably amended to suit local conditions and copies are being issued to current holders to replace copies held. The new issues received will be known as A.P. 4487A, B, D and E, Vol. 5, Pt. 2 (R.A.N.) and future amendments list will have the prefix R.A.N.

3. Existing copies of A.P. 4487A, B, D and E, Vol. 5, Pt. 2 (N) together with all available amendment lists should be returned to the Naval Store Officer (Air), Randwick.

(DNAS 465/53/1.)

UNCLASSIFIED.

1050.—Form A.S. 230—Closing Down Trial Report.

Form A.S. 230 is now available and should be demanded from SNSO Sydney.

(DTSR 464/54/157.)

UNCLASSIFIED.

1051.—Revision and Abolition of Forms.

The following forms have been revised. When stocks of the present forms are exhausted, supply of the revised forms will be effected on demand—

A.S. 17—Certificate of Payment of Officers and Men.
A.S. 47—D.F.R.B. Fund Contributors Variation Return.
A.S. 79d—Clothing Issued Free to WRANS Ratings on Entry.
A.S. 246—Application for Dismissal from H.M.A. Service.
A.S. 272—Representations about Conditions of Service and Complaints of Unfair Treatment.
A.S. 1233R—Trade Certificate—Shipwright.
A.S. 1299X—Application for Marriage Allowance.
A.S. 2022—Report of Defective Material and Design.
A.D. 787C/A.S. 473C—Certificate (A).

2. The following forms have been abolished—

A.S. 557—Daily Sick List.
A.S. 1307—Certificate of Damage or Loss Sustained Whilst Coaling or Oiling H.M.A. Ships.

(DNAS 464/51/3.)

UNCLASSIFIED.

1052.—Vocabulary of Naval Armament Stores (Gunwarf), Divisions "E" and "F"—Reprinting of B.R. 1837, Parts (1) and (2).

(*A.F.O.* 2536/1960.)

Further to Navy Orders 413 of 1959 and 266 of 1960, certain existing common items pertinent to Divisions "E" and "F" of B.R. 1837, Pts. 1 and 2, Vocabulary of Naval Armament Stores (Gunwharf) have been re-numbered in the new AB series, and details are promulgated for advance information.

Division E.

Old Number and item.	*New Number.*
Gun, Machine, Bren .303-in. Marks 1, 2 and 3—	
EH 425 Screw, butt bracket, and Screw, butt plate ..	AB 035
Gun, Hispano, 20 mm—	
EP 449 Pin, split, barrel retainer	AB 487
EP 462 Pin, split, breech block guide bolt and ejector stud	AB 461
EP 475 Pin, split, magazine carrier arm screw	AB 552
EP 650 Wire, locking..	AB 403
Belt Feed Mechanisms, Mark 5—	
EQ 566 Pin, split	AB 617
EQ 527 Pin, split	AB 513

Aircraft Gun Accessories for Gun Hispano 20 mm—	
ES 428 Wire, brass, armourers	AB 481
Weapon Accessories—	
ET 308 Wire, armourers, brass (No. 26 S.W.G.) hard 3-in. lengths	AB 481

Division F.

Old Number and item.	*New Number.*
Respirator, Anti-Gas—	
FW 073 Nut, Clip No. 4	AB 174
FW 086 Nut, Clip No. 5	AB 174
FW 050 Screw, Clip No. 4 and 5	AB 646

2. The Proportion Book of Naval Armament Stores and Ship's Warrants will be amended in due course.

(DAS 465/52/257.)

(*Navy Order* 413 *of* 1959 *and* 266 *of* 1960.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

COMMONWEALTH NAVY ORDER

Navy Office, Canberra,
21st December, 1960.

The enclosed order is promulgated for information, guidance and necessary action.

By direction of the Naval Board.

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

10004/60.

UNCLASSIFIED.

1053.—Books—Distribution of Non-Accountable Publications during October, 1960.

The non-accountable publications, amendments to A.P.'s and B.R.'s, miscellaneous publications, &c., and A.F.O. " S.C." Series contained in the appendix to this order, have been distributed to Ships and Services during October, 1960.

2. Article 2518 of A.B.R. 4 is relevant.

3. Copies of A.F.O. " P " Series amendments and A.P. amendments referred to in the appendix to this order, are available for supply on demand to holders of personal copies of Books of Reference and Air Publications in accordance with Article 2518 (7) of A.B.R. 4.

APPENDIX.

BOOKS, MAGAZINES, PAMPHLETS, ETC.

Publication.	*Date.*
Aeroplane	12th August, 1960.
Aeroplane	19th August, 1960.
Aeroplane	26th August, 1960.
Aeroplane	2nd September, 1960.
Aircraft	Volume 40, No. 1, October, 1960.
Fibres and Plastics	Volume 21, No. 8, August, 1960.
Fibres and Plastics	Volume 21, No. 9, September, 1960.
Flight	12th August, 1960.
Flight	19th August, 1960.
Flight	26th August, 1960.
Flight	2nd September, 1960.
Journal of the R.N. Medical Service	Volume XLVI., No. 2, Spring, 1960.
List of Propellant Lots	Amendment No. 10.
Manual of Interim Instructions for W.R.A.N.S. 1952	Preliminary Amendment to Chapters 12 and 13.
N.A.M.A.N.	N.2124–N.2134 dated 30th September, 1960.
R.N. Medical Bulletin	Issue No. 10, April, 1960.

AMENDMENTS TO B.R.'s, ETC.

B.R. No.	*Amendment No.*
A.B.R. 4/1959	Amendment No. 4.
B.R. 8/1958	Amendment No. 2.
B.R. 31	Title Page and Table of Contents.
B.R. 31	Chapter 29, 1st May, 1960.
B.R. 31	Chapter 38, 1st April, 1960.
B.R. 51 (1) 1955	Amendment No. 2.
B.R. 70/1960	Supplement, June, 1960.
B.R. 122, 20th Edition	Supplement No. 1.
B.R. 125/1960–61, Volume 1	Supplement No. 2—August, 1960.
B.R. 125/1960–61, Volume 1	New Entries No. 2—August, 1960.
B.R. 129 (3) (1), 16th Edition	Supplement No. 7.
B.R. 155C (2)	Amendment No. 7.
B.R. 177/1959	Errata.
B.R. 226B (70)	Amendment No. 2.
B.R. 226B (71)	Amendment No. 1.
B.R. 226C (2)	Amendment No. 4.
A.B.R. 697/1960	Amendment No. 1.
B.R. 763, Volume 1, 6th Edition	Supplement No. 4.
B.R. 763, Volume 2, 6th Edition	Supplement No. 4.
B.R. 878/1959	Amendment No. 2.
B.R. 926/1958	Australian Amendment No. A.N. 1.
B.R. 1168 (1)	Amendment No. 5.
B.R. 1257	Amendment No. 22.
B.R. 1332 (13)	Supplement.
B.R. 1358	Amendment No. 3.
B.R. 1538/1955	Amendment No. 2.
B.R. 1545	Amendment No. 12.
B.R. 1653	Amendment No. 12.
B.R. 1661 (3)	Amendment No. 5.
B.R. 1807	Amendment No. 6.
B.R. 1837 (4), Division T, Section TC	Amendment No. 2.
B.R. 1837 (4), Division U, Section UL	Amendment No. 6.
B.R. 1837 (4), Division U, Section UN	Amendment No. 6.
B.R. 1837 (7), Division J, Introduction	Amendment No. 19.
B.R. 1837 (7), Division J, Section JH	Amendment No. 9.
B.R. 1837 (7), Division K, Introduction	Amendment No. 21.
B.R. 1837 (7), Division K, Section KJ	Amendment No. 15.
B.R. 1837 (7), Division L, Section LG	Amendment No. 11.
B.R. 1837 (7), Division L, Section LH	Amendment No. 14.
B.R. 1837 (7), Division L, Section LM	Amendment No. 7.
B.R. 1837 (7), Division L, Section LP	Amendment No. 8.
B.R. 1865A	Amendment No. 5.
B.R. 1865C—Addendum to B.R. 1865A and B	Amendment No. 2.
B.R. 1870 (1)	Amendment No. 4.
B.R. 1870 (2)	Amendment No. 4.
B.R. 2014B/1957	Amendment No. A.N. 3.
B.R. 2047A (1)	Amendment No. 7.
B.R. 2047A (2)	Amendment No. 7.
B.R. 2047A (3)	Amendment No. 7.
B.R. 2047A (4)	Amendment No. 7.
B.R. 2047B (3)	Amendment No. 2.

AMENDMENTS TO B.R.'S, ETC.—*continued.*

B.R. No.	*Amendment No.*
B.R. 2047B (4)	Amendment No. 8.
B.R. 2050 (648)	Amendment No. 3.
B.R. 2050 (651)	Amendment No. 2.
B.R. 2112 (7)	Amendment No. 1.
B.R. 2127/56	Amendment No. 12.

DISTRIBUTION OF A.F.O. "S.C." SERIES.

Publication.	*"S.C." No.*
N.A.T.O. Supplement No. 1 to A.C.P. 121	S.C. 6/60 R.N., Correction No. 1.
N.C.C.P. 8	S.C. 15/60 R.N., Correction No. 2.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	*A.L. or Leaflet.*
113	A.L. 164.
A.V.P. 970, Vol. 1	A.L. 71, 72, 73 and 74.
A.V.P. 970, Vol. 3	A.L. 10 and 11.
1086, Book 3, Part 2 (2nd Edition)	A.L. 130, 131 and 132.
1086, Book 7 (2nd Edition)	A.L. 115.
1086, Book 8, Part 2 (2nd Edition)	A.L. 17.
1086, Book 9 (2nd Edition)	A.L. 134 and 135.
1086, Book 10 (2nd Edition)	A.L. 98, 99, 100, 101, 102 and 103.
1086, Book 11 (2nd Edition)	A.L. 152 (Erratum) and 154.
1086, Book 12, Part 1 (2nd Edition)	A.L. 185 and 186.
1086, Book 13 (2nd Edition)	A.L. 143 (Erratum).
1086, Book 14 (2nd Edition)	A.L. 39.
1086, Book 15 (2nd Edition)	A.L. 159 and 163.
1181A, Vol. 1 and Vol. 6, Part 1	A.I.L. 1/60.
1182C (N), Vol. 1	A.L. 18, 19 and 20.
1234D, Vol. 4	A.L. 15 and 16.
1275A, Vol. 1, Section 15	A.L. 23, 24 and 25.
1275A, Vol. 1, Section 17	A.L. 33 and 34.
1275Q	A.L. 2.
1355H, Vol. 1 and Vol. 5	A.L. 13.
1464G, Vol. 1	A.L. 166.
1661F, Vol. 1	A.L. 92.
1803C, Vol. 1	A.L. 58.
1803C, Vol. 2, Part 2	A.L. 36.
1803C, Vol. 2, Part 3	A.L. 52.
1803D, Vol. 1, Book 1	A.L. 63, 64 and 66.
1803D, Vol. 1, Book 3A	A.L. 20 and 22.
1803D, Vol. 1, Book 4	A.L. 89, 90 and 91.
1803E, Vol. 1	A.L. 123, 124, 125 and 126.
1803E, Vol. 2, Part 2	A.L. 79.
1803P, Vol. 2, Part 3	A.L. 13.
1803S, Vol. 1, Book 1	A.L. 13.
1803S, Vol. 1, Book 2	A.L. 21.
2247, Vol. 3, Parts 1 and 4, Section 42AJ (2nd Edition)	A.L. 4.
2264B, Vol. 1	A.L. 44.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
2276J	A.L. 26.
2337, Vol. 1, Book 2	A.L. 46, 47 and 48.
2337, Vol. 6	A.L. 80.
2487, Vol. 1	A.L. 12.
2531J, Vol. 2	(A.L. 2)–A.1.
2536C, Vol. 1, Part 1	A.L. 22.
2802A (2nd Edition), Vol. 1, Parts 1 and 3	A.L. 46, 47 and 48.
2892F, Vol. 6	A.L. 15.
3280B	A.L. 17.
4099J—G.H.N.	A.L. 12.
4099J, Vol. 1	A.L. 78.
4177B, Vol. 1 and Vol. 6	A.L. 29, 31 and 32.
4282A, Vol. 2, Part 3, Book 1	A.L. 58.
4282C, Vol. 1	A.L. 41 and 42.
4288, Vol. 1, Part 2 and Vol. 5	A.I.L. 7/60 A.I.L. 8/60 A.I.L. 9/60.
4288, Vol. 2	(A.L. 393)–B.143 (Alt. 1 and 2 inc.) (A.L. 371)–B.242 (Alt. 1 inc.) (A.L. 384)–B.243 (Alt. 1 inc.) (A.L. 403)–B.260 (Alt. 1 inc.) (A.L. 380)–B.280 (A.L. 381)–B.281 (A.L. 385)–B.283 (A.L. 394)–B.289 (A.L. 395)–B.290 (A.L. 399)–B.293 (A.L. 400)–B.294 (A.L. 401)–B.295 (A.L. 402)–B.296.
4300C, Vol. 3, Part 1	A.L. 10.
4320A, B, C, Vol. 6, Part 4	A.I.L. 3/60.
4320B, Vol. 3, Part 1	A.L. 21.
4340, Vol. 1, Book 1	A.L. 23.
4340, Vol. 1, Book 2	A.L. 46.
4343, Vol. 1	A.L. 166, 167, 168, 169, 170, 171 and 172.
4343B, Vol. 1, Book 1	A.L. 14.
4343C, Vol. 1, Book 1	A.L. 22, 23, 24 and 25.
4343C, Vol. 1, Book 2	A.L. 38, 40, 41 and 43.
4343C, Vol. 1, Book 3	A.L. 17, 18, 19, 20, 21 and 22.
4343D, Vol. 1, Book 4	A.L. 26.
4343E, Vol. 4, Part 6	A.L. 24.
4343S, Vol. 1	A.L. 89 and 90.
4360, Vol. 6	R.A.N. Appendix X.
4360B, C and D—G.H.N.	A.L. 13.
4360C, Vol. 5, Part 2	A.L. (RAN) 8. A.L. (RAN) 9.
4361B and C, Vol. 1	A.L. 52 and 54.
4471A, Vol. 1	A.L. 131, 135 and 136.
4487A and D, Vol. 3, Part 1, Book 2	A.L. (RAN) 1.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
4494A, Vol. 1 and Vol. 6	A.L. 4.
4515C, Vol. 3, Part 1, Section 2, Chapter 44	A.L. 8.
4515F, Vol. 3, Part 1, Section 2, Chapter 11	A.L. 6.
4578, Vol .1	A.L. 8.
A.P. (N) 383	A.L. 114.
A.P. (N) 400 (G.A.)	A.L. 15.
A.P. (N) 400 (V.A.)	A.L. 13.
A.P. (RAN) 101	A.L. 33 (Alt. 1), 34, 35, 36 and 37.
N.A.M.O. Engines	SI/Avon/21 (30.6.60)
	SI/Ghost/10A (Issue 2) (2.6.60).
N.A.M.O. General	I.102 (8.6.60)
	O.99 (14.6.60)
	R.89 (2.6.60)
	STI/Electrical/183 (9.6.60)
	STI/Electrical/184 (9.6.60)
	STI/Electrical/185 (9.6.60)
	STI/Miscellaneous/243 (2.6.60).
N.A.M.O. Miscellaneous	Al. 39
	Devon/X.3 (30.6.60)
	Dragonfly/X.20 (28.6.60)
	Sea Prince/X.10 (23.6.60).
N.A.M.O. Sea Venom	A.24 (Issue 2) (9.6.60)
	A.27 (14.6.60)
	O.6 (9.6.60)
	X.79 (13.6.60)
	X.81 (21.6.60)
	STI/187 (13.6.60).
N.A.M.O. Vampire	A.L. 21
	G.1 (Issue 4) (20.6.60)
	STI/197 (8.6.60)
	STI/199 (9.6.60).
N.A.M.O. Westland Whirlwind	A.15 (8.6.60)
R.A.N.A.M.O. Ejection Seats	STI/ RAN.16 (September, 1960).
R.A.N.A.M.O. General	A.L. 17
	A.28 (Issue 2) (September, 1960)
	A.36 (August, 1960)
	L.20 (Issue 2) (September, 1960)
	Q.26 (Issue 2) (August, 1960)
	Q.27 (August, 1960)
	Q.28 (September, 1960)
	R.34 (Issue 2) (September, 1960)
	R.75 (September, 1960)
	X.21 (September, 1960)
	STI/Flying Clothing/RAN.11 (September, 1960).
R.A.N.A.M.O. Sea Venom	A.10 (August, 1960)
	R.8 (August, 1960)
	STI/RAN/76 (Issue 2) (September, 1960).
R.A.N.A.M.O. Sycamore	STI/RAN.42 (September, 1960).
Air Clues	June, 1960.

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
Air Pictorial	July, 1960.
Aviation Studies (International) Ltd. ..	New and Substitute Sheets (6 leaves) (June, 1960) to Engine Data Sheets
	New and Substitute Sheets (11 leaves) (July, 1960) to Armament Data Sheets
	New and Substitute Sheets (8 leaves) (June, 1960) to Army Vehicle and Military Aircraft Data Sheets.
D.C.A. Air Navigation Orders, Part 40 ..	A.L. 17.
D.C.A. Airways Operations Instructions ..	A.L. 11.
D.C.A. Aeronautical Information Publications	RAC/2 (A.L. 36A)
	RAC/3 (A.L. 27)
	A.G.A. (A.L. 23).
D.C.A. Aviation Information Circulars ..	37/1960 (30.9.60)
	38/1960 (8.10.60).
D.C.A. Aviation Safety Digest	No. 23 (September, 1960).
R.A.F. Flight Information Publication, Terminal Approach Procedure Charts	A.L. 3 to T.A.P. Check List (1.8.60)
	A.L. 4 to T.A. Check List (1.8.60.).
Sperry Field Engineering Bulletins ..	No. TA-594-34 (1.7.60)
	No. TA-594-36 (8.7.60).
Sperry Publication " Sperryscope " ..	2nd Quarter, 1960.
Standardization Design Memoranda Air Service	S.D.M.(A), No. 12 (Issue 2), Section 7 Leaflet (A.L. 1)
	S.D.M.(A), No. 87 (Issue 2)
	S.D.M.(A), No. 106 (Issue 3)
	S.D.M.(A), No. 112 (Issue 3)
	S.D.M.(A), No. 116 (Cancellation)
	S.D.M.(A), No. 133 (Cancellation)
	S.D.M.(A), No. 144 (Issue 3) (A.L. 1)
	S.D.M.(A), No. 145 (Cancellation)
	S.D.M.(A), No. 168 (Issue 5)
	S.D.M.(A), No. 246 (Issue 2)
	S.D.M.(A), No. 250 (Issue 3)
	S.D.M.(A), No. 302 (Issue 3)
	S.D.M.(A), No. 351 (Issue 1)
	Numerical Index No. 39 (August, 1960).
A.A.P. No. 2, A.B.C.S.C., Class 5835 (2nd Edition)	Sub A.L. 5 (A.L. 11313).
A.A.P. No. 2, A.B.C.S.C. Class 5940 (2nd Edition)	Sub A.L. 5 (A.L. 11191).
A.A.P. No. 2, A.B.C.S.C. Class 5970 (2nd Edition)	Sub A.L. 7 (A.L. 11199).
A.A.P. No. 2, Group F, Section 3 (12th Edition)	Sub A.L. 59 (A.L. 11400).
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A.A.P. No. 2, Group H, Section 28C (7th Edition)	Sub A.L. 35 (A.L. 11355).

AMENDMENTS TO AIR PUBLICATIONS—*continued.*

A.P. No.	*A.L. or Leaflet.*
A.A.P. No. 2, Group P, Section 1 ..	Sub A.L. 30 (A.L. 11341).
A.A.P. No. 2, Group T, Section 27C (7th Edition)	Sub A.L. 23 (A.L. 11176).
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A.A.P. No. 2, Group Y, Section 110B (5th Edition)	Sub A.L. 20 (A.L. 11372).
A.A.P. No. 2, Group Y, Section 110U (7th Edition)	Sub A.L. 15 (A.L. 11349).
A.A.P. 121	A.L. 8.
A.A.P. 702.1	A.L. 108 and 109.
A.A.P. 716.0, Vol. 2, Part 2	A.L. 38.
A.A.P. 721.79, Vol. 2, Part 2	A.L. 205.
A.A.P. 742.00, Vol. 2, Part 1	A.L. 20.
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	S.R. 1441/N.B., Sheet 1
	S.R. 1441/N.B., Sheet 2
	S.R. 1443/N.B.
	S.R. 1444/N.B.
	S.R. 1446/N.B.
	S.R. 1447/N.B.
	S.R. 1448/N.B.
	S.R. 1477/N.B.
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Lloyds Shipping Index	10th October, 1960.
Lloyds Shipping Index	17th October, 1960.
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(DNAS 465/57/215.)

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C.N.O.'s 1054-1075/60.

COMMONWEALTH NAVY ORDERS

Navy Office, Canberra,
22nd December, 1960.

The enclosed orders are promulgated for information, guidance and necessary action.

By direction of the Naval Board.

Thos. J. Hawkins

The Flag Officer Commanding H.M.A. Fleet, Captains and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

RESTRICTED.

10139/60.

CONTENTS.

Section 1.
ADMINISTRATIVE AND GENERAL.

UNCLASSIFIED.

1054.—Accidents—Explosive Stores—Precautions to be Taken When Transporting—Warning to Tractor Drivers.

(*A.F.O.* 2585/1960.)

The investigation of an accidental explosion of two unfuzed 1,000-lb. M.C. bombs at a U.K. airfield, whilst being transported on a bomb trolley, shows the explosion to have been caused by heat generated by the friction of a trolley tyre rubbing against the rear of a bomb which had become displaced on the trolley. The second bomb detonated sympathetically.

2. The explosion occurred only 80 yards from the point where the bomb became displaced, while being towed at a speed of 6¾ m.p.h.

3. In view of the danger of such an occurrence with all types of explosives, mines, depth charges, pyrotechnics, &c., (light case stores may be more susceptible) action is to be taken to ensure that orders and instructions for the use and servicing of equipment used for transportation of explosive stores are reviewed. Particular emphasis is to be placed on the positive securing of the stores carried.

4. Tractor drivers and other persons who may be concerned in the handling of explosive stores on such trolleys, ashore or afloat, should be warned to stop at once if their load becomes displaced and not to proceed again until the load has been resecured well clear of the trolley's tyres. This warning is to be repeated periodically to ensure that drivers, &c., remain aware of it.

5. Navy Order 1067 of 1958 is hereby cancelled.

(DW 177/51/35.)

(*Navy Order* 1067 *of* 1958.)

UNCLASSIFIED.

1055.—Return of Signalling with Merchant Ships—Quarter ended 30th September, 1960.

A.S. 174 returns for the quarter ended 30th September, 1960 show a total of 377 successful exercises and nine reports of failure to establish communication. There were no reports of exercises with R.F.A.'s. All exercises were conducted by flashing.

2. Exercises reported by H.M.A. ships were as follows—

H.M.A. Ship.	*British.*	*SEATO/NATO.*
MELBOURNE	9	2
VOYAGER	—	—
VENDETTA	35	27
VAMPIRE	21	42
ANZAC	8	1
QUEENBOROUGH	6	3
QUICKMATCH	1	—
QUIBERON	5	4
SWAN	20	1
DIAMANTINA..	6	4
GASCOYNE	5	—
BARCOO	118	41
WARREGO	—	2
PALUMA	1	—
KIMBLA	9	6

3. There were nine cases of Merchant Ship signalling reported as worthy of special mention which have been communicated to the shipping companies concerned.

4. Form A.S. 174 (Revised July, 1960) has been distributed. Further supply will be made without demand by SNSO, Sydney.

5. The attention of Commanding Officers is drawn to the necessity for keeping this interest in merchant ship communications active and to ensure that Communications Officers adequately check the details of successful/unsuccessful exercises.

6. Navy Order 769 of 1960 is hereby cancelled.

(DSD 77/5/2.)

(*Navy Order* 769 *of* 1960.)

Section 2.
PERSONNEL.

UNCLASSIFIED. Cancelled N.O. 775/62

1056.—Artificial Respiration—Mouth to Mouth and Mouth to Nose.

Attention is drawn to the usefulness of the mouth to mouth and mouth to nose methods of artificial respiration in all efforts to revive unconscious and non-breathing victims of drowning, smoke or gas inhalations, electric shock, cardiac arrest, convulsions, injuries causing cessation of breathing and in other suitable cases.

2. The methods are described fully in Appendix D to Navy Order 680 of 1960.

(MDG 156/51/27.)

(*Navy Order* 680 *of* 1960.)

UNCLASSIFIED.

1057.—Ausdil Scheme for Visits by Next-of-kin to Members who are Dangerously Ill.

Attention is drawn to the conditions under which the next-of-kin or a near relative of a member who is dangerously ill may visit him at the expense of the Department. This system is known as the " Ausdil Scheme ".

2. I.P.I. 141–141/12 which governs the operation of the Ausdil Scheme provides *inter alia* that the normal limit of the duration of these visits is four days for visits within Australia and seven days for visits to Malaya, Singapore or the Pacific Area. These limits may be extended on medical recommendation by a period of three days to seven and ten days respectively in exceptional cases only. These limits are to apply whether accommodation is provided at the expense of the Department or not.

3. Where sufficient reason exists for a further extension to the seven and ten days referred to in paragraph 2 above, Commanding Officers are to ensure that the case is submitted to the Naval Board as a matter of urgency in ample time for consideration to be given during the approved duration limit of the visit. Departmental liability in respect of return fare and any accommodation expenses ceases immediately on expiry of the approved time limit. It should be noted that if a visit is extended without authority it may not be possible for the extension to be approved retrospectively.

4. The conditions of the Ausdil Scheme apply only to members medically classified as " dangerously ill ". Where for any reason the member is removed from the " Dangerously Ill List " (including transfer to the " Seriously Ill List ") the visitor is to be returned home as quickly as possible.

5. The normal means of travel for the particular journey should usually be used on the return journey. However, where the use of the normal means of travel would entail the next-of-kin waiting, say, two or three days before proceeding home, thus creating additional liability in respect of accommodation charges (within the approved limits) air travel may be allowed provided that its use results in overall economy.

(HPB 187/1/30.)

Cancelled vide N.O. 468/62

UNCLASSIFIED.

1058.—Herbert Lott Trust Fund.

It has been decided that the full amount allocated to the R.A.N. from the Herbert Lott Trust Fund will, in future, be paid to the ship that is awarded The Gloucester Cup.

2. The Captain of the ship concerned is, on receipt of Finance Authority indicating the sum available, to distribute the money within his own ship in accordance with the principles laid down in Navy Order 478 of 1959. Names of recipients are to be reported to the Flag Officer Commanding, Her Majesty's Australian Fleet.

3. Expenditure is chargeable to Division 690—Other Administrations, Recoverable Expenditure, Admiralty (1).

(HPB 211/51/7.)

(*Navy Order* 478 *of* 1959.)

UNCLASSIFIED.

1059.—Prizes—John Crocker Memorial Prize Award for 1960.

(*A.F.O.* 2894/1960.)

The John Crocker Memorial Prize for 1960 has been awarded to Acting Lieutenant D. J. B. Taylor, R.A.N.

2. Particulars of the prize are shown on Page 135 of the Appendix to the Royal Navy List.

(HPB 38/6/15.)

UNCLASSIFIED.

1060.—Ratings—Seaman Branch—Advancement of Boom-trained Ratings.

The Boom-Trained specialist qualifications are not current specialist qualifications and except as shown below are not effective for advancement purposes.

2. All ratings who hold a Boom-Trained specialist qualification are eligible for recommendation for training in another specialist qualification of their choice, subject to their being considered suitable.

3. Qualification in a new specialist qualification is through the 3rd class. Subsequent recommendations for 2nd and 1st class training are to be in accordance with the normal rules in A.B.R. 10. The provisions of Navy Order 500 of 1959 relative

to re-engagement for courses are applicable, i.e., ratings who have twelve months' service remaining after completion of a 3rd or 2nd class specialist qualification course are not required to re-engage before undergoing the course. Before being eligible to undergo a 1st class specialist qualification it is necessary for there to be two years' service remaining to be served from date of completion of the course.

4. No rating will be permitted to re-engage unless he is a volunteer and recommended for a current specialist qualification. If he fails to qualify, a report is to be forwarded on form A.S. 1245Z in order that consideration may be given to his discharge " Unsuitable ". The importance of ratings becoming qualified as soon as possible in a current specialist qualification is to be stressed to all concerned who wish to continue their career in the Service.

5. Until Boom-Trained ratings are, either discharged, or become qualified in another specialist qualification they are employed as Seamen (others).

6. In order that the advancement of Boom-Trained ratings is not jeopardized owing to the abolition of their specialist qualification the Naval Board have approved the following—

(*a*) Able and Leading Seamen and Petty Officers who at 19th August, 1957, held the Boom-Trained specialist qualification requirement/s for advancement to the next higher rate may be advanced in their due turn on the roster when otherwise fully qualified provided they are recommended. Able and Leading rates so advanced are eligible for confirmation on the normal due date.

(*b*) Able and Leading Seamen who are advanced under (*a*) above and who become fully qualified, with the exception of the appropriate specialist qualification requirement/s for advancement to the next higher rate, will, subject to recommendation, be permitted one advancement on an acting and provisional basis in their due turn on the roster. Confirmation in rating, and any further advancement is subject to qualifying in accordance with the normal rules.

(*c*) Petty Officers, Leading Seamen and Able Seamen who at 19th August, 1957, were not fully qualified in their B.T. specialist qualification requirement/s for advancement to the next higher rate may, when otherwise fully qualified, be advanced on an acting and provisional basis in their due turn on the roster provided they are recommended. Confirmation in rating and any further advancement is subject to qualifying in accordance with the normal rules.

(HPB 303/22/16.)

(*Navy Order* 500 of 1959.)

Section 3.

HULL, MACHINERY, EQUIPMENT AND STORES.

UNCLASSIFIED.

1061.—Signal Flags and Associated Equipment—Allowances, &c.

This order sets out allowances of, or instructions concerning signalling flags, wallets, clips and rings, flag bins and bunting.

Basic Allowance of Signalling Flags.

2. Table A in the appendix to this order shows the revised basic allowance of signalling flags to H.M.A. ships and establishments.

Large Size Signalling Flags.

3. Table B in the appendix to this order shows the allowance to Frigates and above of larger sizes of certain signalling flags in common use which are required to be visible at long distances.

Wallets and Flags for Special Purposes.

4. Table C in the appendix to this order shows the allowance of wallets and sea transfer flags to Ocean Minesweepers and above. Complete sets of size 6 flags for emergency signalling purposes and sets of speed and cable flags, formerly supplied in wallets, have been abolished. The Pilot Jack is also no longer required.

Clips and Rings.

5. Flags and pennants in Tables A and B will be supplied with clips and rings already fitted. These clips and rings are to be removed from old flags and, except for a small stock for replacement purposes, returned to storing yards as soon as possible.

Marking of Flag Bins.

6. Flag bins are to be marked in accordance with Navy Order Diagram Issue 17/60. A miniature of each flag is to be painted on the finger board below the name of the flag. The flags in Table A only are to be stowed in flag bins. Provision is now made for the inclusion of an extra set of numeral flag bins. Separate stowage arrangements are to be made by ship's staff for the large size flags in Table B and for the Church Pennant.

Bunting.

7. Nylon/worsted bunting and terylene sewing thread have been introduced but woollen bunting will continue to be issued until stocks are exhausted. Descriptions and pattern numbers of the new bunting have been included in the Rate Book and Authorized List of Naval Stores (B.R. 810).

Colours, Foreign Ensigns and Dressing Lines.

8. The sizes of colours to be worn, and the allowance of foreign ensigns have been promulgated separately. Navy Orders 424 and 651 of 1960 respectively, refer. The allowance of flags for dressing lines remains unchanged.

Supply.

9. Demands should be lodged with the appropriate (S) N.S.O. for flags and pennants required to complete to the revised allowances. Flags, pennants and flag wallets rendered surplus are to be returned to store. This order should be quoted as the authority to adjust holdings.

Allowances.

10. The allowances of signal flags, &c., quoted in Admiralty Establishments of Sea Stores, with the exception of the allowances for dressing lines, are to be disregarded and the relevant publications should be noted accordingly. An appropriate reference should also be made in copies of B.R. 1971 held to draw attention to the R.A.N. variations to Admiralty policy.

11. Navy Orders 109 and 717 of 1959 are hereby cancelled.

APPENDIX.

Table A.

ALLOWANCE OF SIGNALLING FLAGS AND PENNANTS TO H.M.A. SHIPS IN COMMISSION AND ESTABLISHMENTS.

Class of Ship.	*Size.*	*No. of Sets.*	*Remarks.*
Carriers	3	5+	3 spare
Destroyers and Frigates	4	4+	2 spare
Survey Ships	4	2	—
Ocean Minesweepers	4	3	1 spare
Boom Working Vessels and Tugs	4	1	—
G.P.V.'s, M.L.'s, S.A.R.'s and miscellaneous small craft	4	1	If required
Reserve Training Establishments	4*	3	1 spare
R.A.N.C.	4	3	1 spare
Signal Stations	3	2	1 spare
Signal School	4*	9	1 spare

+ 2 additional sets of numeral flags 1 to ϕ allowed to these ships.

Note.—Until present stocks of obsolete sizes are exhausted, establishments may be issued with complete sets of flags other than those sizes authorized above.

* When present size 6 supplies have been exhausted.

Table B.

ALLOWANCE OF LARGE SIZE SIGNALLING FLAGS FOR FRIGATES AND ABOVE.

Flag or Pennant.	*Carriers.*		*Destroyers and Frigates.*	
	Size.	*Allowance.*	*Size.*	*Allowance.*
Bravo	1	2	2	2
Foxtrot	2	2	—	—
Kilo	2	2	—	—
Answer	2	2	3	2
Corpen	2	2	3	2
Desig	2	2	3	2
Emerg	2	2	3	2
Negative	2	2	3	2
Port	2	2	3	2
Starboard	2	2	3	2
Preparative	2	2	3	2

Table C.

ALLOWANCE OF WALLETS AND FLAGS ON STAVES TO OCEAN MINESWEEPERS AND ABOVE.

Two wallets, pattern 8404, and two sets of size 6 flags on staves for the following purpose—

Sea transfer flags—Set comprises red, green, yellow, blue, white, yellow/blue triangles.

(DSD 510/55/6.)

Navy Orders 109 *and* 717 *of* 1959 *and* 424 *and* 651 *of* 1960.)

UNCLASSIFIED.

1062.—Machinery—Diesel Engines—Perkins " P " Series—Fresh Water Cooling System—Fitting of Gagging Sleeves in Place of Thermostats.

(*A.F.O.* 478/1959.)

Failure of Jabsco circulating water pumps, fitted to Perkins fresh water cooled engines, has been brought about by high coolant temperatures experienced at the inlet to the pump, causing the rubber impeller vanes to deteriorate.

2. This high temperature has been caused by defective operation of the thermostat, and to overcome this defect it is necessary to fit Perkins gagging sleeves, Part No. 0900043. Admiralty Catalogue No. EB000879. in place of the thermostats at present fitted to all fresh water cooled Perkins engines incorporating Jabsco circulating water pumps. This will give a continuous flow of coolant through the heat exchanger.

3. This work should be treated as a defect and carried out by ship's staff or by Overhaul Depots on overhaul of engines.

4. Stocks of the gagging sleeves referred to are available from SNSO Sydney from whom requirements are to be demanded, this order being quoted as authority.

(DNAS 1104/51/37.)

UNCLASSIFIED.

1063.—Aircraft—Ammunition—R.P. Heads—Heads, Rocket Flare, 3-in. —Failures.

New production KL001 and KL066 Heads, Rocket Flare A/C 3-in. were expected to give all-round improved performance. This has not been realized and a failure rate of about 17 per cent. has been found at proof. As there are no other rocket flare heads available this unsatisfactory failure rate must be accepted for the present. Until a new design of flare head is available it is unlikely that any greatly improved results can be expected from flare heads manufactured to the present design. Careful attention to the assembly procedure laid down in Chapter 8, Section 4, Vol. 1 of A.P. 2802A will help to minimize the failure rate.

2. *Ejector Contents No.* 7, *Mark N*2.—The purpose of the celluloid cap over the paper cover on the magazine end of the ejector is to prevent the spilling of powder into the head in the event of the paper disc rupturing which might cause premature ejection. If the celluloid cap is found to be faulty the ejector contents must not be used.

3. Navy Order 1127 of 1958 is hereby cancelled.

(DAS 727/60/26.)

(*Navy Order* 1127 *of* 1958.)

UNCLASSIFIED.

1064.—Ammunition—Propellant—Landing—Destruction—Report.

(*A.F.O.* 2822/1960.)

Propellant of the following lots and sub-lots is due for withdrawal from service, having reached the age limit—

Propellant lots and sub-lots affected.	*Type.*	*Nature of ammunition, &c., which may be involved.*
RNC 1038 ..	SC 061	Q.F. 5.25-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.).
RNC 1043 ..		
RNC 1047 ..		
RNC 1057 ..		
RNC 1168XA		
RNC 1174XA		
RNC 1182XA		
RNC 1036 ..	SC 103	Q.F. 5.25-in.; Q.F. 4-in.
RNC 1053 ..		
RNC 2431XH		
RNC 1051 ..	SC 109	Q.F. 4.7-in.
RNP 53XL ..	SC 140	Q.F. 5.25-in.; Impulse Torpedo.
KA 1108 ..	FNHP 022	Q.F. 40/60.
KA 1110 ..		
KA 1111 ..		
KA 1118 ..		
KA 1125 ..		
KA 1126 ..		
KA 1128 ..		
KA 1129 ..		
KA 1132 ..		
KA 1133 ..		
SPDN 6143 ..	FNHP 019–020 ..	Q.F. 40/60.
SPDN 6180 ..		
SPDN 6182 ..		
SPDN 6187 ..		
SPDN 6201 ..		
SPDN 6287 ..		
SPDN 6323 ..		

Action to be taken by H.M.A. ships, &c. Return to nearest N.A. Depot as early as practicable; if unable to comply within three months from the date of this order, report specially to Navy Office for instructions. N.M. and E.R., B.R. 862, Article 211 and N.C.R., B.R. 862A, Article 53, paragraphs 6, 7 and 9 refer.

Action to be taken at R.A.N.A. Depots Separate instructions have been issued.

(DAS 729/57/59.)

UNCLASSIFIED.

1065.—Cartridges with Flashless Propellant—Supply to Ships Armed with Q.F. 4-in. Mark 16* Guns.

In order to reduce the rate of exchange of loose barrels in H.M.A. ships armed O.Q.F. 4-in. Mk. 16*, total outfits of ammunition for these guns are filled with flashless propellant.

2. Full flash propellant, however, is still to be used for day practice firing. Sufficient full flash ammunition for this purpose is to be embarked and a corresponding number of flashless rounds is to be landed, if necessary, to accommodate them. Should flashless propellant be required for night practice firing, this is to be indicated when demanding the ammunition from Armament Depots.

3. Navy Order 1161 of 1958 is hereby cancelled.

(DAS 726/80/6.)

(*Navy Order* 1161 *of* 1958.)

RESTRICTED.

1066.—Gun Mountings—4.5-in. R.P. 40 and R.P. 41 Mark 6 Series Mountings—Fitting of a Dashpot Damping Plate Assembly to the Mark 5, Mark 5M, Mark 5* and Mark 5*M Oil Servo Units. Modification No. 26 (Mark 6* Mod. 1 Mountings), Modification No. 83 (Mark 6 and Mark 6* Mountings).

(*A.F.O.* 657/1960.)

(*a*) *Ships, Establishments and Authorities Concerned*	Ships and establishments so fitted, Gunnery Equipment Depots.
(*b*) *Type and Mark of Equipment*	4.5-in. Mark 6 and 6* Mountings (Mod. No. 83). 4.5-in. Mark 6* Mod. 1 Mountings (Mod. No. 26).
(*c*) *Part of Equipment Affected* ..	The Mark 5, Mark 5M, Mark 5* and Mark 5*M Oil Servo Units with Serial Nos. before 816650.
(*d*) *Purpose of Modification* ..	To prevent self oscillation of the pilot valve thus reducing the tendency to instability.
(*e*) *Nature of Modification* ..	To fit a damping plate assembly in the top of the dashpot cylinder, as shown on Navy Order Diagram Issue 17/60 and in accordance with the instructions in the appendix.
(*f*) *Drawing No. or Navy Order Diagram Issue*	Navy Order Diagram Issue 17/60.
(*g*) *By Whom to be Done* ..	Ships' staff and authorities holding mountings.
(*h*) *When to be Done*	At first convenient opportunity.
(*i*) *Supply of parts*	To be demanded from G.E.S.O.

APPENDIX.

Instructions for Fitting Dashpot Damping Plate in Oil Servo Units Mark 5, Mark 5M, Mark 5 and Mark 5*M.*

1. Thoroughly clean Oil Servo Unit top plate.

2. Remove top plate.

3. Lower the oil level of the unit to below the top of the dashpot chamber.

4. Clean dashpot damping plate assembly thoroughly.

5. Unscrew the 4BA socket headed screw in the dashpot damping plate until there is sufficient clearance (0.015-in.) between the $\frac{3}{32}$-in. diameter steel ball in the plate and the side of the slot in the plate to allow the dashpot leaf spring to pass the steel ball.

6. Insert the damping plate under the main lever arm into the dashpot chamber so that the head of the 4BA socket headed screw is towards the moving coil assembly.

7. Oscillate the damping plate to ensure that the dashpot leaf spring is central in the slot in the plate, i.e., so that the leaf spring does not rub either side of the slot.

8. Tighten the 4BA socket headed screw so that the tapered end of the screw forces the $\frac{3}{32}$-in. diameter steel ball to open the slot and so expands the flange on the underside of the plate to grip the dashpot cylinder liner wall.

9. Once the damping plate has gripped the dashpot cylinder liner wall, turn the 4BA socket headed screw one further half turn and no more.

10. By deflecting the lever arm, check that the dashpot leaf spring moves freely in the damping plate.

11. Replace the top cover, taking care not to introduce any foreign matter into the unit.

12. Refill unit with clean filtered oil OM33 to the normal level.

(DW 736/59/54.)

RESTRICTED.

1067.—Guns (Other than Aircraft)—Q.F. 4.5-in., Mark 5—Scoring of Breech Blocks—Amendment to Schedule of Modifications.

(*A.F.O.* 2913/1960.)

The following amendments are to be made to the O.Q.F. 4.5-in., Mark 5 Schedule of Modifications—

Modification No. 20—

(*a*) *Column* 3, paragraph (ii).
For " Lanolin "
Read " phosphate/grease PX 6 ".

(*b*) *Column* 4.
Delete " on Admiralty Instructions "
Insert in lieu " C " (when necessary).

(DAS 706/51/42.)

RESTRICTED.

1068.—Asdic Type 170—Failure of Transducer HT Plug.

Experience from sea indicates that the " O " Seal Pattern A.3425 in HT. Plug Pattern A.3325 connecting the Asdic Type 170 transducer does not prevent ingress of moisture leading to subsequent failure of the plug.

2. In order to increase compression of the " O " Seal and so produce a watertight joint, ships fitted are to include an item in their main defect list worded as follows—

" To free the ' O ' Seal recess in Asdic Type 170 H.T. plug pattern A.3325 from any form of corrosion pitting and fit a Lutan heavy duty back-up washer (normally used with ' O ' Ring Packing, Ludowici Part No. 6227-25) in addition to the existing ' O ' Seal."

3. Supply of 1 No. spare Lutan washer to ships fitted with Asdic Type 170 will be affected by S.N.S.O. Sydney without demand. Supply to ships under construction will be arranged in the normal manner.

4. Dockyards are to ensure when fitting transducers in new construction ships that a Lutan washer is included in the H.T. plug on assembly.

(DEE 518/52/85.)

RESTRICTED.

1069.—A/S Mortars Mark 10—Loading Equipment Assemblies, Marks 1, 2, 3 and 4, and Loading and Stowage Racks Fitted in Type 15 Frigates Fitted with A/S Mortar Mark 10.

(*A.F.O.* 1596/1960.)

(*a*) *Ships and establishments concerned*	Ships and establishments so fitted.
(*b*) *Type of equipment* ..	Loading equipment assemblies, marks 1, 2, 3 and 4. Loading and stowage racks, Type 15 Frigates.
(*c*) *Part of equipment affected*	(i) Type 15 Frigates—Loading and stowage racks. (ii) For all other ships and establishments—Loading rack.
(*d*) *Modification number* ..	(i) For Type 15 Frigates—To be known as modification No. 2 to loading and stowage rack. (ii) For all other ships and establishments—To be known as modification No. 4 to loading equipment and associated ship fittings.
(*e*) *Purpose of modification* ..	To provide stowage for an additional set (6 in No.) of mortar blanking plugs, when not fitted to mortar barrels. These plugs, which are the subject of Navy Order 410 of 1960, have been calibrated to counteract temperature effects on MORTAR range in TROPICAL climates.

(*f*) *Nature of modification* .. To secure a blanking plug bracket, drg. U.C.W. 22760/29 to the end remote from the conveyor handwheel of the loading rack; (loading and stowage rack in Type 15 Frigates), using wherever possible existing bolts on the frame. One in No. bracket is required for each A/S Mortar, Mk. 10, fitted.

(*g*) *By whom to be done* .. Dockyards.

(*h*) *When to be done* .. At the earliest opportunity.

Navy Order 1033 of 1959 is relevant.

(DW 707/51/38.)

(*Navy Orders* 1033 *of* 1959 *and* 410 *of* 1960.)

RESTRICTED. Cancelled NO 726/62

1070.—Large H.E.-Filled Underwater Weapons—Care in Handling.

(*A.F.O.* 2828/1960.)

Because of their thin casing and method of construction, large H.E.-filled underwater weapons must be handled with great care at all times.

2. Particular care must be taken with depth charges. Not more than one depth charge should be lifted in one hoist and shot mats should always be used at receiving positions to reduce the risk of jolting.

3. Depth charges filled H.E. are not to be transferred at sea except to meet operational requirements in an emergency.

4. Navy Order 131 of 1959 is hereby cancelled.

(DAS 714/51/89.)

(*Navy Order* 131 *of* 1959.)

UNCLASSIFIED.

1071.—Naval Stores (General) (Class B, Group 11, Parts C and D)—Hand Tools—Introduction of New Specifications.

Future purchases of the hand tools listed in Appendix A will be made to the specifications quoted.

2. The items are to be accounted for under the pattern numbers shown.

3. No further purchases will be made of the items listed in Appendix B. Present stocks are to be exhausted before issues of the new items are made.

APPENDIX A.

Pattern.	*Description.*	*Specification.*
	Calipers—	
B11C/910–4459	Inside Firm Joint 4″	DEF. (AUST.) 814 Type A Style 1
B11C/910–4461	Inside Firm Joint 8″	
B11C/910–4462	Inside Firm Joint 12″	
B11C/910–4463	Inside Spring with Split Nut 6″	DEF. (AUST.) 814 Type A Style 3
B11C/910–4464	Jenny, firm joint 6″	DEF. (AUST.) 814 Type B Style 1
B11C/910–4465	Outside Firm Joint 4″	DEF. (AUST.) 814 Type C Style 1
B11C/910–4467	Outside Firm Joint 8″	
B11C/910–4468	Outside Firm Joint 12″	
B11C/910–4470	Outside Firm Joint 24″	
B11C/910–4471	Outside Spring with Split Nut 6″	DEF. (AUST.) 814 Type C Style 3
	Chisels—	
B11C/910–4179	Cross Cut, Steel, $\frac{1}{8}$″ x 4″	DEF. (AUST.) 813 Type A
B11C/ —	Cross Cut, Steel, $\frac{3}{16}$″ x 5″	
B11C/910–4181	Cross Cut, Steel, $\frac{1}{4}$″ x 7″	
B11C/910–4182	Cross Cut, Steel, $\frac{5}{16}$″ x 8″	
B11C/910–4183	Cross Cut, Steel, $\frac{3}{8}$″ x 8″	
B11C/910–4188	Diamond Point, Steel, $\frac{1}{8}$″ x 4″	DEF. (AUST.) 813 Type B
B11C/ —	Diamond Point, Steel, $\frac{3}{16}$″ x 5″	
B11C/910–4191	Diamond Point, Steel, $\frac{5}{16}$″ x 8″	
B11C/910–4192	Diamond Point, Steel, $\frac{3}{8}$″ x 8″	
B11C/ —	Flat, Steel, $\frac{3}{8}$″ x 5″	DEF. (AUST.) 813 Type C
B11C/ —	Flat, Steel, $\frac{1}{2}$″ x 6″	
B11C/ —	Flat, Steel, $\frac{5}{8}$″ x 6″	
B11C/ —	Flat, Steel, $\frac{3}{4}$″ x 8″	
B11C/910–4207	Flat, Steel, $\frac{7}{8}$″ x 9″	
B11C/910–4208	Flat, Steel, 1″ x 10″	
B11C/910–4214	Half Round Nose, Steel, $\frac{1}{8}$″ x 4″	DEF. (AUST.) 813 Type D
B11C/910–4215	Half Round Nose, Steel, $\frac{1}{4}$″ x 7″	
B11C/910–4218	Firmer, $\frac{1}{8}$″ x $4\frac{1}{8}$″	DEF. (AUST.) 812
B11C/910–4219	Firmer, $\frac{1}{4}$″ x $4\frac{1}{4}$″	
B11C/910–4220	Firmer, $\frac{3}{8}$″ x $4\frac{1}{2}$″	
B11C/910–4221	Firmer, $\frac{1}{2}$″ x $4\frac{3}{4}$″	
B11C/910–4222	Firmer, $\frac{5}{8}$″ x $4\frac{7}{8}$″	
B11C/910–4223	Firmer, $\frac{3}{4}$″ x 5″	
B11C/910–4224	Firmer, $\frac{7}{8}$″ x $5\frac{1}{8}$″	
B11C/910–4225	Firmer, 1″ x $5\frac{1}{4}$″	
B11C/910–4226	Firmer, $1\frac{1}{4}$ x $6\frac{1}{4}$″	
B11C/910–4227	Firmer, $1\frac{1}{2}$″ x $6\frac{1}{2}$″	
B11C/910–4228	Firmer, 2″ x $7\frac{1}{4}$″	
B11C/910–4251	Turning, $\frac{1}{4}$″ x $8\frac{3}{4}$″	
B11C/910–4252	Turning, $\frac{3}{8}$″ x 9″	
B11C/910–4253	Turning, $\frac{1}{2}$″ x $9\frac{1}{4}$″	
B11C/910–4254	Turning, $\frac{5}{8}$″ x $9\frac{1}{2}$″	
B11C/910–4255	Turning, $\frac{3}{4}$″ x $9\frac{3}{4}$″	
B11C/910–4256	Turning, 1″ x $10\frac{1}{4}$″	
B11C/910–4257	Turning, $1\frac{1}{4}$″ x $10\frac{3}{4}$″	
B11C/910–4258	Turning, $1\frac{1}{2}$″ x $11\frac{1}{4}$″	

APPENDIX A—*continued.*

Pattern.	*Description.*	*Specification.*
	Gouges—	
B11D/910–5124 ..	Firmer, $\frac{1}{4}''$ x $4\frac{1}{4}''$	DEF. (AUST.) 812
B11D/910–5125 ..	Firmer, $\frac{3}{8}''$ x $4\frac{1}{2}''$	
B11D/910–5126 ..	Firmer, $\frac{1}{2}''$ x $4\frac{3}{4}''$	
B11D/910–5127 ..	Firmer, $\frac{5}{8}''$ x $4\frac{7}{8}''$	
B11D/910–5128 ..	Firmer, $\frac{3}{4}''$ x 5″	
B11D/910–5129 ..	Firmer, 1″ x $5\frac{1}{4}''$	
B11D/910–5130 ..	Firmer, $1\frac{1}{4}''$ x $6\frac{1}{4}''$	
B11D/910–5158 ..	Turning, $\frac{1}{4}''$ x $8\frac{3}{4}''$	
B11D/910–5159 ..	Turning, $\frac{3}{8}''$ x 9″	
B11D/910–5160 ..	Turning, $\frac{1}{2}''$ x $9\frac{1}{4}''$	
B11D/910–5162 ..	Turning, $\frac{3}{4}''$ x $9\frac{3}{4}''$	
B11D/910–5163 ..	Turning, 1″ x $10\frac{1}{4}''$	
	Hammers—	
B11D/910–4632 ..	Carpenters' Claw, adze eye, $1\frac{1}{4}$ lb. ..	DEF. (AUST.) 815

APPENDIX B.

Pattern.	*Description.*
	Calipers—
B11C/331 ..	Outside Firm Joint, 6″.
B11C/ — ..	Outside Firm Joint, 10″.
B11C/334 ..	Outside Firm Joint, 18″.
B11C/ — ..	Inside Firm Joint, 5″.
B11C/337 ..	Inside Firm Joint, 6″.
B11C/3871 ..	Inside Firm Joint, 14″.
B11C/ — ..	Inside Firm Joint, 16″.
B11C/ — ..	Inside Firm Joint, 18″.
B11C/ — ..	Inside Firm Joint, 20″.
B11C/ — ..	Inside Firm Joint, 28″.
B11C/ — ..	Jenny Firm Joint, 5″.
	Chisels—
B11C/910–4180 ..	Cross Cut, Nickel Steel, $\frac{5}{32}''$ x 4″.
B11C/H361 ..	Cross Cut, Nickel Steel, $\frac{1}{2}''$ x 9″.
B11C/362 ..	Diamond Point, Cast Steel, $\frac{1}{4}''$ x 7″.
B11C/ — ..	Diamond Point, Cast Steel, $\frac{5}{32}''$.
B11C/910–4189 ..	Diamond Point, Nickel Steel, $\frac{3}{16}''$ x 6″.
B11C/910–4202 ..	Flat, Nickel Steel, $\frac{3}{8}''$ x 4″.
B11C/910–4204 ..	Flat, Nickel Steel, $\frac{3}{8}''$ x 5″.
B11C/ — ..	Flat, Nickel Steel, $1\frac{1}{4}''$.
B11C/ — ..	Diamond Point Nickel Steel, $\frac{1}{2}''$ x 9″.
B11C/ — ..	Half Round Nose, Nickel Steel, $\frac{3}{8}''$.
B11C/400 ..	Finger.
B11C/910–4216 ..	Point $6\frac{1}{2}''$ Overall, made from $\frac{3}{8}''$ Sq. Cast Steel.
B11C/402 ..	Firmer, $\frac{1}{16}''$ x 4″.
B11C/ — ..	Firmer, $\frac{3}{16}''$ x $4\frac{1}{4}''$.
B11C/422 ..	Registered, $1\frac{1}{2}''$.
B11C/ — ..	Socket, $\frac{3}{8}''$.

(DNAS 401/54/59.)

UNCLASSIFIED.

1072.—Naval Stores (General) (Class B, Group 11, Part E)—Patterns 5976 and 5977—Pipe and Drain Clearing Tools—Allowances.

Navy Order 785 of 1960 is to be amended as follows—

Delete paragraph 2 and *insert* the following—

" 2. 1 No. of each pattern will be allowed to OMS and above."

(DNAS 506/71/77.)

(*Navy Order* 785 *of* 1960.)

UNCLASSIFIED — Cancelled C.N.O. 693/62

1073.—A.B.C.D.—Respirators, Anti-gas—Policy as to Type and Scale of Supply.

The following amendment is to be made to Navy Order 789 of 1960—

(*a*) *Delete* paragraph 9.

(*b*) *Substitute* new paragraph 9 as follows—

" Personal issues of anti-gas respirators are to be made as follows—

(*a*) *Cadet Midshipmen*—on first joining the Cadet Training Ship.

(*b*) *Direct Entry Officers*—during Preliminary Defence Course which follows the Indoctrination Course at Flinders Naval Depot.

(*c*) *Adult Entry Recruits*—during Preliminary Defence Course at Flinders Naval Depot.

(*d*) *Junior Recruits*—during Preliminary A.B.C.D. Course at H.M.A.S. LEEUWIN.

(*e*) *R.A.N. Apprentices*—during Junior A.B.C.D. Course at H.M.A.S. PENGUIN.

(*f*) *W.R.A.N.S.*—respirators are not to be issued."

(DMT 710/251/3.)

(*Navy Order* 789 *of* 1960.)

Section 5.

BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

UNCLASSIFIED.

1074.—Establishment Lists for Radio A/S, E/S, &c., Equipment—Accounting.

It has been decided that Establishment Lists for Radio, A/S, E/S, &c., equipment are to be " non-accountable ". Future issues by Superintending Naval and Air Store Officer, Sydney, will be made under cover of Advice Notes, forms A/S/ 2081Z, in accordance with the procedure set out in A.B.R. 4, Naval Storekeeping Manual, Article 2518.

2. Ledger pages in respect of Establishment Lists at present held in H.M.A. ships and commissioned establishments should be closed, quoting this order as authority, and removed to the Dead Ledger. *See* A.B.R. 4, Article 1808.

3. The foregoing instructions do not refer to printed Establishments of Naval Stores in the B.R. or A.P. Series, which should continue to be accounted for in the authorized manner.

(DNAS 517/51/185.)

UNCLASSIFIED. Cancelled N O 740/62

1075.—Magazine—" The Communicator "—Distribution.

The following is the revised distribution for the magazine " The Communicator " which will be brought into force with the Christmas Edition.

2. Until H.M.A.S. PARRAMATTA and H.M.A.S. YARRA are commissioned there will be spare copies available which may be demanded by ships requiring an extra copy.

	No. of Copies.
Navy Office (Canberra)	2 (DSD).
Victoria Barracks (Melbourne)	1 (A/DSD (M)).
C.S.T.F.N.D. (Signal School)	3
S.T.C. Sydney (Kuttabul)	2
HARMAN (for Canberra Naval Radio Station)	3
MELVILLE (for Darwin Naval Radio Station)	2
WATSON	1
LONSDALE (and R.A.N.R.)	1
RUSHCUTTER (and R.A.N.R.)	1
LEEUWIN (and R.A.N.R.)	2
HUON (for R.A.N.R.)	1
MORETON (for R.A.N.R.)	1
TORRENS (for R.A.N.R.)	1
TARANGAU	1
N.A.S. Nowra	1
A.J.A.S.S.	1
F.O.C.A.F.	1
ANZAC	2
BARCOO	2
DIAMANTINA	1
GASCOYNE	1
MELBOURNE	2
PARRAMATTA	2 (when commissioned).
QUEENBOROUGH	2
QUIBERON	2
QUICKMATCH	2
SWAN	1
VAMPIRE	2
VENDETTA	2
VOYAGER	2
WARREGO	1
YARRA	2 (when commissioned).
Spares	1

3. Navy Order 907 of 1960 is hereby cancelled.

(DSD 465/58/263.)

(*Navy Order* 907 *of* 1960.)

By Authority: A. J. Arthur, Commonwealth Government Printer, Canberra.

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