RESTRICTED

COMMONWEALTH NAVY ORDERS

INDEX OF NAVY ORDERS

1ST OCTOBER, 1954, TO 31ST MARCH, 1955.

For previous Navy Orders, refer to Index 1st January, 1948, to 30th September, 1954, and to Navy Order Volume 1927 - 1947, Part I.

N.0083

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3. The general coverage of each section is as follows :-

Section 1 - Administrative and General.

Administration, policy, ceremonies, and such other matters as do not conveniently fit into one of the other sections, e.g., commissioning of ships, hydrographic information, etc.

Section 2 - Personnel.

All matters relating to personnel (including recruitment, entry, training, examinations, education, promotion and advancement, welfare, discharges, pay and allowances, discipline, etc.) reserves, accounting, medical and dental (other than medical and dental stores), instructional films and film strips, etc.

Section 3 - Hull, Machinery, Equipment and Stores.

(A) Aviation - technical, excluding gunnery matters.

(B) Communications and radio.

(C) Electrical.

(D) Engineering - Main and auxiliary engines, boilers, flight deck and other machinery in the charge of the engineer officer, coal, fuel oil.

(E) Gunnery - guns (including aircraft gunnery matters), mountings, ammunition, turrets, directors, fire control, magazines, etc., and associated stores.

(F) Navigation direction - navigation direction stores and equipment, action information, organization equipment, compasses, charts, anchors, etc.

(G) Torpedo - anti-submarine - anti-submarine weapons, demolition and explosives, diving, mine countermeasures, seaward defence, mining, torpedoes, tubes and associated stores.

(H) Weather.

(I) Hull and general - alterations and additions, naval stores, general.

(Y) Boom Defence.

(Z) A.S.C.D.

Section 4 - Dental Stores, Medical Stores, Victualling Stores.

Section 5 - Books, Correspondence, Forms, Stationery.

Section 6 - Shore Establishments.

Section 7 - Cancelled List.

ABBREVIATIONS

Confidential Navy Orders are indicated by the letter C before the number.

Headings marked † in the lists of reference headings are for cross-indexing purposes only; no orders are entered under these headings.

SECTION 1 - ADMINISTRATIVE AND GENERAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

A

B

C

F

J

M

N

O

P

Q

R

S

V

Y

SECTION 2 - PERSONNEL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

A

C

K

L

M

N

O

P

R

S

T

U

W

SECTION 3 (A) - AVIATION

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

† Administration. (See Section 1 - Aviation)
† Ammunition. (See Section 3 (3))

† Bombs. (See Section 3 (E) - Aircraft)

Equipment

† Gunnery. (See Section 3 (E) - Aircraft)

Photography

Release Limitations

Safety Equipment and Survival
† Search and Rescue. (See Section 1 - Aviation)
† Stores. (See Section 3 (I) - Naval Stores)

Targets
† Training. (See Section 2)

E

P

R

S

T

SECTION 3 (8) - COMMUNICATIONS AND RADIO

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

AIRCRAFT RADIO

Modifications

RADAR

General

† Stores. (See Section 3 (I) - Naval Stores)

Types

V/S AND V/S SPECIAL

Flags and Accessories

WIRELESS

General

Aerials

Crystals

Outfits

Reports
Remote Control Systems

† Stores. (See Section 3 (I) - Naval Stores)

AIRCRAFT RADIO

M

Modifications -

RADAR

General -

T

Types -

V/S AND V/S SPECIAL

F

Flags and Accessories -

WIRELESS

General -

A

Aerials -

C

Crystals -

Supply 018/55

O

Outfits -

D.F. Outfit AH7 - fitting-out information .. 659/54

R

Reports -

Half yearly electrical and radio reports .. 133/55

Remote Control Systems -

Control outfit XHH - fitting-out information 168/55

T

Transmitters -

Type 691 - Mark 4 plugs, 12 pin, pattern 2560/50 - treatment with silicone grease - introduction 107/55

SECTION 3 (C) - ELECTRICAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

R

S

T

SECTION 3 (D) - ENGINEERING

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

† Alterations and Additions. (See Section 3 (I))

Boilers

Fuel

Machinery

Shafting

† Stores. (See Section 3 (I) - Naval Stores)

Valves

B

F

M

S

V

SECTION 3 (E) - GUNNERY

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

Aircraft -
- Ammunition. (See also Ammunition)
- Bombs
- Guns
- Pyrotechnics

Ammunition

Bombardment

Fire Control

† Fuzes. (See Ammunition)

Gun Direction Systems

Gun Mountings (other than Aircraft)

Gunnery Inspections and Trials

Guns (other than Aircraft)

† Igniters, ammunition. (See Ammunition)

Launchers

† Machine Guns. (See Small Arms)

† Primers, ammunition. (See Ammunition)

† Propellants. (See Ammunition)

† Pyrotechnics. (See Aircraft and Ammunition)

† Rockets. (See Aircraft and Ammunition)

Small Arms

Stores, Spare Parts, Tools and Ordnance Accessories. (See also Section 3 (I) - Naval Stores)

† Tracers, ammunition. (See Ammunition)

A

B

F

G

L

S

SECTION 3 (F) - NAVIGATION DIRECTION

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

C

P

W

SECTION 3 (G) - TORPEDO - ANTI-SUBMARINE

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

ANTI-SUBMARINE

Asdics

Bathythermographs

Echo Sounding

A/S WEAPONS

A/S Mortar

Depth Charges and Equipment

Squid

Trials

DEMOLITIONS AND EXPLOSIVES

Non-Explosive Stores

DIVING

General

MINE COUNTERMEASURES

General

Magnetic Sweeps

Paravanes. (Bow protection)

MINING

General

Mines

SUBMARINE PYROTECHNICS

Submarine Pyrotechnics

TORPEDO

Torpedoes
Torpedo Components

ANTI-SUBMARINE

A

B

E

A/S WEAPONS

A

D

S

T

DEMOLITIONS AND EXPLOSIVES

N

DIVING

MINE COUNTERMEASURES

M

P

MINING

M

SUBMARINE PYROTECHNICS

S

TORPEDO

T

SECTION 3 (H) - WEATHER

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

General

Communications

Organization

SECTION 3 (1) - HULL AND GENERAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

Alterations and Additions
† Ammunition. (See Section 3 (E))
† Armament Stores. (See Section 3 (E))

Cold and Cool Rooms
Cutters

Destroyers

Films and Film Strips. (See also Section 2)
Frigates

Habitability
Hull Outfit
Hull Structure

Naval Stores -
- General
- Accounting
- Air
- Electrical
- Equipment
- Fuel
- Motor Transport
- Technical

Paints and Compositions

Replenishment at Sea
Reports and Returns

Sanitary Arrangements

Tanks

Ventilation

A

C

D

F

H

N

P

R

S

T

V

SECTION 3 (Z) - A.B.C.D.

LIST OF SUB-SECTIONS

A.B.C.

Damage Control

Fire Fighting

A.B.C.

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

DAMAGE CONTROL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

FIRE FIGHTING

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

F

P

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

DENTAL AND MEDICAL STORES

VICTUALLING STORES

M

Mess Gear -

Cooking pots	689/54
Demands	627/54
Special items for cafeteria messing ..	865/54

P

Provisions -

Dehydrated vegetables	91/55
Form A.S.92 - fresh provisions received ..	784/54
Fruit juices	115/55
Revision of fixed issuing prices for - as from 1st January, 1955	34/55
S.A.R. craft - emergency and reserve rations	726/54

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

LIST OF REFERENCE HEADINGS

BOOKS

General

A.B.R. Publications
Air Publications

B.R. Publications

Meteorological

CORRESPONDENCE

FORMS

STATIONERY

BOOKS

General -

Distribution of non-accountable publications and amendments 655/54,767/54,831/54,866/54,57/55,217/55
Ships' libraries reference section - addition 94/55

A

A.B.R. Publications -

A.B.R. 10 - R.A.N. advancement instructions - amendment 632/54,159/55

Air Publications -

Instructions for the Fleet Air Arm 693/54
Manual of naval airmanship - issue of copies to naval airman ratings 600/54
Sea Otter aircraft and Mercury engines - disposal 194/55
Vampire Trainer 766/54

B

B.R. Publications -

B.R.1837 (7) and (8) -
Ammunition - vocabulary of naval armament stores 794/54,171/55
Introduction of store references for naval armament stores - reprinting of part 11 (ammunition) of the vocabulary of naval armament stores (O.U.5365B) 170/55
B.R.2018 - Handbook for testing and tuning R.P.10, R.P.40 and R.P.50 auto systems - personal issue 653/54

M

Meteorological -

Miscellaneous publications and charts - Supply and accounting arrangements .. 195/55

CORRESPONDENCE

General -

Director of Naval Education Service .. 628/54
Dispatch of correspondence to Navy Office .. 148/55
Mail despatched from H.M.A. ships and shore establishments 601/54
Naval Board correspondence 813/54
Naval hospital, Manus Island 197/55

FORMS

SECTION 6 - SHORE ESTABLISHMENTS

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked † are for cross-reference only. No Orders are indexed under headings so marked.

A

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SECTION 7 - CANCELLED LIST

(KEY TO SUPERSEDED ORDERS)

Orders cancelled between 1st April, 1954, and 31st March, 1955.

For previous cancellations see Navy Order Volume 1927-1947, Part 1, and Navy Order Indexes 1st January, 1948, to 31st March, 1954.

C denotes C.C.N.O.

Cancelled Order	Superseded By
1940	
138	140/54
157	
1942	
125	132/54
193	729/54
1943	
143	132/54
275	
409	729/54
457	
520	132/54
603	
1944	
15	132/54
67	203/54
118	132/54
197	729/54
213	132/54
225	277/54
240	132/54
C277	C28/55
418	132/54
436	439/54
496	729/54
561	208/54
1945	
44	596/54
52	320/54
82	729/54
114	601/54
308	729/54
317	140/54
318	208/54
322	320/54
346	729/54
368	140/54
564	
1946	
23	729/54
36	712/54
48	847/54
1946 (Cont'd.)	
142	710/54
201	112/55
235	341/54
298	140/54
315	320/54
399	645/54
1947	
135	596/54
147	739/54
169	622/54
180	320/54
194	729/54
217	
251	
283	
284	140/54
297	660/54
336	650/54
378	729/54
393	140/54
1948	
C12	C90/54
66	150/54
84	198/55
110	668/54
176	710/54
185	151/54
243	660/54
244	
296	341/54
318	96/55
338	279/54
1949	
4	628/54
8	140/54
C17	C55/54
C26	
28	C21/55
C30	C55/54
77	804/54
86	153/54
121	

Cancelled Order	Superseded By
1949 (Cont'd.)	
175	400/54
243	320/54
299	400/54
303	444/54
311	659/54
347	140/54
364	199/54
416	660/54
1950	
43	689/54
124	61/55
133	199/54
210	614/54
262	140/54
328	280/54
349	467/54
368	320/54
374	444/54
384	729/54
1951	
33	729/54
42	544/54
46	198/55
48	218/54
58	132/54
78	218/54
92	332/54
122	218/54
131	127/54
156	30/55
196	660/54
203	320/54
209	462/54
257	523/54
282	61/55
299	400/54
334	399/54
337	523/54
344	729/54
350	236/54
384	566/54
405	306/54
407	138/54
411	148/55
435	462/54
440	18/55
444	C71/54
1952	
11	750/54
C12	C44/54
13	177/55
14	504/54
C28	C86/54
C29	C15/54
41	691/54
86	139/54
93	30/55
1952 (Cont'd.)	
104	656/54
119	400/54
125	404/54
178	523/54
184	742/54
187	523/54
188	140/54
201	400/54
212	320/54
238	140/54
248	139/54
253	128/54
269	191/54
279	133/55
321	194/54
371	661/54
391	38/55
399	30/55
412	585/54
413	742/54
424	215/54
452	215/55
1953	
10	120/55
C18	C36/54
C21	C23/55
C25	C4/55
C26	C66/54
C29	C21/55
C34	C82/54
C35	C33/54
C39	C21/55
C40	
41	333/54
47	C21/55
50	
51	
65	661/54
79	400/54
106	120/55
118	115/55
136	59/55
137	660/54
148	523/54
155	400/54
184	199/55
194	72/55
222	520/54
235	714/54
246	155/54
257	349/54
271	323/54
283	689/54
284	318/54
285	484/54
286	365/54
297	348/54
307	524/54
308	514/54

Cancelled Order	Superseded By	Cancelled Order	Superseded By
1953 (Cont'd.)		1954 (Cont'd.)	
312	60/55	C51	C27/55
318	235/54	65	294/54
338	158/54	C79	C21/55
348	812/54	80	400/54
365	13/55	88	178/55
378	276/54	89	165/54
381	60/55	95	170/55
391	524/54	98	162/55
393	515/54	102	19/55
395	349/54	128	786/54
397	318/54	141	385/54
403	34/55	144	199/55
441	120/55	148	411/54
445	606/54	207	604/54
451	153/54	265	575/54
452	35/55	302	512/54
467	446/54	326	776/54
494	447/54	339	58/55
511	127/54	356	538/54
512	513/54	358	847/54
513	514/54	374	C21/55
533	463/54	428	755/54
1954		439	24/55
		542	124/55
C15	C8/55	656	179/55
24	165/54	794	170/55
C28	C8/55	832	58/55
40	56/55	853	179/55

J.G. HOLMES, Printer, 310 King Street, Melbourne.

RESTRICTED

COMMONWEALTH NAVY ORDERS

INDEX

OF

NAVY ORDERS

1ST APRIL TO 30TH JUNE, 1955.

For previous Navy Orders, refer to Indexes 1st January, 1948, to 31st March, 1955, and to Navy Order Volume 1927 - 1947, Part I.

N.0144

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(F) Navigation direction - navigation direction stores and equipment, action information, organisation equipment, compasses, charts, anchors, etc.

(G) Torpedo - anti-submarine - anti-submarine weapons, demolition and explosives, diving, mine countermeasures, seaward defence, mining, torpedoes, tubes and associated stores.

(H) Weather

(I) Hull and general - alterations and additions, naval stores, general, etc.

(Y) Boom Defence.

(Z) A.B.C.D.

Section 4 - Dental Stores, Medical Stores, Victualling Stores.

Section 5 - Books, Correspondence, Forms, Stationery.

Section 6 - Shore Establishments.

Section 7 - Cancelled List.

ABBREVIATIONS

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SECTION 1 - ADMINISTRATIVE AND GENERAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

A

C

D

F

H

J

N

O

P

R

S

SECTION 2 - PERSONNEL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

A

B

C

D

SECTION 3 (A) - AVIATION

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

S

SECTION 3 (8) - COMMUNICATIONS AND RADIO

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

RADAR

*Stores. (See Section 3 (I) - Naval Stores)

Types

RADIO

Crystals

Hazards

WIRELESS

General

Aerials
Automatic Telegraph

Outfits

Receivers

*Stores. (See Section 3 (I) - Naval Stores)

RADAR

T

Types -

262/M/P - observation of fall of shot in surface fire 343/55
277 P/Q and 293 P/Q - S - band test equipment - reports 310/55
277 P/Q, 293 P/Q, 982 and 983 - S - band test equipment - crystal burn-out C46/55
293M/P/Q - use for D.F. and search purposes C62/55

RADIO

C

Crystals -

Wireless communication equipment in H.M.A. ships, R.A.N. Air Stations and Naval Aircraft - supply of crystals C47/55

H

Power supplies - Pattern No. W891 motor generator - replacement 466/55

WIRELESS

General -

MF/HF Receiver common aerial working - introduction 243/55

A

Aerials -

Outfits AYC, AYD and AYE - fitting-out information C63/55

Automatic Telegraphy -

Radio teletype (R.A.T.T.) in ships - policy .. C48/55

O

Outfits -

Search and DF outfit UA2 - fitting-out information C56/55

R

Receivers -

Outfits CAY, CAZ, CDW and CDY - modified receivers B40 A.P.57140D and B41 A.P.57141C - introduction 344/55

SECTION 3 (C) - ELECTRICAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Accumulators

Fittings

Generators and Alternators

*Stores. (See Section 3 (I) - Naval Stores)

A

F

G

SECTION 3 (D) - ENGINEERING

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

C

M

S

SECTION (E) - GUNNERY

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

A

B

G

L

S

SECTION 3 (F) - NAVIGATION DIRECTION

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Charts
Compasses

Plots and Plotting. (See also Section 3 (G))

* Replenishment at Sea. (See Section 3 (I))

Sight Reduction
* Stores. (See Section 3 (I) - Naval Stores)

C

P

R

SECTION 3 (G) - TORPEDO - ANTI-SUBMARINE

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

ANTI-SUBMARINE

Asdics

A/S WEAPONS

Depth Charges

DIVING

General

MINE COUNTERMEASURES

General

Magnetic Sweeps
Minesweeps

Paravanes
Plots and Plotting

TORPEDO

General

Torpedo Components

ANTI-SUBMARINE

A

A/S WEAPONS

D

DIVING

MINE COUNTERMEASURES

M

P

TORPEDOES

SECTION 3 (H) - WEATHER

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Communications

C

Communications -

SECTION 3 (1) - HULL AND GENERAL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Alteration and Additions
* Ammunition. (See Section 3 (E))

* Films and Film Strips. (See Section 2)

Naval Stores -
Accounting
Air
Allowances
Electrical
Equipment
Furniture
Motor Transport
Stores
Technical

Materials

Paints and Compositions

Replenishment at Sea

Spare Gear

A

N

SECTION 3 (Z) - A.B.C.D.

LIST OF SUB-SECTIONS

A.B.C.

Damage Control

Fire Fighting

A.B.C.

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Breathing Apparatus

* Courses. (See Section 2)

* Films and Film Strips - Instructional. (See Section 2)

Respirators

* Stores. (See Section 3 (I) - Naval Stores)

* Training. (See Section 2)

B

R

DAMAGE CONTROL

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked *are for cross-reference purposes only. No Orders are indexed under headings so marked.

FIRE FIGHTING

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

Fire Fighting Equipment

* Training. (See Section 2)

Fire Fighting Equipment -

Fire control - magslip transmission systems - specification of rotation/connection conventions and housing requirements for magslip elements 332/55

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

MEDICAL STORES

Medical Stores

VICTUALLING STORES

General

Clothing

Provisions

MEDICAL STORES

VICTUALLING STORES

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked * are for cross-reference purposes only. No Orders are indexed under headings so marked.

BOOKS

General

A.B.R. Publications
Air Publications

CORRESPONDENCE

FORMS

BOOKS

SECTION 6 - SHORE ESTABLISHMENTS

LIST OF REFERENCE HEADINGS

NOTE:- Headings marked* are for cross-reference purposes only. No Orders are indexed under headings so marked.

Accommodation
Accounting

Jervis Bay

Motor Transport

Removals
Reports

A

J

M

R

SECTION 7 - CANCELLED LIST

(KEY TO SUPERSEDED ORDERS)

Orders cancelled between 1st April, 1955, and 30th June, 1955.

For previous cancellations see Navy Order Volume, 1927-1947, Part 1, and Navy Order Indexes 1st January, 1948 to 31st March, 1955.

C denotes C.C.N.O.

Cancelled Order	Superseded By
1941	
219	241/55
1945	
272	438/55
357	360/55
1946	
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135	252/55
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549	392/55
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C.N.Os.1-13/55

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
4th January, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0042

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List of Admiralty Fleet Orders promulgated as Commonwealth Navy Orders (Navy Order 104 of 1954.)

SECTION 1.- ADMINISTRATIVE AND GENERAL

1.

ISSUE OF NAVY ORDERS - 1954.

The last Navy Order issued for 1954 was No. 867.

(3712/20/14)

2.

NATIONAL SERVICE TRAINEES - PAY RATE DURING PERIOD OF TRAINING, AND RATING ON COMPLETION OF TRAINING OBLIGATION.

Owing to changes in the National Service Training Scheme, since Navy Order 240 of 1951 was issued, occasioned by the variation of the training period and the introduction of the scheme of training for "Students" having a National Service Training obligation, a new Navy Order, now in course of preparation, covering the Naval administration of the National Service Trainee will be necessary.

This will be issued as early as practicable.

2. In the meantime, Navy Order 240 of 1951, is to be amended as follows :-

Paragraph 34 is to be deleted and the following inserted in lieu :-

34. Rates of pay and allowances for members of the R.A.N.R. (N.S.) during their period of 154 days' training, whether undertaken in one continuous period, or under the "Students" scheme in two periods of 77 days in each of two successive years, are as follows :-

(i) Active Pay - National Servicemen entered as Recruits will be paid the Recruit (Minor) rate, except that the Recruit (Adult) rate is payable in respect of any period of training performed by a member subsequent to his having attained twenty-one years of age.

(ii) Active Pay Deferred - In the case of unmarried trainees an amount of 5/- per day is to be deferred from Active Pay for payment on completion of initial full-time training, provided that in special cases the Commanding Officer may, at his discretion, approve a lesser amount to be deferred.

(iii) Marriage Allowance - Marriage Allowance may be paid to married members on production of the Marriage Certificate and declaration of allotment under the usual conditions as applicable to members of the Permanent Naval Forces.

(iv) Separation Allowance - Separation Allowance may be paid to members under existing R.A.N. conditions.

Paragraph 57 is to be deleted and the following inserted in lieu :-

57. RATING ON COMPLETION OF TRAINING OBLIGATION.

(i) Shortly before the end of the 154 day training period, trainees who undertake their training in the one period are to be examined for rating by their Training Establishment in the Syllabus laid down.
Those who, under the "Students" scheme undertake their training in two periods of 77 days in each of two successive years, are to be examined shortly before the conclusion of the second 77 day period.

(ii) Those who pass will subsequently be rated Ordinary Seaman (N.S.) (or equivalent) to date as under -

Those who obtain 85% or higher	- 6 calendar months from date of starting 154 days' training (or first 77 days in the case of "Students").
Those who obtain 75-84%	- 7 calendar months from date of starting 154 days' training (or first 77 days in the case of "Students").
Those who obtain 65-74%	- 8 calendar months from date of starting 154 days' training (or first 77 days in the case of "Students").

provided that where a "Student's" advancement to Ordinary Seaman (N.S.) (or equivalent) is ante-dated in accordance with the foregoing, such ante-date shall not serve to entitle the rating to any retrospective adjustment of pay in respect thereof.

(iii) Those who obtain less than 65% in the aggregate, or below 50% in any of the subjects taken, are to be failed.

(iv) Nominal lists showing results, including marks obtained, of qualifying examination for rating and for specialist qualification (in the case of Seaman ratings) are to be forwarded to the Director of Naval Reserves within one month of completion of training.

(v) The Training Establishment conducting the examination is to enter the results thereof on page 2 of the ratings Forms R.A.N.R. (N.S.) 2 before these are forwarded to the Reserve Training Establishments to which they will subsequently be attached.

(vi) Commanding Officers of Reserve Training Establishments are, after receipt of these results, to rate the individuals concerned at the appropriate dates shown on the Service Certificates. Forms A.S. 161 are to be forwarded. The ratings themselves are to be informed by the Establishments concerned.

(vii) The conditions of subsequent advancement of R.A.N.R. (N.S.) personnel will be the same as those for members of the R.A.N.R.

(4002/13/298)

SECTION 2.- PERSONNEL

3.

RE-ENGAGEMENT OF MEN SELECTED TO UNDERGO COURSE OF INSTRUCTION.

It is intended to amend Consolidated Orders and Regulations by deleting the existing Article 144 and inserting the following new Article :-

"144. Re-engagement Of Men Selected To Undergo Courses Of Instruction.- For the purposes of this Article courses of instruction are grouped as follows :-

Group "A" - Courses which confer benefits in excess of those normally required for purely Service needs and courses which are of long duration or give qualifications for change in branch, such as -

Mechanician Course.
Air Mechanician Course.
Sick Berth Course at a civil hospital lasting at least one year.
Language training course.
Courses abroad for commissioned rank, and courses involving expense of passage abroad.

Group "B" - Courses in technical branches which are compulsory before advancement to the confirmed Petty Officer rating or courses for Instructor specialist ratings, such as -

Aircraft Handler I.	Gunnery Instructor.
Safety Equipment I.	T.A.S. Instructor.
Meteorological Observer I.	Wireless Instructor.
Photographer I.	Signal Instructor.
P.O. Airman Fitter.	Plot and Radar Instructor.
P.O. Telegraphist.	Diver II and I.

Yeoman of Signals.	Sick Berth civil hospital course of less than 12 months.
Electrician.	First class specialist rates of Seaman Branch.
Physical Training II and I.	

2. A rating selected for a course in Group "A" whose current engagement is due to expire within four years of the date of completion of the course will be required to re-engage before commencing the course or before embarkation as appropriate. Such re-engagement will be for a period equal to the sum of -

(i) the unexpired portion of his current engagement; and

(ii) the period of his next normal re-engagement,

provided that where such period (i.e. the unexpired portion of the rating's current engagement plus the period of his next normal re-engagement) would expire less than four years after the anticipated date of completing the course, the re-engagement period will be extended to include the next subsequent period.

3. A rating selected for a course in Group "B" whose current engagement is due to expire within two years of the date of completion of the course will be required to re-engage for the period equal to the sum of -

(i) the unexpired portion of his current engagement; and

(ii) the period of his next normal re-engagement.

4. A rating whose current engagement is due to expire within one year of the date of completion of a course will not normally be selected for any course, including courses which would be grouped lower than those in Group "B". Such a rating if desirous of having his name listed for a course should indicate that he is willing to re-engage. The remarks column of Form A.S. 1303 or other form of recommendation should be endorsed accordingly.

5. Ratings who have completed 17 years' service or have reached 40 years of age will not be given courses unless there are special circumstances."

(3712/19/76)

SECTION 3.- HULL, MACHINERY, EQUIPMENT AND STORES.

4.

RADAR - TYPE 275 - CONTROL UNIT DESIGN 13 - SELECTIVE FITTING.

Selected ships in commission and building will be supplied with Control Unit Design 13, A.P. 54733, until stocks are exhausted. This action has been taken so that

the maximum benefit may be obtained from the teacher facility in training the Bearing and Elevation operators of Radar, Type 275.

2. The Control Unit Design 13 will enable operators to be trained, in the absence of a Live target, by simulated targets with varying rates of change of range and bearing. Since bearing facilities are only incorporated in the teacher, the Elevation Control Unit operator must be trained on the Bearing Control Unit.

3. The ships and establishments named in paragraph 5 should demand the following stores from the nearest (S) N.S.O. if not already fitted :-

1 in No.	Control Unit Design 13	A.P.54733
1 in No.	Connector, 8 way	A.P.66554
1 in No.	Plug, 3 pin	Air Ministry Reference 5X102
10 yards	Cable, 3 core	A.P.9086P.

4. Before fitting the Control Unit Design 13, it is necessary to remove the existing Control Unit Design 68 from the Top Outer Right Panel of the 275 tallboy. The Control Unit Design 13 should be inserted and connected in lieu. (B.R. 1768(5), Chapter 49, refers.)

5. The following ships and establishments have been selected to fit the Control Unit Design 13 for training purposes :-

H.M.A.S. ANZAC
H.M.A.S. TOBRUK
H.M.A.S. VOYAGER
H.M.A.S. VAMPIRE
H.M.A.S. VENDETTA
Electrical School, Flinders Naval Depot.

(The foregoing is the text of A.P.O. 2256/1954 altered to meet R.A.N. conditions.)

(4519/31/535)

5.

RADIO - MOUNTINGS, SHOCK/VIBRATION, PATTERNS 66651, 66652, 66653, AND 61321 - USE.

The current standard patterns of shock/vibration mountings and corresponding securing clips are shown on the left-hand side of the table below. The right-hand side shows the corresponding older design resilient mounts, packing pieces and clips.

New Mountings and Securing Clips		Existing Mountings, Packing Pieces and Securing Clips		
Mounting	Securing Clips	Mounting	Packing Piece	Securing Clip
66653	57733 (2)	W.3083	66659	57733 (1)
66652	57734 (2)	W.3114	66658	57734 (1)
66651	57735 (2)	W.3115	66657	57735 (1)
(see Note A) 61321	57736	W.3116	-	57736 (2)

Note A.- Not to be used in Type 262 Radar.

Except when individually specified Patterns W.3083, W.3114 and W.3116 will be issued as long as stocks are available, in lieu of the later designs. Pattern W.3115 will continue in use in Type 262 Equipment and the slightly larger Pattern 66651 mountings are not to be used for this application.

2. Old and new type mounts are not to be fitted in the same piece of equipment.

3. Apparatus supported by these mountings is to be efficiently earthed by copper or aluminium tape (in accordance with Installation Specification for Abatement of Radio Interference in H.M. ships B786) run between the earthing terminal of the apparatus and a direct earth connection. Where the apparatus is not provided with an earth terminal, the tape is to be secured between a securing clip and the mounting. Sufficient slack is to be allowed in the earth tape so as not to restrict the movement of the mount.

4. Some of the relevant "E" Lists have been amended and the remainder will be amended in due course.

(The foregoing is the unaltered text of A.F.O. 2526/1954.)

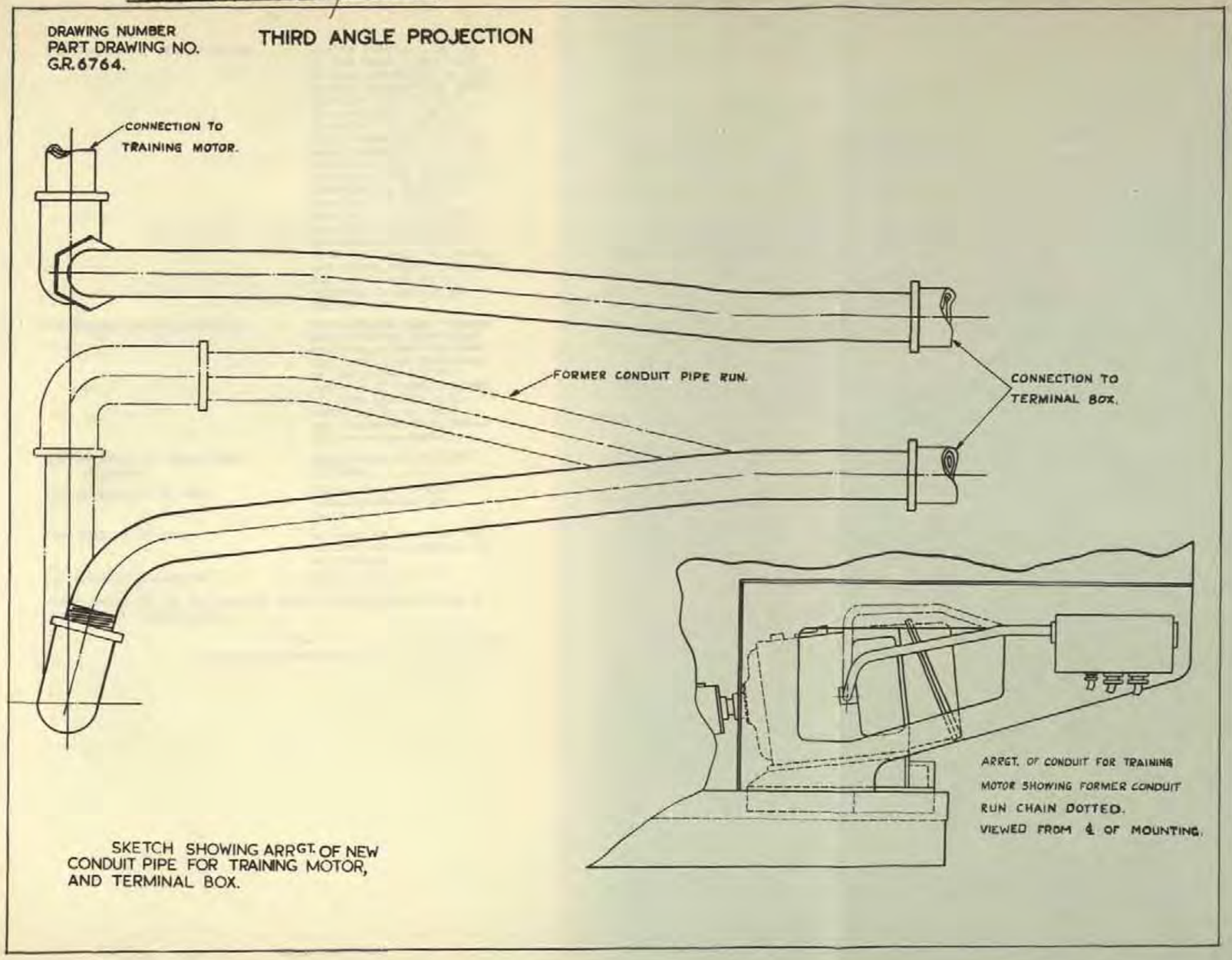
(4519/11/854)

6.

GUN MOUNTINGS - 40 mm. BOFORS TWIN R.P. 50 MARK 5 MOUNTINGS - CONDUIT CABLE FOR TRAINING MOTOR - MODIFICATION NO. 24.

(a) Ships, Establishments and Authorities concerned.	Ships and Shore Establishments, Dockyards, Repair Establishments and Gunnery Equipment Depots holding these mountings.
(b) Types and Marks of Mounting	40 mm. Bofors Twin Mark 5, R.P. 50 Mounting.
(c) Parts of Mounting Affected	The run of cable protective tubing between the training driving motor and training motor terminal box.

Navy Order 6 of 1954 Diagram



(d) Purpose of Modification	During practice firing it has been found that on some mountings a foul occurs between the cable conduit pipe for the training motor and terminal box and the right hand gun when the hand operating lever is housed in the rear catch position, and the gun is elevated or depressed through 76° to 82° approx. All mountings should be examined to determine whether this foul is likely to occur, and where found necessary the modification to prevent it should be carried out.
(e) Nature of Modification	The conduit pipe between the training motor and training motor terminal box should be re-routed as indicated in Navy Order 6 of 1955 Diagram. 1¼ inch Conduit A.P. 10806 is to be used and demanded from Naval Stores as necessary.
(f) Drawings or Navy Order Diagrams	Navy Order 6 of 1955 Diagram.
(g) By whom to be done	Ships staff, repair establishments and depots.
(h) When to be done	As soon as possible or on the next occasion of stripping.
(i) How to be treated	As a defect.

(The foregoing is the text of A.F.O. 3049/1954 altered to meet R.A.N. conditions.)

(4429/41/160)

7.

ALTERATION AND ADDITION ITEM - H.M.A.S. SYDNEY.

Navy Order 722 of 1954 is to be amended by the insertion of Class List Item No. 271.

(4278/1/57)

8.

BINOCULARS, LIGHT WEIGHT, PATTERN A.C.2035, FOR USE OF F.O.B. PARTIES - INTRODUCTION.

A requirement has arisen for a light weight binocular with a graticule to assist Forward Observation Officers in assessing the position of the fall of shot in Bombardment practices.

2. A 6 power Binocular with 30 mm. objectives manufactured by Kershaw and fitted with a horizontal graticule in the right eyepiece has been obtained. The graticule covers 4° and is marked in degrees and quarters.

3. Pattern No. A.C.2035 has been allocated to these binoculars which will be supplied without demand, to Cruisers, Darings and R.A.N. Battle Class Destroyers, on a basis of 2 binoculars each ship, as supplies become available.

(The foregoing is the text of A.F.O. 2472/1954 altered to meet R.A.N. conditions.)

(4518/16/109)

9.

FIRE-IRONS - TRANSFER TO "CONSUMABLE" CATEGORY.

The items shown in the Appendix to this Order, at present classified Permanent stores, are to be transferred to the "Consumable" category.

2. Ships and Services concerned should make the necessary adjustments to their accounts in accordance with the instructions contained in Article 109(C) of B.R.4, Naval Storekeeping Manual.

3. Any such items in Official Residences and Married Quarters should continue to be dealt with as Permanent items subject to recovery of percentage charges of 4% per annum.

4. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 2914/1954 altered to meet R.A.N. conditions.)

(4506/2/23)

APPENDIX

Pattern No.	Description
106A	Rakes, galvanised
112	Shovels, coal
5867	Tongs, scissor
19	Pokers, fire
19A	Shovels, fire (a)
19B	Tongs, bright (b)

(a) obsolete (b) obsolescent.

10.

H.M.A. SHIPS - FIRE FIGHTING EQUIPMENT - REMOVAL OF FIRE BUCKETS.

In view of the quantity and efficiency of portable fire appliances supplied to H.M.A. Ships, it has been decided that all fire buckets can be dispensed with.

2. All ships are to remove and return all fire buckets to the appropriate (Superintending) Naval Store Officer at the first opportunity.

3. An appropriate item is to be included in the next main defect list. "To remove all fire bucket stowages".

4. Ships are to report to Navy Office the total weight of fittings removed.

(4276/4/309)

11.

NAVAL STORES (GENERAL) (CLASS B, GROUP 9A) - BLOWLAMPS AND BRAZING APPARATUS - TESTING.

It has been decided that, in view of the pressure test carried out by contractors at their works on the containers of blowlamps and the containers and hoses, if fitted, of brazing apparatus, retest of these items at Dockyards before they pass into stock, is unnecessary. Contractors will in future be required to record on a metal plate, to be soldered on to the container of each blowlamp or brazing apparatus, the date of the pressure test carried out thereon, and the pressure applied. Such tests are to be witnessed by a Departmental Inspecting Offi er. If imported items bear a test record plate and ther are no visual signs of damage in transit they are to be accepted into store without further test.

2. The containers of blowlamps and the containers and hoses, if fitted, of brazing apparatus are to be tested (in addition to the test carried out by contractors before delivery) as follows :-

(a) Before issue to H.M.A. ships and services.

(b) Before being taken into stock after repair.

(c) Every 12 months from date of issue (including stocks in Dockyard Loan Tool Stores).

The date of the last test and the pressure applied should be recorded on the metal plate.

3. B.R. 1692 (The Storehouse Manual) will be amended.

(The foregoing is the text of A.F.O. 1916/1954 altered to meet R.A.N. conditions.)

(4505/90/133)

SECTION 4.- DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

12.

MEDICAL STORES - ANTIBIOTICS.

Monthly reports of the use of antibiotics are no longer required.

2. Paragraph 2 of Navy Order 167 of 1954 is hereby cancelled.

(4482/1/166)

SECTION 6.- SHORE ESTABLISHMENTS

13.

FURNITURE - OFFICIAL RESIDENCES AND MARRIED QUARTERS - ELECTRICAL APPLIANCES.

Particulars of charges recoverable from tenants using the undermentioned appliances in official residences and married quarters are as follows :-

Description	Annual Charge	Remarks
Electric Irons Electric Jugs Electric Kettles Electric Radiators Electric Urns Electric Vacuum Cleaners	15%	The charge should be based on the total cost of the appliance, including elements where applicable. Reduction of value for percentage charge purposes is not permissible.
Electric Table Fans	4%	
Electric, Gas or Kerosene Refrigerators	12½%	

Description	Annual Charge	Remarks
Electric Ceiling Fans Electric Heater Panels (built in radiators) Electric Sink Heaters, Coppers, and Hot Water Systems Electric Stoves	Nil	Regarded as fixtures of the house and not subject to furniture percentage charges.

2. Replacement of defective elements in electrical appliances will be effected at Commonwealth expense, except where replacement is necessary as a result of negligence or misuse, when charges should be imposed in accordance with normal procedure.

3. Navy Order 365 of 1953 is hereby cancelled.

(3021/51/35)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954.)

A.F.O.'s (April, 1954 and Onwards)	ADOPTED IN FULL C.N.O. 1954	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954
900	231	-
931	-	244
932	-	245
933	223	-
935	-	248
936	244	-
937	-	292
938	249	-
940	-	331
942	296	-
947	-	436
948	357	-
950	-	221
974	206	-
978	-	233
984	-	360
985	-	344
994	-	269
999	-	240
1001	-	371
1004	-	242
1005	-	243
1007	-	247
1008	441	-
1009	303	-
1010	-	304
1011	-	C.C.N.O. 36
1019	253	-
1042	295	-
1046	-	311
1055	-	343
1056	-	361
1060	-	816
1071	-	700
1072	-	375
1074	222	-
1076	-	309
1080	-	353
1083	-	254
1084	442	-
1085	-	459
1116	-	342
1128	-	397
1132	-	275
1134	-	252
1136	278	-
1137	255	-
1139	-	432
1148	336	-
1158	-	339
1181	302	-
1182	393	-
1184	288	-
1187	-	351
1189	-	579
1190	684	-
1193	-	437

A.F.O.'s (April, 1954 and Onwards)	ADOPTED IN FULL C.N.O. 1954	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954
1198	-	560
1216	-	260
1241	-	359
1251	-	419
1255	-	325
1256	-	290
1259	291	-
1262	-	377
1263	-	709
1269	-	379
1270	-	435
1275	-	440
1276	-	335
1299	-	321
1310	-	518
1317	546	-
1323	-	589
1324	-	363
1340	-	469
1343	-	349
1344	-	350
1345	-	326
1346	-	327
1348	-	686
1349	305	-
1352	-	356
1353	-	334
1355	-	358
1357	-	452
1369	-	480
1370	-	630
1405	-	550
1406	-	420
1408	324	-
1409	-	372
1411	378	-
1413	-	822
1418	-	599
1441	-	399
1444	401	-
1475	-	471
1477	499	-
1480	-	621
1482	-	478
1527	369	-
1531	-	472
1532	-	373
1533	-	453
1538	-	763
1539	-	495
1548	460	-
1549	559	-
1595	-	479
1614	-	461
1616	-	500
1617	392	-
1622	-	581
1623	-	598
1624	-	380
1646	384	-

A.F.O.'s (April, 1954 and Onwards)	ADOPTED IN FULL C.N.O. 1954	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954
2779	-	790
2781	-	796
2783	-	846
2785	-	821
2823	852	-
2836	788	-
2845	-	839
2847	-	842
2852	843	-
2862	-	860
2890	-	855
2902	-	841
2906	-	797
2915	863	-
2941	-	814
2961	857	-
2964	-	802
2969	-	861
3045	-	859
3048	817	-
3051	844	-
3060	-	862

NOTE:- A.F.O.'s subsequent to 900/1954, which are not listed above, can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206-867 of 1954, dated 1st June to 29th December, 1954.)

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C.N.O.14-38/55

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
11th January, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0045

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SECTION 2.- PERSONNEL

14.

EDUCATIONAL - HIGHER EDUCATIONAL TEST - EXEMPTION IN RESPECT OF CIVILIAN QUALIFICATIONS.

As from the date of this Order, ratings in possession of civilian 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 commissioned rank on the Branch List.

2. 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 civilian certificates involved each case will be determined on its merits by the Naval Board.

3. Requests for exemption are to be made to Commanding Officers who are to forward them to Navy Office for decision, supported by the actual Certificate in respect of which exemption is claimed. Exemptions will be noted in Navy Office records.

4. Exemptions will not lead to the award of a Higher Educational Certificate. This Certificate will be awarded only to candidates at the H.E.T. examination who pass in four subjects of that examination.

(4017/7/127)

(This Order will be reprinted for posting on Notice Boards.)

15.

INSTRUCTIONAL FILMS AND FILM STRIPS - RELIGIOUS - H542 - "THE PRIOR CLAIM" - DISTRIBUTION.

Copies of the new religious film H.542, "The Prior Claim", are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments	No. of Copies
R.A.N. Film Library, Sydney	1
Flinders Naval Depot	1

2. A synopsis of the film is as follows :-

" The camera visits the Pacific Islands to record the life of elephant seals and brings back from Midway Island most entertaining studies of the gooney bird and the bosun bird that can fly backwards and take off vertically like a helicopter.

The further the scientist delves into the intricate equipment by which tiny and humble creatures live, the more do we see that man has no prior claim to originality in invention. It is God the Creator of all, who first conceived the idea." Running time 43 minutes. 1 spool.

3. 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.

(4518/61/413)

SECTION 3.- HULL, MACHINERY, EQUIPMENT AND STORES

16.

ELECTRICAL EQUIPMENT AND TRIALS UNIT - DUTIES AND RESPONSIBILITIES.

The Electrical Equipment and Trials Unit is to operate from the date of this Order as an integral part of the Directorate of the Naval Electrical Branch. The Unit will make its Headquarters in Sydney, ratings being borne in H.M.A.S. KUTTABUL additional for Electrical Equipment and Trials Unit. The Officer-in-Charge of the Unit will be attached to the staff of the Director of the Naval Electrical Branch with accounts borne in H.M.A.S. KUTTABUL.

2. This Unit, which will keep in close touch with electrical and radio developments, and with sea opinion regarding operation and maintenance of electrical equipment, is constituted to carry out the following functions :-

(a) Introduction of new electrical equipment and systems.

The Unit will provide expert advice and assistance on the testing, tuning and maintenance of new electrical equipment and systems to Ship's Officers and the instructional staff of H.M.A. Naval Electrical School during the introductory and familiarization stage. Officers who have been associated with development and trials of such new equipment and systems will be appointed additional to the Unit for this purpose.

(b) Equipment evaluation trials and inspections.

The Unit will carry out evaluation trials and inspections of new and existing electrical equipment and systems, and of modification proposals. Proposals for trials and inspections of this nature are to be submitted for prior approval to the Naval Board.

(c) Trials in Ships under construction, modernization, conversion and large repairs, including pre and post refit trials.

The Unit will represent the Director, Naval Electrical Branch, and the Electrical School at electrical trials (Navy Order 36 of 1952, except at trials after minor refits) and overall gunnery control trials (Navy Order 189 of 1954). Where a trials programme has been approved these responsibilities will be co-ordinated at Navy Office.

(d) Assistance to Ships and Establishments on current equipment problems beyond Fleet or local resources.

Officers and ratings of the Unit can be made available to advise on electrical equipment problems beyond the capacity of Fleet resources. While the duties of Ships' Officers will remain as heretofore, where any doubt exists concerning the installation of electrical equipment the advice of the Unit should be sought.

(e) Visits to Ships, Craft and Establishments building and refitting.

The Unit is authorized to visit ships, craft and establishments building and refitting and will give any necessary advice from the Electrical maintainers' aspect to Ships' Officers and/or electrical overseers upon the installation of electrical equipment. The duties of the overseers remain unaffected. The Unit cannot authorize changes, but recommendations, if beyond the jurisdiction of the overseers, are to be referred by them through the appropriate authority to Navy Office. Overseers concerned are to ensure co-ordination of User Department visits with those of the Unit in the interests of efficiency.

(f) Preparation of Electrical Registers.

The Unit will compile Electrical Registers for ships which have not been supplied with these during building and will call for information from Ships' Officers and design and fitting authorities as necessary. The Unit will advise other authorities responsible for the compilation of Electrical Registers for ships building.

3. Requests by ships and establishments for the services of the Electrical Equipment and Trials Unit except where authorized under paragraph 2(c) should be direct to F.O.I.C. E.A. (Copy to A.C.N.B.) who will co-ordinate the programme required to be undertaken.

4. Reports of visits under paragraph 2(e) are to be prepared by the Officer-in-Charge of the Unit and submitted through the Flag Officer-in-Charge, East Australian Area, to authorities concerned, including the Ship's Officer and/or electrical overseer directly concerned. Where a routine inspection is held conjointly with a representative of a User School or Directorate, the latter shall receive two copies, one of which is to accompany his report, which should indicate concurrence or otherwise.

5. Navy Order 440 1f 1951 is hereby cancelled.

(3031/13/222)

17.

COOL WATER DRINKING UNITS - SECURING OF HIGH PRESSURE CUT-OUT SWITCH.

Navy Order 699 of 1954 is to be amended by the addition of the following paragraph :-

" 4. Authorities concerned are to report when the modification has been carried out."

(3768/14/16)

18.

BOILERS - WATERTUBE BOILERS - LIGHTING UP PROCEDURE.

A recent incident which resulted in damage to a boiler in one of H.M.A. Ships has emphasized the importance of strict attention to the management of boilers whilst raising steam.

2. Engineer Officers are to ensure that their standing orders incorporate specific instructions for lighting up under all conditions including the routine to be followed for giving warming flashes, and that adequate organization exists to ensure that men taking charge of a boiler are aware of the exact state of the boiler.

3. Once a boiler has been run down to the level required for flashing up, it should not be necessary later, after warming flashes have been given, to run more water out prior to raising steam unless, for example, the feed check valves are leaking. If the water level at commencement of warming flashes was, say, two inches, it is to be expected that when the boiler is warm the level will be higher than this.

4. Before a boiler which has a steam pressure in it is left unattended, the gauge glass cocks are to be shut to prevent loss of water and injury to personnel should the glass break, and a notice to this effect is invariably to be hung on the cock operating handles whenever the cocks are shut. Under no circumstances is a sprayer to be alight, or water run out of a boiler, unless the gauge glass cocks are open on at least one water gauge mounting.

5. In Tribal and modernized Tribal Class destroyers, the forward end of each boiler is three inches lower than the after end to allow for squat at high speed, and the length of the gauge glass is such that when water is just showing in the glass the adjacent "U" rows of generator tubes are just drowned. To ensure that all tubes are drowned when the ship is at normal trim, the water level in Numbers 1 and 3 boilers during lighting up operations is at no time to be below two inches in the glass.

6. Attention is drawn to the Engineering Manual Article 171, et seq.

(3757/12/23)

19.

WATCHES, WRIST, CHRONOGRAPH, PATTERN H.S.9 - ISSUE.

Watches, Wrist Chronograph, Pattern H.S.9 are to be issued only to -

(i) aircrew undergoing O.F.S., observer or aircrewman training;

(ii) aircrew in receipt of flying pay, vide Navycirc 060 Item.

2. Chronographs are not to be issued other than to those persons mentioned in paragraph 1 of this Order.

3. Navy Order 102 of 1954 is hereby cancelled.

(4576/11/44)

20.

ALTERATION AND ADDITION ITEMS - A.A. FRIGATES (MODIFIED RIVER).

The following alteration and addition item is approved in principle for A.A. Frigates (Modified River) :-

"To remove the two (2) in No. 32 rounds 4" R.U. lockers at present fitted on the forward side of "B" Gun Mounting and replace with two (2) in No. 24 rounds 4" R.U. lockers sited back to back on centre line, with their doors opening outward."

Class List Item No. 519 Classification 'B'

Compensating Weight Required: Nil.

2. As this work is not applicable to H.M.A. Ships CONDAMINE and CULGOA, action in accordance with paragraph 1(d) of Part II of Navy Order 424 of 1953 is to be taken.

(4283/1/149)

21.

ALTERATION AND ADDITION ITEMS - H.M.A. BATTLE CLASS DESTROYERS.

The following alteration and addition item is approved in principle for Battle Class Destroyers :-

Class List Item No. 79 Classification 'B'

(a) Range receiver to be fitted in the operations room and fed with present range and cut from the type 275 tallboy.

(b) The Mk. 6 Director Bearing Receiver in the operations room to be re-placed by an Aerial gyro Bearing Receiver, Design 8 and fed with a Gyro compass transmission.

Compensating Weight Required: 390 lbs. at Upper Deck Level or 165 lbs. at Forecastle Deck Level.

References: A.F.O. "A" SERIES A265/54. Item 329.

2. Proposals to meet compensating weight requirements are to be forwarded.

(4283/1/149)

22.

ALTERATION AND ADDITION ITEMS - H.M.A.S. SYDNEY.

The following alteration and addition item is approved in principle for H.M.A.S. SYDNEY :-

Class List Item No. 266 Classification 'A'

Item: "To fit gas tight trunks to cables in hangars and access lobbies."

Compensating Weight Required: 520 lbs. at galley deck level or 1090 lbs. at hangar deck level.

References: (a) Commanding Officer SYDNEY letter 17/3/144 of 10th February, 1954.

(b) Garden Island letter 57/150/358 of 2nd September, 1954.

2. Proposals to meet the compensating weight requirements are to be forwarded for H.M.A.S. SYDNEY.

(4278/3/594)

23.

ALTERATION AND ADDITION ITEMS - H.M.A. SHIPS - "TO INSTAL POTATO PEELING MACHINE".

The following alteration and addition item is approved in principle for A.A. and A.S. Frigates (Modified River) and A.A. Frigates (Sloop) :-

"To fit 14 lbs. capacity Potato Peeling Machine in or adjacent to Galley."

Class List Item Numbers are as follows :-

(a) A.A. Frigates (Modified River)
Class Item No. 518 Classification 'B'.

(b) A.S. Frigates (Modified River)
Class Item No. 514 Classification 'B'

Compensating Weight Required: 528 lbs. at Upper Deck Level or 207 lbs. at forecastle deck level.

(c) A.A. Frigates (Sloop)
Class Item No. 508 Classification 'B'

Compensating Weight Required: 170 lbs. at Upper Deck Level or 75 lbs. at forecastle deck level.

2. Proposals to meet the compensating weight requirements are to be furnished by all A.A. and A.S. Frigates (Modified River) and A.A. Frigates (Sloop) except H.M.A.S. SHOALHAVEN.

3. As this item has been completed in H.M.A.S. SHOALHAVEN a notation is to be made in Form A.S. 345 (fair copy).

4. Item number 105 for H.M.A.S. SHOALHAVEN is hereby cancelled.

(4276/4/311)

24.

DESTROYERS AND A.S. FRIGATES (CONVERTED FLEET) - REMOVAL OF REDUNDANT WEIGHTS.

The necessity for reducing displacement and improving stability by removal of redundant weights has been stressed in Admiralty Fleet Order 1349/1953.

2. The following items are to be landed from destroyers and A.S. Frigates, (Converted Fleet) and returned to the appropriate Store Authority :-

(a) Lifting gear for lubricating oil drain tanks.

(b) Spare studs, bolts and nuts for main gear cases.

(c) Spares for fuel oil discharge filters. One spare filter is to be retained.

(d) Spares for lubricating oil discharge filters. One spare filter is to be retained.

(e) Spares for potato peelers. One set of spares is to be retained for a single machine when two potato peelers of the same make and capacity are carried, one set of spares is to be landed.

(g) 4.5 gun-barrel exchange gear (vide Navy Order 191 of 1954). Top weight compensation gained must not be used for other purposes.

(g) Spare holding down bolts for plummer and thrust blocks.

(h) Spare bolts for H.P. and L.P. cylinder horizontal joints.

(i) S.T.A.A.G. deck awning stanchions (applicable to Battle Class Destroyers).

(j) Radar rolled blackboard.

3. Where amendments to Lists of Portable Fittings, spare gear, etc., are necessary, Forms A.S.197/A.D.526 are to be rendered to General Manager, Garden Island, in accordance with Consolidated Orders and Regulations, Article 298.

4. Commanding Officers are to report action taken on this Order.

5. Navy Order 459 of 1954 is hereby cancelled.

(4276/4/311)

25.

NAVAL STORES - ELECTRICAL - BI-SEAL INSULATING TAPE - INTRODUCTION - CLASS F, GROUP 2A, PART 2.

Bi-seal Insulating tape is being introduced as a Naval Store item for use in the Royal Australian Navy.

2. Supplies of this tape have been ordered and will be held at the Naval Store Depots at Sydney, Melbourne and Fremantle under Class F, Group 2A, Part 2. Demands should be forwarded accordingly.

3. Electrical, physical and chemical properties of Bi-seal tape are shown in the Appendix to this Order. Particular attention is drawn to the upper operating temperature limit.

4. The tape fuses into a solid mass, which can be shaped to any contour, when used to wrap a cable splice or small wire connections. It is recommended for use as a splicing tape for polyethylene, vinyl, and natural and synthetic rubber insulations. It is also particularly recommended for use in radio and electronic equipment applications, as well as for general electrical applications where flame resistance is not a requirement, subject to the limitation in paragraph 6 hereof.

5. In using Bi-seal insulating tape the following points should be observed :-

(a) The tape does not adhere to any cable, but relies on pressure (built up during the solidifying process), to create a moisture-proof seal.

(b) When used in exposed positions, better results will be obtained if the tape is not stretched too much and is protected by some outer covering.

(c) The tape has a tendency to become fibrous if stretched to less than half normal thickness at warm or cold temperatures.

6. Owing to its comparatively high cost, Bi-seal insulating tape should not be used where requirements can be satisfactorily met by the use of Admiralty Pattern insulating tape.

(4518/21/47)

APPENDIX

Electrical Properties

Dielectric strength	1000 volts/mil.
Power factor at 60 cycles	0.0006
" " " 103 cycles	0.0006
" " " 106 cycles	0.004

Physical and Chemical Properties

Dielectric constant -	60 cycles	2.32
	103 "	2.34
	106 "	2.13

Resistance to -

Ozone	Excellent
Oxygen	"
Acids (commercial concentrations)	"
Alkalis (commercial concentrations)	"
Moisture vapour transmission	"
Oils - Petroleum compounds	Poor
Aromatic compounds	"
Castor Oil	Good
Corrosion	Will not corrode or be corroded by tin, copper, lead, silver, iron.
Ageing qualities	Excellent
Operating temperatures	160°F to -40°F
Application temperatures	120°F to -20°F.

26.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - HEAT RESISTING ENAMELS - INTRODUCTION.

It has been decided to introduce a new heat-resisting paint into the Royal Australian Navy. The material will be known as Heat-resisting Gloss Interior Enamel (200°C), and will be supplied in the following range of colours :-

Colour	Pattern Number
Aluminium	Like 4318
Light Grey (Colour 631 of B.S.3810)	-
Black	-

2. The enamel will be bought to Specification S.A.A. Int. 49 Type 4 Condition A. It will be water, oil and petrol resistant, and it will be suitable for brushing or spraying as supplied, or when thinned. Mineral turpentine is to be the only thinner used.

3. This enamel is to be used generally where a heat-resisting paint is required, particularly for the painted parts of engine seatings, bulkheads, etc., which are subjected to heat. It is compatible with, and should be used over, the zinc-chromate and red-oxide/zinc-chromate primers at present in use. The light grey and black enamels can be mixed.

4. Items which have been superseded in the Royal Australian Navy by the introduction of these enamels are listed in the Appendix to this Order. Stocks of these items are to be used up before the new enamels are issued.

5. Aluminium enamel, like pattern 4318, may, however, be issued in lieu of proprietary items where a special use is defined.

(4512/71/19)

APPENDIX

Superseded Items

Pattern	Description
N.12301	Aluminium paint powder.
N.12302	Aluminium paste to B.S.388/1938.
-	Aluminium paste, proprietary types.
772	Varnish medium for aliminium paint.
4302	Varnish medium for aluminium paint to Specification DNC/M/74A.
-	Medium for aluminium paste, proprietary types.
4318	Aluminium paint to Specification DNC/M/74.
-	Paint, aluminium, to D.O.T.M.5258, EF.2093, and proprietary types.
-	Paint, black, heat-resisting.
-	Paint, green, heat-resisting.
-	Paint, grey, heat-resisting.
-	Paint, olive-drab, heat-resisting.
-	Enamel, black, heat-resisting.
-	Enamel, grey, heat-resisting.

27.

CHARGES FOR BEDDING (NAVAL STORES) LOST BY NEGLECT.

With reference to Navy Order 361 of 1953, as amended by Navy Order 430 of 1953, variations to replacement costs of bedding referred to therein are as follows :-

Item No.	Pattern No.	Description	Amended Replacement Costs
2	-	Pillows, kapok 29" x 19" and 28" x 18"	14. 2
6	T362 and like	Blankets, white, officers, bedberths, 96" x 62"	£3. 8. 3
25	18A	Covers for mattresses Patt. T372	£1. 7. 9

(3190/1/87)

28.

PAINT COATING FOR FRESH WATER TANKS.

Following upon recommendations of the Naval Paint Committee, it has been decided that aluminium pigmented, heat-resisting enamel, like pattern 4318, will be used for internal surfaces of fresh water tanks in H.M.A. Ships, replacing the bituminous paints at present in use.

2. For application in tanks, the paint can be brushed or sprayed, using mineral turpentine only as a thinner.

3. Navy Order 26 of 1955 refers to the introduction of these heat-resisting paints.

4. The maintenance of this coating will under normal circumstances be a ship's staff responsibility. However, in the first instances, the removal of the old bituminous enamel, and the recoating with the new aluminium enamel, is to be done by dockyards. The repainting is to be done for each tank on the next occasion on which 50% or more of the coating has to be renewed. If patching is required on smaller areas the bituminous compound is to be retained. Where it is known to ship's officers that renewal of the coating will be required, an item is to be included in the defect list. The instructions in Appendix "A" to this Order are to be observed when painting.

5. A great advantage of the new paint is that any defects in the coating can be corrected easily by ship's staff. Any signs of corrosion, or defects in the paint film, which are evident when the tanks are inspected, are to be dealt with immediately.

6. Stocks of the bituminous compounds are to be retained for patching purposes in accordance with paragraph 4. When the repainting with aluminium paint has been completed for all ships, stocks remaining of the bituminous compounds are to be used up for other purposes for which suitable. This should be effected by treating them as general bituminous compounds. Items which have been superseded in the Royal Australian Navy as fresh water tank coatings are listed in Appendix "B" to this Order.

7. With reference to paragraph 5 of Navy Order 26 of 1955, the present proprietary aluminium paints are NOT to be used for painting in fresh water tanks.

(4512/60/128)

APPENDIX "A"

Aluminium paint to Specification S.A.A. Int. 49 is a gloss-finish, heat-resisting enamel. It is easy to apply, and has a high spreading rate.

2. The following procedure is to be carefully followed in preparing the tanks, and applying the enamel for the first time :-

(a) The surface to be coated should be thoroughly chipped or cleaned to remove the present bituminous composition. It should then be wire scrubbed.

(b) Adequate light and ventilation should be supplied when the tanks are being prepared and painted. It is particularly important that all steel surfaces should be thoroughly dried before the painting is commenced.

(c) Prior to painting, a close inspection should be carried out to make certain that no signs of corrosion are evident.

(d) Two coats of the aluminium enamel should then be applied, allowing approximately 24 hours drying time between coats.

(e) On completion, the tanks should be washed out with fresh water, and any sediment or dirt removed.

NOTES:-

1. A priming coat is NOT to be used under the aluminium paint.

2. When applying this paint in fresh water tanks, the general precautions laid down in B.R.16(50), Article 209(2) are to be observed.

APPENDIX "B"

Superseded Items

Pattern	Description
7048	Bituminous enamel for fresh water tanks.
N.12306	Bituros solution for coating fresh water tanks in water carriers only.
N.12897	Rosbonite (special quality) for coating fresh water tanks.
N.12898	Enamel, bituros, for coating fresh water tanks except in water carriers.
-	Enamel, bitotes (fresh water tank quality).
-	Enamel, bitaqua (fresh water tank quality).
-	Tankite number 2.
-	Tankite primer J6152.

29.

PLAIN BLACK GLOBES, PATTERN 3810, FOR INSTRUCTIONAL PURPOSES - ALLOWANCES.

The Royal Australian Navy allowances for Admiralty Pattern 3810, Plain black globe, 12 in. diameter, supported on stand, for instructional purposes, referred to in Admiralty Fleet Order 765/1953, have been determined and will be on the following scale :-

Aircraft Carriers and Cruisers	1 No.
Destroyer and Frigate Squadrons	1 No.
Flinders Naval Depot (including 2 No. for Royal Australian Naval College)	4 No.
R.A.N.A.S. Nowra	2 No.
Other Shore Establishments with complements of over 200	1 No.

2. H.M.A. Ships and Establishments referred to above, which do not already possess globes in accordance with their allowance, should forward demands, if required, to the appropriate (Superintending) Naval Store Officer.

3. In H.M.A. Ships and Establishments where an instructional globe is held as B.R.468, the item should be removed from charge in the B.R. & O.U. ledger and transferred to the permanent ledger, Class F, Group 3A, of the Naval Store Account in accordance with the procedure detailed in Article 109 of the Naval Storekeeping Manual, B.R.4.

(4518/36/280)

30.

"SCOPE" ELECTRIC SOLDERING IRONS - ALLOWANCES.

The "Scope" electric soldering iron was introduced for use by the Electrical Branch in the Royal Australian Navy. This iron is also suitable for use in the repair of optical instruments.

2. The iron heats in six seconds and can be supplied either from a 230/4 volt transformer or a 4 volt Secondary battery. The construction is such that soldering in very confined spaces, e.g. radio chassis, can be done without injury to nearby wiring and components.

3. The iron is dealt with as a permanent item of Naval Stores under Class F, Group 2B, Part 4. The components of this iron, which may be demanded separately, consist of -

Description		Classification
Transformer	1 No.	Permanent
Iron, soldering	1 No.	Consumable
Bits, (assorted)	3 No.	Consumable
Heating element	1 No.	Consumable

4. The authorized allowance of "Scope" soldering irons is as follows :-

Service	Allowance
Aircraft Carriers	8 No.
Cruisers	8 No.
Daring class ships	6 No.
Battle Class destroyers	6 No.
Tribal Class destroyers	4 No.
A.S. Frigates (converted fleet)	4 No.
River Class frigates	2 No.
Sloops	2 No.
Fleet Minesweepers	1 No.
H.M.A.S. HARMAN (4 No. Receiving Station) (2 No. Transmitting Station)	6 No.
Coonawarra W/T Station (2 No. Receiving Station) (2 No. Transmitting Station)	4 No.
H.M.A.S. TARANGAU (for W/T Station)	2 No.
Flinders Naval Depot (12 No. for Electrical School) (1 No. for O.A.'s workshop)	13 No.
H.M.A.S. KUTTABUL (2 No. for Port Radio workshop, Garden Island) (1 No. for O.A.'s workshop at G.I.C.)	3 No.
H.M.A.S. LONSDALE (2 No. for Port Radio workshop) (1 No. for optical workshop)	3 No.
H.M.A.S. LEEUWIN (for optical workshop)	1 No.
H.M.A.S. RUSHCUTTER (for T.A.S. School)	2 No.
H.M.A.S. WATSON	3 No.
R.A.N. Armament Depot, Byford	1 No.
R.A.N. Mine Depot, Swan Island	2 No.
R.A.N. Air Stations	12 No.
Carrier Air Groups	4 No.
Engineer Manager, Garden Island (for Radio Test Section, Leichardt)	4 No.

HEADQUARTERS SHIPS OF THE RESERVE FLEET COMMAND

Sydney Division	3 No.
Melbourne Division	2 No.
Fremantle Division	2 No.

5. Demands (Form A.S. 134d) for supply and/or replacement should be lodged with the appropriate (Superintending) Naval Store Officer.

6. Navy Orders 156 of 1951, 93 and 399 of 1952 are hereby cancelled.

(4518/27/138)

31.

TOOL KITS, TYPE E.4 AND O.1 FOR ENGINE ROOM AND ORDNANCE RATINGS.

Approval has been given for tool kits, type E.4 and O.1, to be amended as follows :-

(a) Engine Room Ratings - Tool Kit Type E.4.

Wheel spanner 9" to be supplied in lieu of Pattern 6424 wheel spanner, 12" in all future issues of tool kit type E.4, present holdings to remain unchanged.

(b) Ordnance Ratings - Tool Kit Type O.1.

"Crescent" type spanner 8" to be supplied in lieu of Pattern 2420 spanner, adjustable, (9" when closed), replacement to be effected as soon as stocks are received.

2. Demands (Form A.S.134d) should be lodged with the appropriate (Superintending) Naval Store Officer for any requirement of (a) and for supply of the "Crescent" type spanner at (b) hereof.

3. Action should be taken in accordance with Navy Order 493 of 1953, regarding amendments to tool kit lists and for return of the Pattern 2420 spanner.

(4506/18/8)

SECTION 4.- DENTAL STORES, MEDICAL STORES, VICTUALLING STORES.

32.

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. A flat rate of 6d. per dozen articles is to be charged to public funds therefore, in respect of all Service articles laundered as from 1st January, 1955.

(3708/1/29)

33.

MEAT TENDERISER.

It has been decided as a result of trials of various trade preparations to introduce meat tenderiser for general use in the Royal Australian Navy.

2. The trials showed that the tenderness and palatability of topside steaks and mutton chops, in particular, were greatly improved when treated with meat tenderiser. It was also shown that the different trade preparations required different treatment and it is not practicable to prescribe specific instructions for use. It will be necessary, therefore, for discretion to be used when following the instructions issued by the manufacturers.

3. Meat tenderiser is available for issue on demand from H.M.A. Victualling Yards and is to be accounted for in accordance with Consolidated Orders and Regulations, Article 423, clause 4.

(4528/26/57)

34.

REVISION OF FIXED ISSUING PRICES FOR PROVISIONS AS FROM 1ST JANUARY, 1955.

The fixed issuing prices of provisions have been amended as from 1st January, 1955, and printed lists showing the revised prices have been distributed to all ships and establishments.

2. Consequent on the revision of these prices, the current victualling allowance has been increased to 5/4d. per diem commencing from 1st January, 1955.

3. The revised issuing prices are based on current costs and are intended to maintain the standard of victualling. However, a number of new items has been added to the price list and should improve the variety of meals.

4. The denominations and descriptions used in the Fixed Issuing Price List for Provisions are, as from 1st January, 1955, to be applied to all transactions recorded in Provision Accounts of ships and establishments and accounts are to be amended accordingly. Any packs other than those specified in the Price List issued from R.A.N. Victualling Yards will be separately rated in Supply Notes.

5. Necessary amendments to the various Regulations and Instructions will be made at an early date.

6. Navy Order 403 of 1953 is hereby cancelled.

(3818/2/49)

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36.

UNIFORMS - RATINGS - CLASSES I AND III - USE OF LIGHTWEIGHT SERGE.

The provisions of Navy Order 70 of 1954, which authorized the use of lightweight serge in uniforms of Chief Petty Officers and Petty Officers not dressed as seamen, have been extended to include all ratings wearing either Class I or Class III uniform.

2. It is not intended to stock ready made lightweight serge jackets and trousers for repayment issue until existing stocks of diagonal serge uniforms and material are considerably reduced.

(4716/1/151)

(This Order will be reprinted for posting on Notice Boards.)

37.

VALUATION OF GRATUITOUS ISSUES OF CLOTHING.

The valuation of gratuitous issues of clothing on Forms A.S. 79 Series and A.S. 105 is to be omitted in future.

2. The printing of these forms to accord with this procedure will be effected when present stocks are exhausted.

3. The relevant Naval Financial Regulations and Instructions and Naval Account Regulations and Instructions will be amended as necessary in due course.

(3526/12/1100)

SECTION 7.- CANCELLED LIST

38.

AVIATION - SQUADRON ORGANIZATION - RESPONSIBILITY FOR AIRCRAFT ARMAMENT.

Navy Order 391 of 1952 is hereby cancelled.

(3031/13/216)

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Miss Hitchins

C.N.O.39/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.

12th January, 1955.

The following Order is promulgated for information, guidance and necessary action.

By direction of the Naval Board,

Thos. Hawkins

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

TABLE OF CONTENTS

N.0044

Plots and Plotting—Grids, Graticules and Reference Systems

Introduction.

Their Lordships are aware that difficulties which have arisen in using the present grid systems for surface and air reporting have sometimes made them unpopular. The two basic reasons for this are, first, that the T.G.G. has been used in situations for which it was unsuitable and for which it was never designed and secondly, it has not been generally appreciated that there must be flexibility in the choice of method by which surface or air reporting is done.

2. Grids were introduced to simplify the exchange of positional information between ships, and between ships and aircraft. Their advantages in certain circumstances are by now well known. However, even when a force is proficient in grid reporting, there will still be occasions when some other system will be more suitable. Furthermore, even though a grid has been established by the O.T.C. of a force, no ship or aircraft of that force should feel obliged to report by grid, if there is an alternative method available which is clearly more suitable in the circumstances, and is equally intelligible to those for whom the report is intended.

3. Experience has shown that there is a need in maritime operations for two types of grid.

(*a*) *The "Floating" Grid.*—In open waters it is more important that reports *within a force* should be correct relative to the O.T.C., than that they should be geographically accurate. For this reason once the grid has been established in a certain position at a particular time, it is assumed thereafter to move in the resultant direction and at the resultant speed of the tidal stream, current and surface drift ; in other words, to "Float". Thus, provided a ship has an accurate compass and log, its grid position will remain accurate, and there will be no need for ships to make individual estimations (which will always differ) of tidal stream, current and surface drift. The effect of leeway is taken to be the same for all ships, since the error due to this assumption is seldom great.

(*b*) *The "Anchored" Grid.*—For operations near land, where correct Navigational position is needed, it is nearly always necessary for the grid in use to be fixed geographically (i.e., "anchored"). In this case, either by constant fixing or by making the necessary allowance for tidal stream, current, surface drift and leeway, ships must keep their geographical positions and consequently their grid positions, as accurate as possible.

4. One of the principal reasons for the confusion and controversy about grids in the past has been that the same grid has been used both in the floating and in the anchored role, and this has led to misunderstanding about its correct employment in either.

It has therefore been decided to adopt one floating grid and one anchored grid *whose roles will not be interchangeable.*

5. *Types of grid in use.*—For the reasons stated in paragraph 16 below, it has been decided to re-name the T.G.G. the *Local Tactical Grid (L.T.G.).* The graticule and grid reference systems to be used in the Fleet and the manner of their employment are set out in the following sections :—

Section I	The Geographical Reference System (GEOREF). The anchored grid.
Section II	The Local Tactical Grid (L.T.G.). The floating grid.
Section III	Special Grids for Special Purposes.
Section IV	Methods of Displaying Grids.
Section V	Guidance on the best reporting method to use.

6. *Changing the Grid.*—The decision as to the best time to change from the floating to the anchored grid and vice versa must be taken by the O.T.C., who will be influenced by the following considerations :—

(*a*) The composition of the force. Carrier operations will often necessitate a change to the anchored grid at considerable distances from the land.

(*b*) The type of operation. In particular, whether or not shore based aircraft are participating.

(*c*) The tactical situation at the time.

It is essential that when the decision is made to change either surface or air reporting from one grid to the other, all ships in the force should change simultaneously, both for surface and air plots.

7. *Accuracy Required.*—With modern radar every ship should have a good surface picture in its own vicinity. The main purpose of surface raid reporting in this area is, therefore, to assist in the identification of individual contacts and to ensure that nothing is missed.

For these purposes great positional accuracy is not essential ; neither is it needed when exchanging information on contacts outside a ship's radar range.

It has therefore been decided that an accuracy of "to the nearest mile" should be adopted for all Grid reporting.

In the past the use of grids on surface plots has often given rise to unnecessary "grid chatter", and repeated queries regarding ships' grid positions have often adversely affected the compilation of the surface picture.

These queries should no longer be necessary.

Provided that ships are locked to the Surface Raid Reporting Control Ship (S.R.C.S.) with sufficient accuracy to enable them to identify raids reported by her, they can be satisfied that they are adequately gridded in.

Section I—Geographical Reference System (Georef)
(The "Anchored" Grid)

8. GEOREF is a method of expressing latitude and longitude in a form suitable for rapid reporting and plotting. It may be applied to any map or chart graduated in latitude and longitude regardless of the projection.

9. In addition to its purely Naval uses, (e.g., in Enemy Contact Reporting, Raid Reporting, etc.), GEOREF is used specifically in the following instances :—

(*a*) In Air Defence operations in which the air forces are concerned.

(*b*) In shore-plotting, including Seaward Defence.

It must *not* be used in messages which include civil authorities.

10. There are 24 longitudinal zones of 15 degrees each lettered from A to Z (omitting I and O) eastward from the 180th meridian. There are 12 zones of latitude, each 15° wide, lettered from A to M (omitting I) northward from the South Pole. (A.F.O. Diagram 44/54.) (Figure 1.)

11. Each zone is divided into fifteen lettered degree units eastward and fifteen lettered degree units northward. These are lettered from A to Q (omitting I and O). When added after the letters in paragraph 9 above, these two letters will identify any single degree quadrangle in the world. Thus the degree quadrangle enclosing Torbay is MKMF. (A.F.O. Diagram 44/54.) (Figure 2.)

12. Each degree quadrangle is divided into 60 minute units eastward and 60 minute units northward. Thus four letters and four figures will identify a position to one minute anywhere in the world. Thus the position of Start Point is MKMF 2113. (A.F.O. Diagram 44/54.) (Figure 2.)

13. Greater accuracy can be obtained by further dividing into decimals of a minute eastward and decimals of a minute northward.

14. Six figures therefore represent 1/10th of a minute (approximately 608 ft.) eight figures 1/100th of a minute (approximately 61 ft.), etc.

Thus the GEOREF reference of Start Point is MKMF 215133 to six figures. In many cases the definition of such positions can be abbreviated without risk of ambiguity.

15. It is emphasised that GEOREF provides no security in reporting position. Where necessary, GEOREF positions are to be encrypted.

Section II—The Local Tactical Grid (L.T.G.)

(The " Floating Grid ")

16. The construction of the L.T.G. is the same as that of the now obsolete T.G.G. (i.e., it is a 1,000 mile square).

It has been re-named in order to emphasise the *Local* nature of its use (*see* paragraph 22) and to avoid any mention of " geography " which might suggest an anchored grid.

17. The L.T.G. has been designed to provide a common and rapid air/surface tactical reporting and plotting system for use *within* a force. It has a measure of short term security, and may only be used as a " floating " grid (*see* paragraph 3(*a*)).

18. *Description.*—This grid has a coverage of 1,000 miles square and references are passed as mile units East followed by mile units North from the South West corner of the grid (e.g. 415224). (A.F.O. Diagram 44/54.) (Figure 3.)

Note.—This is the only method of expressing positions by this grid. The old method used with the T.G.G. on L.O.Ps. of giving the square number followed by 4 figures has been dropped as an accuracy of one mile is considered acceptable (*see* paragraph 7).

19. *Establishing the L.T.G.*—There are three methods of establishing the L.T.G. :—

(*a*) The O.T.C. or the S.R.C.S. promulgates his grid position and other ships determine their grid positions according to their positions relative to the O.T.C. or S.R.C.S.

Example :—The O.T.C. signals " My grid position is (or will be at. . . .) 249743 ".

(*b*) If the O.T.C. or S.R.C.S. cannot be easily identified, the grid position of some other suitable ship or standard position should be signalled.

Example :—" The grid position of QQ is (or will be at. . . . . .) 249743 ".

(*c*) The O.T.C. signals his grid position at the same time as he promulgates his reference position.

Example :—" My reference position at 0800 is 54° 20′ N 10° 00′ W grid position 249743 ".

Action to be taken by ships of the force when L.T.G. is established.

20. The following action is taken by ships of the force, depending on which method was used to establish the grid, as described in paragraph 19 :—

(*a*) Ships plot themselves relative to the grid position signalled, choosing a convenient part of their plots.

Example :—The O.T.C.'s position is signalled as 249743, own ship is 180° 5 miles from the O.T.C., therefore own ship's grid position is 249738.

It can be seen that if this method is used, only ships in visual or radar contact, either direct or through a link, can be " locked " in.

(*b*) As for (*a*) above, except that the relative position of own ship must be determined from the ship or standard position designated.

(*c*) For those ships in visual or radar contact with the O.T.C., as in (*a*) above. Other ships must establish their positions relative to the O.T.C. by comparing their geographical position with that signalled. Although in this case the L.T.G. is established relative to a geographical position (vide paragraph 18(*c*)), this position is only of significance at the moment of establishment. Thereafter the grid must " float " as described in paragraph 3(*a*).

21. The O.T.C. or S.R.C.S. should normally promulgate his grid position in advance, and, if possible, when ships are in a stable formation. This enables ships to set up their plots and clutch them in at the selected time.

Subsequently the S.R.C.S. should pass occasional check grid positions, either of himself or another suitable ship or standard position, in order that ships may adjust their plots relative to this. Provided ships have taken care to calibrate their A.R.L. tables accurately, check grid positions should not be necessary more than once an hour.

22. *Looking in aircraft to the L.T.G.*—(*a*) Carrier borne aircraft are given a P.I.M. of the O.T.C. both as a geographical position and in grid at briefing for the time of take-off. If this is not possible, it can be given to them either on deck or when airborne. In the latter case it is better to give a grid position some five minutes or more ahead so that the aircraft can arrange to obtain a radar fix at that time. Only in exceptional circumstances should the ship give the aircraft its (the aircraft's) grid position, as quick and certain recognition is very much easier for aircraft than for the ship, particularly if other air operations are in progress.

(*b*) Royal Naval aircraft can, by setting grid co-ordinates on their Automatic Dead Reckoning Instrument System (ADRIS) produce very rapid grid position reports, but it must be remembered that these reports are liable to considerable errors, increasing with latitude and with the distance from the O.T.C. The most accurate reports will be those based on radar fixes of the contact and of some ships of the force being screened, either taken simultaneously or with a short run between. These can be given as grid references if time permits, but the crews of small A/S aircraft will usually have little time to spare at the moment of sighting and ships must be prepared to deal with reports in other forms (*see* paragraph 2).

(*c*) Shore based aircraft joining a force should request the O.T.C.'s grid position when they are in a position to fix themselves relative to him.

23. *Limitations on the use of the L.T.G.*—If the L.T.G., which has a constant scale, is superimposed onto a Mercator's chart, which has a variable scale, inaccuracies will clearly result. The amount of inaccuracy varies with the bearing and the distance of the reporter from the receiver of the report, as well as with the latitude. Near the equator where the scale of a Mercator's chart varies very little, any inaccuracy will be small even out to the limits of coverage of the L.T.G. In other latitudes the approximate errors in (*a*) Latitude, and (*b*) Intercardinal bearing, at various distances from the O.T.C. is given in the following table.

Latitude	30°		50°		65°		75°	
Distance from O.T.C.	(*a*)	(*b*)	(*a*)	(*b*)	(*a*)	(*b*)	(*a*)	(*b*)
20 miles	–	–	0·1′	–	0·1′	0° 05′	0·2′	0° 39′
100 miles	0·9′	0° 19′	1·7′	0° 41′	3·3′	1° 19′	5·9′	2° 21′
150 miles	2·0′	0° 34′	4·1′	1° 07′	7·6′	2° 03′	13·8′	3° 44′
300 miles	8·2′	1° 05′	17·2′	2° 17′	32·6′	4° 02′	63·6′	8° 32′

Notes :— (i) No errors in either bearing or distance are introduced when working due East or West of the O.T.C.

(ii) The errors tabulated arise when working from the O.T.C. towards the poles. When working towards the equator the errors introduced are slightly smaller.

(iii) The errors in columns (*b*) are in addition to half convergency.

24. A study of this table shows that in Latitude 50°N (or S) the maximum inaccuracy becomes unacceptable for Normal purposes over about 200 miles, and in Latitude 75° N (or S) over about 100 miles.

While these errors could virtually be eliminated by using certain other projections, the use of such projections would introduce further plotting complications which are unacceptable.

25. When using the L.T.G. with a Mercator's chart the East/West scale used should be that corresponding to the latitude of the O.T.C. at the time the grid is established.

The grid should be re-established when proceeding North or South beyond the limit of accuracy for that particular latitude. It need not, however, be re-established when proceeding East or West, unless the force is running off the grid.

It may sometimes be necessary to differentiate between establishing the grid and giving periodic check positions. On these occasions the phrase " My check grid position is . . . . " or " the check grid position of . . . . is " should be used instead of those given in paragraph 18.

26. *Information to units joining a force.*—The first ship to detect a friendly unit joining the force is responsible for informing her of her position on the L.T.G. and the position and identity of the S.R.C.S.

Section III—Special Grids for Special Purposes

27. *The " Universal Transverse Mercator " Grid.*—This is the Universal Military Grid Reference System. It is a world-wide, permanent, geographical, metric, square grid, superimposed on a Universal Transverse Mercator projection, and using a different standard meridian for different areas. It is printed on maps and chart maps. Details of its construction are, however, not required here.

This grid is used generally by the Army for all areas except the British Isles where the National Grid (Military System) is used. It is used by the Navy and the Royal Air Force in bombardment and certain amphibious operations.

A " U.T.M." (Military) Grid Reference consists of a group of letters and numbers which indicate :—

(i) The Grid zone (6° longitude × 8° latitude).

(ii) The 100,000 Metre square.

(iii) The Grid Co-ordinates—i.e., the numerical reference of the point, expressed to the required accuracy.

28. *The " National " Grid.*—This is a permanent, geographical, metric, square grid, which covers the United Kingdom and its coastal waters. It is superimposed on all Ordnance Survey maps and plans. If a 12-figure reference is used (Military System), a position can be defined (to within half a metre) by giving it in metres East followed by metres North from the S.W. corner of the grid.

In view of its high accuracy, it may be used for certain special purposes (e.g., possibly for the correlation of mine plots ashore), having the following additional advantages :—

(*a*) Standard National Grid plotting sheets of a constant scale can be produced, and would be suitable for use anywhere within the limits of the grid.

(*b*) The positions of observing stations (e.g., minewatching posts) and other important marks can be transferred direct to a National Grid plot from any large-scale Ordnance Survey Map.

(*c*) The accuracy of plotting is flexible, increasing with the number of figures used in the reference.

29. *The " Air Navigation " Grid.*—Certain charts based on the Lambert Conformal projection and covering the main operational areas of the Home and Meditterranean Fleets, have been overprinted with a permanent square grid. This is numbered from 000 to 999 in Nautical Miles, from West to East and South to North.

This grid has been used for trials in Air Navigation. It is not primarily a " reporting " grid, but can be used for position reporting from aircraft.

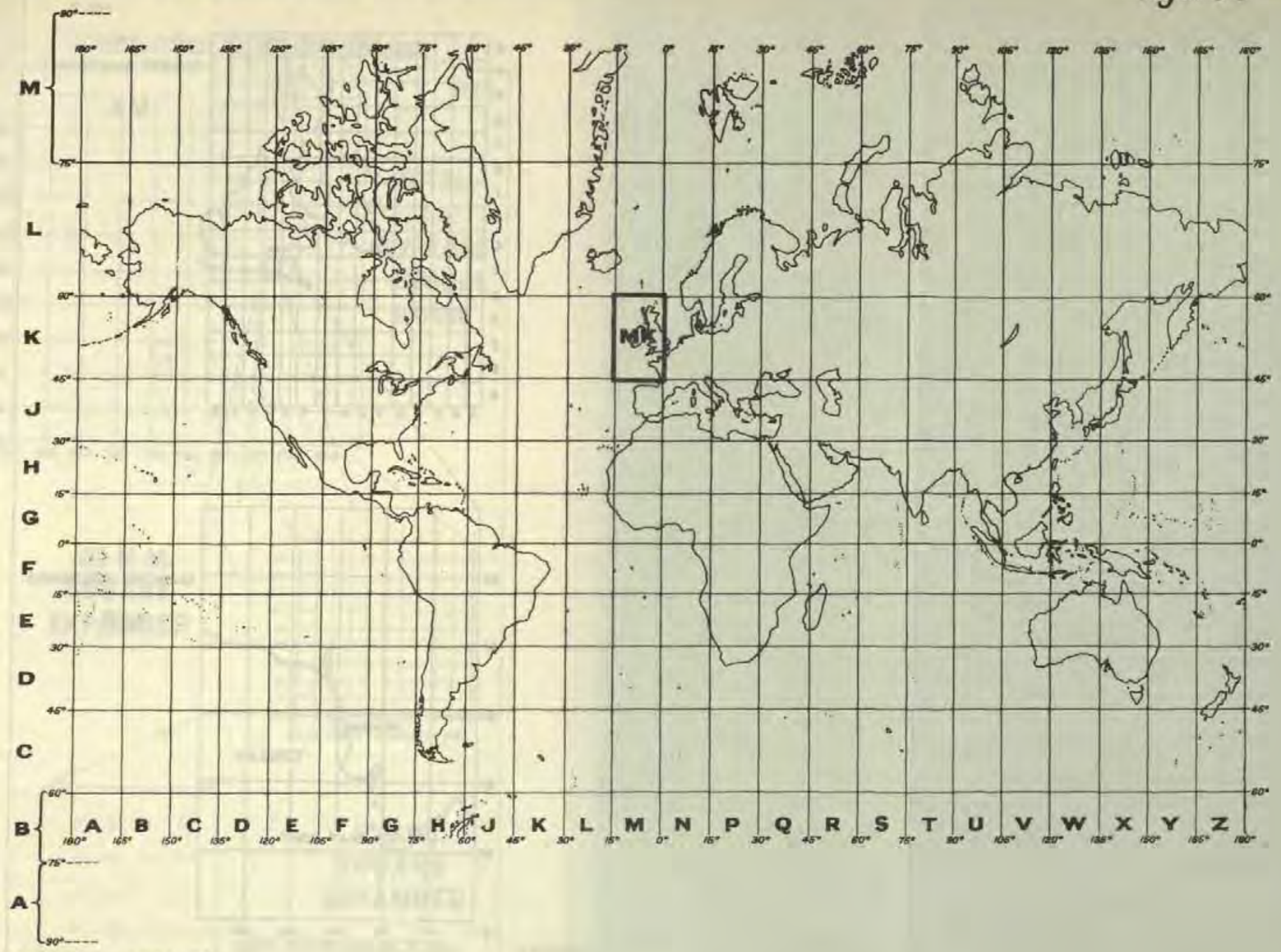
The trials concerned proved very successful, but owing to the labour and expense involved in producing the necessary charts to adopt this scheme universally, it is not at present being proceeded with.

Section IV—Methods of Displaying Grids

30. Until further experience has been gained it is not intended to lay down any hard and fast instructions on the various methods of displaying grids on plots.

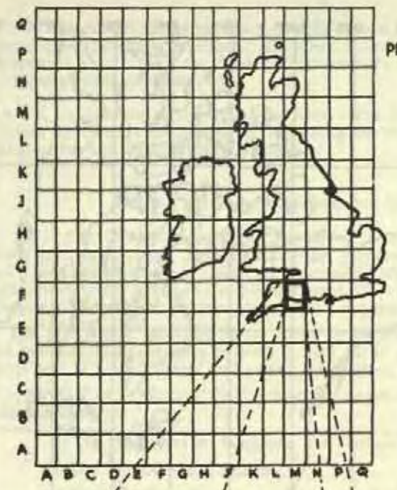
Some suggestions are, however, put forward for guidance in the paragraphs which follow.

Figure 1



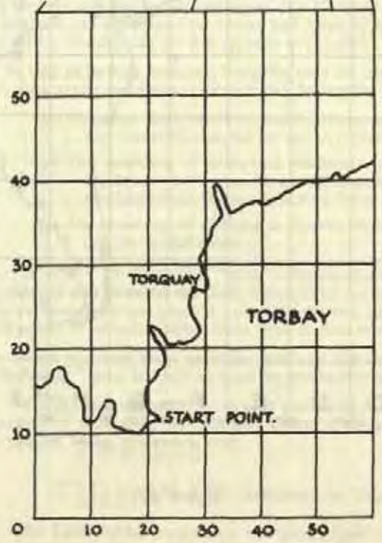
88/54 (1) N.C. c 2063 N.4

FIG. 2.



PRIMARY QUADRANGLE.

MK



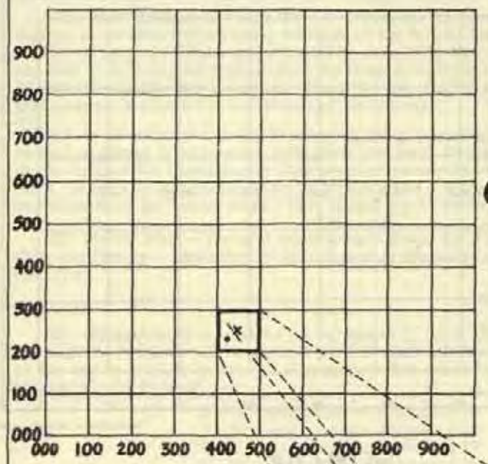
SECONDARY QUADRANGLE.

MF

88/54 (2) N.C.

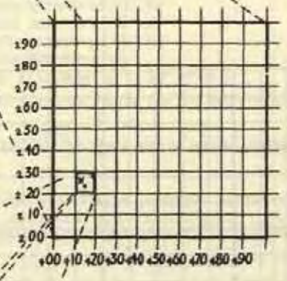
Navy Order 39 of 1955 Diagram

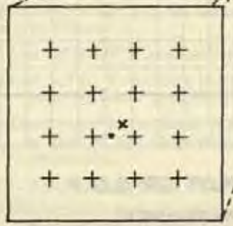
Fig. 3



TOTAL L.T.G. COVERAGE 1000 N.M. SQUARE

100 N.M. SQUARE EXPANDED





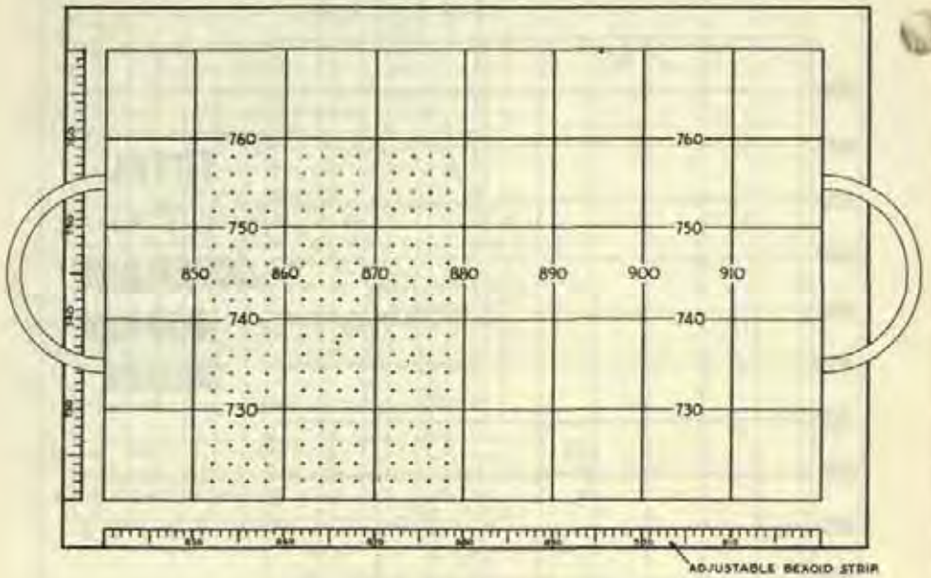
10 N.M. SQUARE EXPANDED

GRID POSITION OF X IS:- 415224

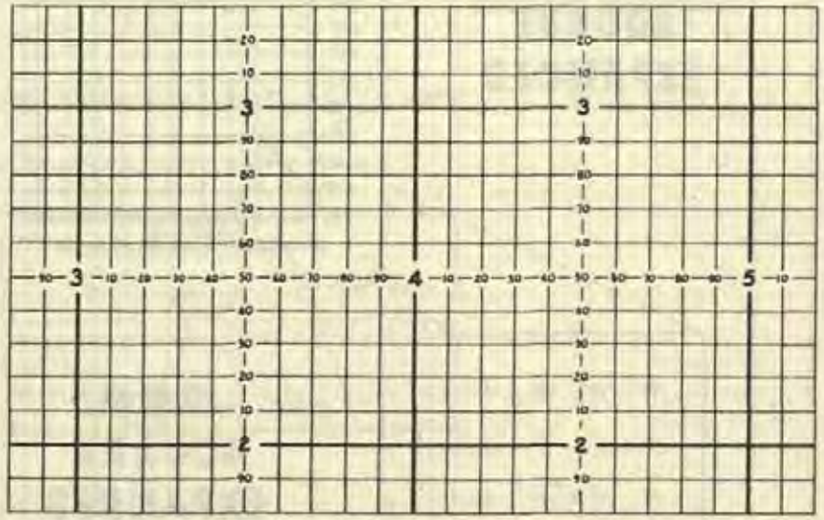
88/54 (3) N.C.

Navy Order 39 of 1955 Diagram

Fig. 4.



(a) ON L.O.P.
(SCALE: 2 MILES = 1 INCH)



(b) ON SEA/AIR PLOT OR G.O.P.
(SCALE: 5 OR 10 MILES = 1 INCH)

L.T.G.

31. *On Surface Plots.*—(*a*) An underlay of tracing cloth or Koda-trace can be placed below the plotting surface. This should be ruled out in 10-mile squares to the scale of the plot, and may be further sub-divided if desired.

The grid references should either be written on the pavements or other plotting surface, or on bexoid strips along the edges of the A.R.L. Table (*see* A.F.O. Diagram 44/54). (Figure 4.) These strips should be secured by two screws which, when free, can slide in slots long enough to allow the strips a movement for adjustment of about 10 miles (5 miles in each direction). The strips can thus be re-aligned whenever ships grid position is adjusted by movement of the underlay.

(*b*) As an alternative to (*a*), if not using the grid underlay, the bexoid strips may be used as above, in conjunction with guide lines (say, 10 miles apart) either engraved on the back of the pavements or drawn on the under-side of the glass of the A.R.L. table. These lines are purely guides to the eye when plotting a position from the grid co-ordinates on the bexoid strips. They should not be confused with Grid lines.

32. *On Air Plots.*—The grid tapes already in use for T.G.G. (A.F.O. 3652/52—*Plots and Plotting—Application of Grid Reference System to Air Plots*) should be used for L.T.G.

GEOREF.

33. *On Surface Plots.*—(*a*) As for paragraph 31 (*a*) or (*b*). In this case, however, although the N/S scale will be constant the E/W scale will require graduating according to the middle-latitude in use. It is suggested that scales for the following belts of latitude should be used :—

0°–15° using a middle latitude of 10°
15°–20° using a middle latitude of 18°
20°–25° using a middle latitude of 23°
25°–30° using a middle latitude of 28°
30°–34° using a middle latitude of 32°
34°–38° using a middle latitude of 36°
38°–41° using a middle latitude of 39°
41°–44° using a middle latitude of 42° 30′
44°–47° using a middle latitude of 45° 30′
47°–50° using a middle latitude of 48° 30′
50°–52° using a middle latitude of 51°
thereafter for every 2° of latitude up to 80° N or S.

(*b*) If underlays are used they will have to be constructed for the belts of latitude in (*a*) above.

(*c*) Any Navigational chart or Mercatorial Plotting Sheet can, of course, be marked in GEOREF co-ordinates.

34. *On Air Plots.*—The question of providing Grid tapes graduated for the various latitude belts is being investigated. In the meanwhile ships should make their own arrangements to graduate strips of blank 35-mm. film with chinagraph pencil when required.

Section V—Guidance on the Best Grid Reporting Method to Use

35. The factors affecting the choice of grids for local contact reporting may be summarised as follows :—

(*a*) Use *GEOREF* if *geographically* accurate position reporting is required.

(*b*) Use *L.T.G.* if accurate position reporting *relative* to the O.T.C. is more important than geographical accuracy.

(*c*) Convoys or forces being supported in certain areas should adopt the grid in use by the supporting force unless circumstances make a change undesirable.

(*d*) L.T.G. is of no value to other forces who have not been " locked " in.

(*e*) Grids should only be used in circumstances where they appear to be the most effective system available (*see* paragraph 36).

36. *Other Methods.*—It is emphasised that Grid reporting is not intended to exclude the passing of information by any other method if this appears desirable. Ships and aircraft should always be free to use the best method available to meet the circumstances.

In particular this applies to the "bearing and distance" method the great advantage of which is its self-evident form. It should normally be used :—

(*a*) For initial enemy contacts made on a signal net.

(*b*) For local reporting in the vicinity of a convoy, where escorts are wide-spread (e.g., 150° QQ 12).

(*c*) For A/S hunts conducted on a large-scale plot.

(*d*) For Air sitreps and Raid Reports to and from units in close company.

(*e*) For passing information *within* a ship.

(*f*) By A.E.W. aircraft.

(The foregoing is the text of A.F.O. 2753/1954 altered to meet R.A.N. conditions.)

(3858/1/4)

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C.N.Os.40-56/55

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
18th January, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0046

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SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

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No. Subject

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SECTION 6 - SHORE ESTABLISHMENTS

SECTION 2.- PERSONNEL

40.

MEDICAL - CARBON MONOXIDE POISONING - EXAMINATION OF SPECIMENS IN SUSPECTED CASES.

In cases of suspected carbon monoxide poisoning an examination of the blood should be made, wherever practicable, of all personnel believed to have been so affected.

2. In living subjects carbon monoxide is rapidly excreted from the blood when the individual is removed from the poisonous atmosphere, so the specimen of blood should be obtained as soon as possible after this has been done, and all necessary immediate medical attention has been given. But no specimen of blood is to be taken from a civilian employee without his consent. Specimens for examination are to be sent to the Medical Officer-in-Charge, Flinders Naval Hospital or Balmoral Naval Hospital.

3. The specimen of blood should be about 5 c.c. in volume (though much less will serve if need be), and should be collected preferably by vein puncture. The blood should be placed in a small screw cap bottle containing potassium oxalate to prevent clotting. A suitable size bottle should be chosen so that the specimen of blood nearly fills the bottle. If such a container is not available a test tube should be used, and the blood diluted with an equal volume of sterile distilled water. The test tube should be chosen of such a size that the diluted blood nearly fills it. The test tube should be closed with a washed rubber bung held in place with suitably applied pieces of adhesive tape. On no account must it be sealed by fusing the glass as it is imperative that no combustion process should come near the specimen.

4. In fatalities every effort should be made to collect whole blood from the cadaver. A large vessel can be tied in two places then dissected out and the ligature opened over a suitable container as described in paragraph 3. If all efforts of this kind are unsuccessful the examination can be carried out on tissue containing haemoglobin, e.g., muscle, kidney, or liver. The type of tissue is to be stated. A small portion of the tissue should be dissected, preferably from a situation which has not been exposed to air. It should be placed in a test tube or small specimen jar and covered with distilled water in amount such that the blood imparts to this a pronounced red coloration; the air space above the liquid should be minimal. The container should be corked or stoppered (concluding remark in previous paragraph refers).

5. The specimens should be protected from light, kept cool, and forwarded by the most rapid transport available. Full details to accompany these will include information concerning the smoking habits (if any) of the individual and, in cases of survival, the time which elapsed between removal from the poisonous atmosphere and the collection of a blood specimen.

(The foregoing is the text of A.F.O. 2705/1954 altered to meet R.A.N. conditions.)

(4018/5/72)

41.

INSTRUCTIONAL FILMS AND FILM STRIPS - A573, "WARNING RADAR DISPLAYS" (PARTS 1-2) - DISTRIBUTION - "WARNING RADAR DISPLAYS" (PARTS 1-2) (SERIAL NO. A434) - OBSOLETENESS.

Copies of the new film A573, "Warning Radar Displays" (Parts 1-2), are being obtained and distribution will be made without demand by the S.N.S.O., Sydney, on the following scale :-

H.M.A. Establishments	No. of Copies
Flinders Naval Depot	1
H.M.A.S. WATSON	1
H.M.A.S. RUSHCUTTER	1
H.M.A.S. MORETON	1
H.M.A.S. LONSDALE	1
H.M.A.S. HUON	1
H.M.A.S. TORRENS	1
H.M.A.S. LEEUWIN	1

2. Details of Parts 1 and 2 are as follows :-

Part 1 Controls.

Gives a brief description of the P.P.I. and its uses and shows in detail the operation of the individual controls and the effect they produce on the picture. The standard drill for lining up, calibrating and setting up a P.P.I. by use of these controls is also shown. Running time 13 minutes. 1 spool.

Part 2 Operation.

This film, a re-edited version of the Admiralty film of the same title (Serial No. A434), shows the operating procedure for seaguard and airguard P.P.I.s. Running time 10 minutes. 1 spool.

3. The Film A434, Warning Radar Displays, has now been declared obsolete and ships and establishments holding copies are to return them to the nearest Naval Store Depot for disposal by destruction.

(The foregoing is the text of A.F.O. 2577/1954 altered to meet R.A.N. conditions.)

(4518/61/415)

SECTION 3.- HULL, MACHINERY, EQUIPMENT AND STORES

42.

MACHINERY - DIESEL ENGINES - PAXMAN 5RW AND 6RW SERIES - CYLINDER HEAD GASKET.

Attention is drawn to the fact that the cylinder head gasket in Paxman 5RW and 6RW Series engines can be wrongly positioned so that certain water passages are blanked and others restricted. This is particularly the case if the gasket is fitted upside down, which is possible.

2. In view of the damage which can result from the incorrect fitting of these gaskets, particular care is to be paid to this point when these engines are refitted.

(The foregoing is the unaltered text of A.F.O. 3110/1954.)

(3760/26/26)

43.

AMMUNITION - PROPELLANT - LANDING - DESTRUCTION - REPORTS.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots 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 specially to Navy Office for instructions :-

Propellant lot or sub-lot No.	Propellant nature and size	Nature of gun ammunition which may be involved
RNC 237	SC 103	B.L. 6 in.; Q.F. 4 in.; Q.F. 4.5 in.
RNC 238	SC 122	B.L. 6 in.; Q.F. 4.7 in. (8.L.); Q.R. 4.5 in.
RNC 354 XB	SC 061	B.L. 6 in.; Q.F. 4.7 in.; Q.F. 4 in. (F.A.); Q.F. 4.5 in.; Q.F. 12-pdr. 12 cwt.
RNC 1992 XR	SC 140	B.L. 6 in.; Impulse Torpedo.
RNC 2014 XR	SC 103	B.L. 6 in.; Q.F. 4 in.; Q.F. 4.5 in.
RNC 2170 XS	SC 140	B.L. 6 in.; Impulse Torpedo.
RNC 2207 XS	SC 061	B.L. 6 in.; Q.F. 4.7 in.; Q.F. 4 in. (F.A.); Q.F. 4.5 in.; Q.F. 12-pdr. 12 cwt.
RNC 2659 XA RNP 1021 XH	NF 052 NF 052	Q.F. 4.7 in.; Q.F. 4 in.; Q.F. 12-pdr.
WA 13750 XA	NA 029	Q.F. 4 in.

2. Attention is drawn to 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.

(The foregoing is the text of A.F.O. 2905/1954 altered to meet R.A.N. conditions.)

(4433/51/199)

44.

GUNS - Q.F. 4.5-IN., MARK 5 - FITTING STOP PLATE TO BARREL, ADJUSTMENT OF SHOULDER OF BARREL AND BARREL LOCKING PLATE.

The following modification is approved :-

Gun — Q.F., 4.5 in., Mark 5

Parts affected — Gun body and barrel

Purpose — To prevent rearward movement of barrel

Nature of modification

(1) *Guns mounted in H.M.A. Ships and Establishments, Guns in store and at Gunnery Equipment depots*

(a) Barrel retaining plate (BP591) and screws (BP439 and 426) to be removed and tapped holes fitted with preserving screws (BP308 and BP295).

NOTE:- It is first necessary to remove -

(i) the SA/QF shaft;

(iii the shaft for power opening the breech;

(iii) the bracket for the rammer push.

(b) Stop plate (BP708) to be fitted to barrel.

(c) Barrel locking plate to be mated to breech ring and stamped with registered number of gun.

(2) *Spare barrels*

(a) Front shoulder of barrel to be machined as necessary to give a dimension of 10.248-0.001 from chamber face.

(b) Stop plate (BP708) to be fitted to barrel.

Drawing

(1) Guns mounted, guns in store and at Gunnery Equipment depots N.O.D. 3175/69 Items 1, 2, 4 and 5: Item 3, if suitable; otherwise item 6.

(2) Spare barrels in store, N.O.D. 3175/69 Items 2, 3, 4 and 5.

New parts required	BP708 PLATE, stop, barrel BP608 SCREW, SECURING, barrel stop plate (2 No.) BP308 SCREW, PRESERVING, holes (outer) for leading stop bracket breech ring BP295 SCREW, PRESERVING, holes (inner) for loading stop bracket, breech ring.	To be provided locally
By whom to be done	R.A.N. Armament depots.	
When to be done	As soon as possible.	

2. For the component barrels of guns it will be necessary to adjust the stop plate to item 6 of N.O.D. 3175/69 when the actual dimension from chamber face to front shoulder exceeds 10.248 in. and these barrels may require their stops to be re-adjusted when transferred to another gun. The memo. of Inspection of such barrels are to be endorsed -

" On transfer of this barrel to another gun the stop plate may require replacement and/or re-adjustment to Drawing N.O.D. 3175/69".

3. BP591 PLATE and BP439 and 426 SCREWS recovered are to be scrapped.

4. New Store References have been allocated as follows :-

BP560 BARREL, loose (new), O.Q.F., 4.5 in., Mark 5 BP573 BARREL, loose (worn), O.Q.F., 4.5 in., Mark 5	Fitted with BP708 PLATE.
BP586 BARREL, loose (new), O.Q.F., 4.5 in.; Mark 5 BP599 BARREL, loose (worn), O.Q.F., 4.5 in., Mark 5	New manufacture.

5. Schedule of Modifications, Part 1.

Q.F. 4.5 in., Mark 5 and accessories

Delete Serial No. 13.
Add Serial No. 17.

(The foregoing is the text of A.F.O. 2780/1954 altered to meet R.A.N. conditions.)

(4428/26/110)

45.

GUNS - Q.F., 40-MM. AND 2-PDR. (IN MULTIPLE MOUNTINGS) - MATCHING OF MUZZLE VELOCITIES OF BARRELS.

In multiple 40 mm. mountings where the control systems can correct variations of muzzle velocities from normal, it is necessary that the muzzle velocites of the barrels should be matched. The systems concerned are the C.R.B.F.D. and S.T.A.A.G., and the mountings concerned at present are -

(a) All 40 mm. twin S.T.A.A.G. mountings.

(b) 40 mm. twin Mark 5 mountings in the following ships :-

MELBOURNE, SYDNEY, "Daring" Class, "Battle" Class and Type 12 Frigates.

2. In these mountings, gun barrels are to be within 20 f.s. M.V. or 0.010 in. mean wear at 1 in. from C. of R. of each other. Barrels should be exchanged when necessary to give effect to this requirement and spare barrels when embarked should be matched as nearly as possible to the barrels mounted.

3. Matching is not required in other 40 mm. or in any 2-pdr. mountings.

4. Appendix 14 of B.R. 292 and Appendix 12 of B.R. 819 (6) will be amended.

(The foregoing is the text of A.F.O. 2342/1954 altered to meet R.A.N. conditions.)

(4428/50/13)

46.

AMMUNITION - 40-MM., 20-MM. AND 2-PDR. - CARTRIDGES S.A. 20-MM. HISPANO BALL - SUPPLY.

As supplies of Hispano Ball of recent manufacture are now available the following supply arrangements are to operate :-

(a) H.M.A. Ships are to be issued with Ball ammunition of 1949 and later manufacture only. Commanding Officers of H.M.A. Ships having stocks of Hispano Ball ammunition of pre 1949 manufacture are to arrange for these to be exchanged for cartridges of later manufacture at the earliest opportunity.

(b) R.A.N. Air Stations will be issued with Ball ammunition of pre 1949 U.S.A. manufacture until stocks are exhausted when the arrangements for ships will apply. Any other Ball of pre 1949 manufacture is to be exchanged at the earliest opportunity.

2. Officers in charge of R.A.N. Armament Depots are to arrange for stocks of pre 1949 Hispano Ball, other than that of U.S.A. origin, to be transferred to restricted charge for expenditure at Depot gun functioning testing only, and for packages to be stencilled accordingly. The following entry is to be inserted on Sheet 4 of Restriction List (B) :-

Column 1	12.
Column 2	Ball.
Column 3	Pre 1949 manufacture (other than of U.S.A. origin).
Column 4	Not to be used for aircraft practice.
Column 5	To be used for Depot gun functioning testing only.
Column 6	Navy order 46 of 1955.

(The foregoing is the text of A.F.O. 2662/1954 altered to meet R.A.N. conditions.)

(4433/19/228)

47.

DIVING - BREATHING APPARATUS - UNDERWATER BURNING EQUIPMENT (OXY-HYDROGEN).

Investigations have proved that there is a danger of a serious accident occurring when using underwater burning equipment (Oxy-Hydrogen) with self-contained breathing apparatus, Pattern 5561A/5562A. If a lighted torch is brought into close contact with the breathing bag a large flashback in the breathing apparatus takes place.

2. The practicability of providing an asbestos apron to safeguard the breathing bag is being investigated. Meanwhile, operations involving the use of underwater burning equipment with Pattern 5561A or 5562A breathing gear are to be performed only by trained and experienced divers, who are to be warned of the danger of bringing a lighted torch close to the breathing bag.

(The foregoing is the unaltered text of A.F.O. 2965/1954.)

(4512/50/189)

48.

COLD AND COOL ROOMS - INSULATION TESTS-H.M.A. SHIPS, INCLUDING SUBMARINES.

The insulation of the cold and cool rooms of H.M.A. Ships must be within a certain standard of efficiency to ensure that the refrigerating machinery can maintain the rooms at the correct temperatures under tropical conditions.

2. Insulation trials in accordance with the instructions printed on Form D741A are to be carried out at intervals not exceeding 4 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. In cases where the refrigerated compartments (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 D741A.

5. On completion of these trials, the "K" value for the compartment 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 trial :-

(a) When the value of "K" is below 1.0, the insulation may be regarded as satisfactory and the test records forwarded to the Naval Board in due course 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 on the completion date of the ship concerned reported immediately to the Naval Board.

6. The coefficient "K" referred to herein is an average figure representing the number of B.Th.U.s passing through 1 in. thickness of the insulation of the room under test, per hour, per square foot of internal surface area, per degree Fahrenheit difference of temperature across the insulation.

$$\text{i.e.} \quad K = 1/2\left[\frac{Ht}{A\theta_s} + \frac{Ht}{A\theta_c}\right]$$

where -

H = Constant electrical input in Watts, measured during 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 heat leakage is taking place.

A = The total internal surface area of the room under test through which heat leakage is taking place, in square feet.

θ_s = Mean temperature difference in degrees Fahrenheit between the inside and outside of room. The temperature of the latter being obtained from surrounding space thermometers.

θ_c = Mean temperature difference in degrees Fahrenheit between the inside and outside of room; the temperature of the latter being obtained from the surrounding contact thermometers.

7. Where re-insulation is carried out, the room is to be retested on completion of the work and records forwarded to the Naval Board.

8. 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 of temperature across the insulation during the 6 hours "Natural Cooling Test". The value of "R" should not exceed 2.0.

9. 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.

(The foregoing is the text of A.F.O. 1795/1954 altered to meet R.A.N. conditions.)

(4276/4/312)

49.

GALLEYS - POTATO PEELING MACHINES - SALT WATER SUPPLY.

Experience at sea has shown that as much as 10 tons of fresh water per day is used in a large ship for the potato peeling machine. In view of the necessity for conserving fresh water during long periods at sea, it has been approved to provide a salt water supply to potato peeling machines for use under suitable conditions.

2. Ships in which a salt water supply to the potato peeling machines is not provided are to include an item in the next main Defect List to cover the fitting.

3. Salt water should be used in the potato peeler only when the ship is at sea, and care is to be taken to ensure that this restriction is observed. On no occasion should salt water be used in harbour or whenever the salt water is suspected of contamination.

4. After use with salt water, the machines should be flushed out with fresh water in order to reduce the risk of corrosion.

5. Separate instructions will be issued by the Naval Board for new construction and conversion vessels.

(The foregoing is the text of A.F.O. 2966/1954 altered to meet R.A.N. conditions.)

(3776/12/58)

50.

NAVAL STORES (AIR) - GROUND EQUIPMENT - TRANSFER OF CERTAIN ARTICLES TO NAVAL STORES (GENERAL).

The Air Stores indicated hereunder will in future be dealt with as Naval Stores (General) -

R.A.F. Ref.No.	N.S. Class and Group	N.S. Patt. No.	Description	Ships Accounting Classification
4A/543	BIIF	543	Block swage 18 in. x 18 in. x 6 in. (R.A.F. Vocab. Sec. 4A)	P
4A/544	BIIF	544	Block swage, stand for, 24 in. x 24 in. x 14 in. (R.A.F. Vocab. Sec. 4A)	P
4G/3251	BIOB	3251	Ladder, steel (R.A.F. Vocab. Sec. 4G)	P
4G/3737	E12	3737	Ladder, wood, flat top, left, double Step. (R.A.F. Vocab. Sec. 4G)	P
4G/3738	BIOB	3738	Ladder, metal flat top, left (R.A.F. Vocab. Sec. 4G)	P
4G/3740	E12	3740	Ladder, wood, swing back 8 ft. (R.A.F. Vocab. Sec. 4G)	P
4G/3742	E12	3742	Ladder, wood, swing back 12 ft. (R.A.F. Vocab. Sec. 4G)	P
4K/1332	E12	1332	Ladder, wood, extending, 15 ft. to 28 ft. (R.A.F. Vocab. Sec. 4K)	P

2. Future demands for these stores should be forwarded to the Superintending Naval and Air Store Officer, Sydney.

3. Stocks of ladders, wood, shelf, 10 ft. A.M. Ref. No. 4K/91 and ladders, wood, extending 20 ft. to 37 ft. A.N. Ref. No. 4K/1333 should be similarly transferred for absorption into Naval Store stocks under Pattern 4861 and 4863 (Class E, Group 12), respectively.

4. The Rate Book and Authorized List of Naval Stores and Air Stores Establishment A.P.(N) 377 and 378 will be amended.

(The foregoing is the text of A.F.O. 2908/1954 altered to meet R.A.N. conditions.)

(4403/4/343)

51.

NAVAL STORES (GENERAL) (CLASS E, GROUPS 11 AND 12) - HAZE SCREENS, PATTERN 952 AND SPARE GLASSES FOR - DELETION FROM RATE BOOK FOR NAVAL STORES.

Haze Screens, Pattern 952 (E.12), and Spare Glasses, Pattern 952A (E.11), are no longer required for any services, and are being deleted from the Rate Book and Authorized List of Naval Stores.

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

3. Relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 3114/1954.)

(4512/1/91)

52.

LIFTING GEAR - ROBINSON'S DISENGAGING GEARS, PATTERNS 1B AND 1J - REPLACEMENT OF FLEXIBLE STEEL WIRE ROPE BY EXTRA SPECIAL FLEXIBLE STEEL WIRE ROPE.

H.M.A. Ships

The 1 in. F.S.W.R., Pattern 9088, used for making up the fore and after in the Robinson's Disengaging Gears, Patterns 1B and 1J, should be replaced by 1 in. E.S.F.S.W.R., Pattern 9108, of minimum breaking load 3.6 tons.

2. The work is to be treated as a defect and replacement carried out accordingly.

3. The disengaging gear and associated equipment should be landed for re-test as soon as possible on completion of the fitting of the new pendant.

(The foregoing is the text of A.F.O. 2967/1954 altered to meet R.A.N. conditions.)

(4505/18/115)

53.

REPLENISHMENT AT SEA EQUIPMENT - DAMAGE TO, OR LOSS OF - REPORTS.

Whenever serious damage to, or loss of, replenishment at sea equipment occurs, ships concerned (supplying and receiving) are to forward a manuscript report to their administrative authorities under the following headings :-

(a) Date, time and position of accident or loss.

(b) Replenishment course and speed.

(c) Wind strength and direction.

(d) State of sea and swell.

(e) Type of rig in use.

(f) Distance apart of ships.

(g) Position of receiving ship relative to supplying ship (to be shown by diagram).

(h) Replenishment signals made or in use.

(j) Description of events leading up to damage or accident.

(k) Particulars of damaged or lost gear.

2. Where the supplying ship is a Royal Fleet Auxiliary, the Master is to report as above to the Senior Officer ordering the exercise.

3. Reports should be forwarded to the Naval Board at the discretion of the Administrative Authority.

4. B.R. 1742 (52) - Replenishment at Sea - will be amended in due course.

(The foregoing is the text of A.F.O. 2791/1954 altered to meet R.A.N. conditions.)

(4523/7/83)

54.

FIRE - PRECAUTIONS WHEN USING BOSTIK C ADHESIVE COMPOUNDS AND SIMILAR INFLAMMABLE SUBSTANCES.

In view of the inherent danger in the use of Bostik C compound and similar inflammable substances, and of the inflammable vapours arising therefrom, the following precautions are to be observed and brought to the notice of all concerned :-

(a) Smoking, the use of naked lights, open flame stoves or any other apparatus capable of igniting inflammable vapours, is strictly prohibited in the area.

(b) Notice Boards with the wording "INFLAMMABLE VAPOUR PRESENT. NO SMOKING OR NAKED LIGHTS ALLOWED". should be placed in prominent positions.

(c) The maximum ventilation is to be afforded; a portable extractor fan is to be used where normal ventilation appears inadequate.

(d) A portable fire extinguisher Pattern 7272 (gas/water) or Pattern 4726 (foam) is to be readily available in the vicinity.

2. A skin rash experienced by certain men engaged in applying these compounds was at first suspected of being attributable to their use; analysis, however, has demonstrated that there is little likelihood of this having occurred.

3. In order to minimize any possible risk of skin irritation from close contact with these compounds and to facilitate removal of splashes, the following additional precautions should be observed :-

(a) Before work is commenced the hands should be covered with a suitable barrier cream, e.g. ROZALEX. When this is unacceptable due to its incompatability with the materials handled, e.g. as with certain ammunition components, the overalls should be tied at the wrists and leather gloves worn.

(b) Hands and forearms should be washed well with soap and water after work.

(The foregoing is the text of A.F.O. 1419/1954 altered to meet R.A.N. conditions.)

(4512/71/50)

SECTION 5.- BOOKS, CORRESPONDENCE, FORMS, STATIONERY

55.

B.R.1938 - NAVAL RATINGS HANDBOOK.

The Naval Ratings Handbook is being revised and on receipt of supply now on order will be available for issue on demand as follows :-

R.A.N. Recruits	-	On Entry
R.A.N.R. Recruits	-	On Entry
R.A.N.R. (N.S.) Ratings	-	On Loan.

2. A limited number of copies of the current edition is available and demands placed on the (Superintending) Naval Store Officer, Sydney, should be restricted to meet requirements for R.A.N. Recruits and R.A.N.R. (N.S.) Ratings.

(4139/13/1074)

SECTION 6.- SHORE ESTABLISHMENTS

56.

FURNITURE - OFFICIAL RESIDENCES - FIRE SCREENS.

Firescreens are no longer authorized for supply to official residences and married quarters in the Royal Australian Navy. Those at present in use may remain in the houses but will not be replaced on becoming unserviceable.

2. Navy Order 40 of 1954 is hereby cancelled.

(3541/1/33)

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RESTRICTED

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
19th January, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

TABLE OF CONTENTS

57.

BOOKS - DISTRIBUTION OF NON-ACCOUNTABLE PUBLICATIONS AND AMENDMENTS DURING DECEMBER, 1954.

The undermentioned non-accountable publications to A.P's, B.R's etc., have been distributed to Ships and services during December, 1954. Navy Order 110 of 1954 is relevant.

MAGAZINES, PAMPHLETS, ETC.

TITLE	DATE
"Flight"	1st October, 1954.
"Flight"	8th October, 1954.
"Aeroplane"	17th September, 1954.
"Aeroplane"	8th October, 1954.
"Aeroplane" Index Vol. 86	January-June, 1954.
"Joint Services Recognition Journal" Vol. 9, No. 9	September, 1954.
"Joint Services Recognition Journal" Vol. 9, No. 10	October, 1954.
"Aircraft" Vol. 33, No. 3	December, 1954.
"United Nations Review" Vol. 1, No. 3	October, 1954.
N.A.M.A.N. N.1354-N.1365	30th November, 1954.
"Journal of Naval Engineering" Vol. 7, No. 4	October, 1954.
"Occupational Safety and Health"	July-September, 1954.
"Fibres" Vol. 15, No. 10	October, 1954.
"Journal of the R.N. Medical Service" Vol. 11, No. 3	Summer, 1954.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. NO.	A.L. OR LEAFLET
113	A.L.95
970 Vol. 1	A.L.31 to A.D.M.800
1086 Book 2 2nd Edition	A.L's 41 and 42
1086 Book 3 Pt. 2 2nd Edition	A.L's 29 and 30
1086 Book 4 Pt. 1 2nd Edition	A.L.54
1086 Book 5 2nd Edition	A.L.33
1086 Book 6 2nd Edition	A.L.35
1086 Book 7 2nd Edition	A.L.34
1086 Book 8 2nd Edition	A.L.26
1086 Book 9 2nd Edition	A.L's 52, 53 and 54
1086 Book 10 2nd Edition	A.L.35
1086 Book 11 2nd Edition	A.L's 39, 40, 41, 42, 43, 44, 45, 46, 53, 54, 55, 56, 57 and 58
1086 Book 12 2nd Edition	A.L's 52 and 53
1086 Book 13 2nd Edition	A.L's 49, 50 and 51
1086 Book 14 2nd Edition	A.L.13
1086 Book 15 2nd Edition	A.L.58
1181 Vol. 2	(A.L.3) and B.2
1182A Vol. 1	A.L.102
1182B Vol. 4 Pt. 6	A.L.4
1182D Vol. 1 and Vol. 6	A.L.56
1275A Vol. 1	A.L's 425, 426, 427, 428, 429, 431 and 432
1275A Vol. 2 Pt. 1	(A.L.216) L.4 and (A.L.217) L.5
1275B Vol. 1	A.L's 225, 226, 227 and 228

A.P. NO.	A.L. OR LEAFLET
1275B Vol. 2 Pt. 1	(A.L.131) A.29 (A.L.132) C.36 (Alt.3) and (A.L.133) C.37 (Alt.1)
1275E Vol. 2 Pt. 1	A.L.101 (Z.18 Alt.1 inc.) and A.L.102 (Z.19)
1275E Vol. 6	A.L's 6, 7 and 8
1275G Vol. 2 Pt. 1	(A.L.36) F.2 (Alt.1)
1275T Vol. 1	A.L.6
1355 Vol. 2 Pt. 1	A.L.77 (D.122)
1355C Vol. 1	A.L.40
1355D Vol. 1	A.L.19
1374C Vol. 2 Pt. 1	(A.L.42) E.7 and (A.L.43) E.8
1374E Vol. 1	A.L.10
1455	A.L.219, A.L.3 to L.3 (A) Issue 2
1464B Vol. 1	A.L's 131 and 132
1464C Vol. 2 Pt. 1	No. 2 (A.L.13)
1464D Vol. 3 Pt. 1	A.L.1 (Altering Designation to A.P.4515G Vol. 3 Pt. 1)
1464G Vol. 1	A.L.121
1492A Vol. 1	A.L.67
1492A Vol. 2	(A.L.28) G.I.
1538A Vol. 1 and Vol. 6 Pt. 1	A.L.11
1538B, D, G, H, Vol. 3 Pt. 1 5th Edition	A.L.18
1538D Vol. 1 and 6 Pt. 1 2nd Edition	A.I.L. 1/54
1538D Vol. 6 Pt. 2 & 4	A.L's 37 and 38
1538E Vol. 2 Pt. 3	A.L.67
1538L Vol. 1 & 6 Pt. 1	A.I.L.4/54
1538L Vol. 6 Pts. 2 & 4	A.L's 16, 17 and 18
1538L Vol. 6 Pt. 3	A.L.2
1538P Vol. 1 and Vol. 6 Pt. 1	A.I.L.5/54, A.L.19
1641F Vol. 1 Pts. 1 & 3	A.L's 17 and 18
1641F Vol. 2 Pt. 1	K.31 (Cancellation)
1641P Vol. 2 Pts. 1 & 3	A.L.52
1661B Vol. 1 (2nd Edition)	A.L's 51, 52, 53 and 54
1661D Vol. 1	A.L's 83 and 84
1664 Vol. 2 Pt. 1	A.21 (A.L.2)
1664A Vol. 1	A.L.91
1664C Vol. 1	A.L.25
1664D Vol. 1 Pt. 2 & Vol. 5	A.L.27
1664D Vol. 1 Pts. 1 & 3	A.L.14
1803 Vol. 2 Pt. 1	B.17, E.61, E.62
1803A Vol. 1	A.L's 34, 35 and 36
1803B Vol. 1	A.L's 121, 122 and 123
1803C Vol. 2 Pt. 2	A.L.24
1803D Vol. 1 Book 2	A.L.14
1803D Vol. 1 Book 3	A.L's 27 and 28
1803D Vol. 2 Pt. 2	A.L's 119 and 120
1803D Vol. 2 Pt. 3	A.L.151
1803E Vol. 1	A.L's 62, 63 and 64
1803E Vol. 2 Pt. 2	A.L.41
1803E Vol. 4 Pt. 6	A.L.8
1803F Vol. 1	A.L's 115, 116 and 117
1803F Vol. 2 Pt. 3	A.L's 36 and 37
1803F Vol. 4 Pt. 6	A.L.2
1803J Vol. 1	A.L's 24, 25 and 26
1803J Vol. 2 Pt. 2	A.L.12
1803R Vol. 6	A.L.27
2102F Vol. 2 Pt. 1	A.36, A.37 and Q.15
2102H Vol. 2 Pt. 1	A.9, A.10, RAN.20 (A.L.1) 3 Sheets November 1954 and Q.12

A.P. NO.	A.L. OR LEAFLET
2240A Vol. 2 Pt. 1	No. 48
2240A Vol. 6 Pt. 2	A.L.38
2337 Vol. 1	A.L.103
2337 Vol. 2	(A.L.50) A.8, (A.L.51) C.13, (A.L.52) C.14
2337 Vol. 6	A.L's 18, 19
2552K Vol. 3	A.L.4
2563Z Vol. 2 Pt. 1	No. 1 (A.L.1)
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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
25th January, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0049

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SECTION 1 - ADMINISTRATIVE AND GENERAL

58.

AVIATION ORGANIZATION - ROYAL AUSTRALIAN NAVAL AIRCRAFT MAINTENANCE EXAMINATION BOARD.

The functions of the Royal Australian Naval Aircraft Maintenance Examination Board are to maintain, through the medium of examinations and trade tests, the efficiency of aircraft maintenance ratings, other than electrical ratings, in accordance with standards laid down from time to time by the Naval Board. In detail the Board is to -

(a) Conduct the following examinations :-

(i) Professional examination for Chief Aircraft Artificer (A/E) and (O).

(ii) Professional examination for Aircraft Artificer, 3rd Class (A/E) and (O).

(iii) Professional examination for Chief Aircraft Mechanician (A/E) and (O).

(iv) Professional examination for Aircraft Mechanician, 1st Class (A/E) and (O).

(v) Passing-out trade test and technical examinations of Aircraft Mechanician trainees.

(vi) Part I and Part II examination of P.O. Airman Fitter (A), (E) and (O) trainees.

(vii) End of course examination of Leading Airman Mechanic (A), (E) and (O) trainees.

(viii) Part I examination of Pilot's Mate trainees.

(ix) Part II examination of Pilot's Mate trainees.

(x) Passing-out examination of Naval Airman 2 Mechanic (A), (E) and (O) trainees.

(xi) Candidates for Aircraft Artificer.

(b) Give all possible guidance to officers conducting the local Q.S. examination.

(c) To make recommendations where results of examinations are considered to call for modified standards of instruction.

2. So far as possible, the systems to be adopted for the above examinations are as follows :-

For (i), (ii), (iii), (iv), (vii), (viii) and (x) -

(a) One or more written papers.

(b) Oral examinations by members of the Board.

For (v), (vi) and (xi) -

(a) One or more written papers.

(b) Oral examinations by members of the Board.

(c) Workshop test of ability to use tools.

For (ix) -

(a) Oral examinations only.

3. The Board is to consist of the following members :-

President - Deputy Director of Aircraft Maintenance and Repair.
An Air Engineer Officer (part time).
A Commissioned Airman (part time).
2 Chief Aircraft Artificers.
1 Chief Aircraft Artificer (O).
1 Chief or P.O.A.F. (A), (E) or (O) - qualified A.E.O.'s writer.

4. Boards for ratings completing advancement courses in the School of Aircraft Maintenance (Engineering) are convened by the Commanding Officer, R.A.N. Air Station, Nowra. The appointment of one officer as Senior Officer of the Board, will always be made, together with at least two other members, according to the following scale :-

Examination for	Minimum Composition of Board
(a) All Aircraft Artificer and Aircraft Mechanician rates, and all other Chief and Petty Officer rates.	1 Lieutenant-Commander (E) (A/E). 1 Lieutenant (E) (A/E). 1 Commissioned Air Engineer.
(b) All leading rates.	1 Lieutenant (E) (A/E). 1 Commissioned Air Engineer. 1 Aircraft Artificer.
(c) Naval Airmen Mechanics.	1 Commissioned Air Engineer. 2 Chief Aircraft Artificers.

5. An Air Engineer Officer qualified in Air Ordnance is to be a member of the Board for examinations of all Ordnance ratings. A Gunnery Officer or Commissioned Airman qualified in Air Explosives is also to be a member of the Board for examinations of Ordnance ratings other than Aircraft Mechanicians or Artificers.

6. An Air Electrical Officer is always to be on the Board when ratings are being examined in an electrical subject.

7. The President is authorized to correspond direct with the President of the N.A.M.E.B. of the Royal Navy, on matters of technical standards only.

Methods of Convening Board and Applying for Examinations.

8. (a) For all ratings completing advancement courses in the School of Aircraft Maintenance (Engineering) - Boards are to be made up of officers and ratings available at R.A.N.A.S. Nowra.

(b) Examination Boards for higher rates will be convened by the Naval Board and held during the second week of January, May and September each year. The officer in charge of R.A.N.A.M.E.B. is to signal A.C.N.B. proposing a date for these examinations.

Forms A.S.442, in duplicate, are to be raised for each rating, both copies being forwarded to the Commanding Officer, R.A.N.A.S., Nowra.

(c) For ratings completing Aircraft Mechanician training, the Board will be convened by the Naval Board. The Officer-in-Charge of R.A.N.A.M.E.B. is to signal A.C.N.B. proposing a date for these examinations.

9. This Order applies both to Royal Australian Navy and Royal Navy Loan ratings.

R.A.N.A.M.E.B. Action on Completion of Examinations.

10. On completion of examinations the Senior Officer of the Board is to raise and/or complete the following forms :-

(a) For all ratings completing advancement courses Forms A.S.429 are to be raised, in triplicate, for each rating, for distribution as follows :-

Original	-	To the rating's Commanding Officer for inclusion in the rating's Service documents.
Duplicate	-	To F.O.I.C. E.A. for information and onward transmission to Navy Office.
Triplicate	-	Retained at R.A.N.A.M.E.B. Headquarters.

(b) For all ratings completing higher rates examinations, Forms A.S.442 are to be raised in duplicate and both copies completed by the Examining Officers for distribution as follows :-

Original	-	To the rating's Commanding Officer for notation and inclusion in the rating's Service documents.
Duplicate	-	To F.O.I.C. E.A. for information and onward transmission to Navy Office. In the case of Royal Navy Loan ratings, the duplicate will be forwarded by Navy Office to the Commodore, Royal Naval Barracks, Lee-on-Solent.

(c) For ratings completing Aircraft Mechanician training, the President of R.A.N.A.M.E.B. is to forward the examination marks to the Commanding Officer, N.A.S. Nowra, for his remarks and onward transmission to the Naval Board.

11. In forwarding the duplicates of the forms referred to in the preceding paragraph, the Senior Officer of the Board is always to include two copies of the Summary of the examination results made out in four columns under the following headings :-

Name and Official No.	Candidate for	Date of Application	Date of Result

12. The results of all examinations are also to be reported on Forms A.S.161.

13. Royal Navy ratings are to be distinguished from Royal Australian Navy ratings throughout by quoting Royal Navy official numbers and not their Royal Australian Navy numbers.

14. Navy Order 339 of 1954, as amended by Navy Order 832 of 1954, is hereby cancelled.

(3031/13/223)

59.

H.M.A. SHIPS - HABITABILITY - ENVIRONMENTAL CONDITIONS.

Reports on conditions in typical compartments in H.M.A. Ships in commission under all conditions of climate are required to provide information on the ventilation, heating, cooling and lagging arrangements, and to indicate for any compartment reported upon, whether it is desirable to effect an improvement in the existing arrangements.

2. All ships to which instruments are issued are to forward bi-annually to the Ship's Administrative Authority triplicate reports on environmental conditions in selected compartments covering the periods 1st September to 28th February and 1st March to 31st August. Should any unusual conditions be reported "Suggestions for Improvements" should be completed by the Ship.

3. On receipt of the forms from the Ship, the Administrative Authority is to include his remarks and despatch two copies to Navy Office.

4. Each report which should embrace compartments of all types should cover about 5 per cent of the occupied spaces of the ship. Since it is intended that these routine reports should present a typical picture of conditions within the ship, they should not be confined to those compartments in which conditions are considered to be unsatisfactory.

5. Form A.S.1120 should be completed for each compartment concerned. The information required comprises mainly a statement of general conditions and a number of wet and dry bulb thermometer readings which should be taken with a whirling hygrometer.

6. So that the value of the reports will not be lost due to recording of inaccurate temperature data the following instructions are issued to enable reliable data to be collected and forwarded :-

(a) Readings should preferably be taken whenever the ship encounters extremes of heat, cold or humidity or when sweating occurs on the boundary surface of a compartment;

(b) upper deck temperatures should be taken as far windward as possible and clear of all exhaust outlets;

(c) all punkah louvres and distributors on supply trunking should be open;

(d) when temperatures are being taken at inlets on weather deck, at supply terminals in compartments, and at exhaust outlets inside compartments, it is not necessary for the hygrometer to be revolved. In these cases the hygrometer should be held close to the terminals with the thermometers in the air stream and temperatures read while the hygrometer is held in this position, special care being taken that the hands are kept as far as possible from the bulbs of the thermometers;

(e) care is to be exercised that sufficient water is retained in the container for the wet bulb which must always be kept moist when wet bulb temperatures are being taken;

(f) temperatures should be recorded while ship is at sea, and compartments being tested should, as far as possible, be fully manned with any heat producing equipment in operation;

(g) the description of ventilation arrangements should include one of the following :-

(i) fan supply and fan exhaust,

(ii) fan supply and natural exhaust,

(iii) natural supply and fan exhaust,

(iv) natural supply and natural exhaust;

(h) where natural supply and natural exhaust trunks are fitted the dimensions of the trunk concerned should be stated;

(i) the number and size of ventilation terminals fitted in a compartment should be stated;

(j) fans to be run at full speed under hot conditions;

(k) for accuracy the wet bulb reading should always be read first as the level of mercury will commence to rise immediately the thermometer is withdrawn into comparatively still air.

7. It is emphasized that the sequence of temperature readings from upper deck to compartment outlet enables a check to be made on possible fouling of the supply, the source of any undesirable heat pick-up to be located and short circuiting of fresh air supplies to exhaust outlets to be recognized when such a situation occurs.

8. An undesirable heat pick-up is present if the increase in temperature between upper deck intake and delivery outlet in a compartment is in excess of 3°C. Where heat pick-up is indicated, the route of trunking should be checked to determine where heat pick-up occurs. In the case of trunking which exhausts a hot compartment, the run of trunking should be checked to determine whether the necessary lagging has been fitted to prevent heat leakage into compartments through which the trunking passes. Lagging found necessary to prevent either heat "pick-up" or "heat leakage" should be dealt with as a defect item.

9. On receipt at Navy Office the forms will be completed and consideration given to any improvements recommended. When any consequent alteration and addition or defect list action is required one copy of the form will be returned to the ship through the Administrative Authority together with directions as to action to be taken.

10. Alterations and Additions.- When an alteration and addition item affecting compartment habitability is proposed, the following are to be forwarded with the Form A.S.1182 :-

(a) Form A.S.1120,

(b) an outline sketch of the compartment showing the layout of the ventilating trunking, siting of terminals, hatches, scuttles, etc.,

(c) any other information likely to be of value.

When a globe thermometer can be made available, the reading obtained from this instrument should be included in the relevant space on Form A.S.1120 so that it may be determined whether the lagging arrangements to compartment boundaries are adequate. A globe thermometer is included in the sets of instruments for undertaking complete thermal surveys which have been allocated to various authorities. Each set also contains a copy of S.R.1472 (Environmental Warmth and its Measurement) in which are included instructions for the use of the various instruments.

11. Sets of instruments (some of which have already been allocated), as shown in the Appendix to this Order, will be distributed as follows. (Allowances set out in the relevant Admiralty Establishments of Sea Stores are to be disregarded and those shown hereunder regarded as Special Allowances of Naval Stores for the ships concerned. Establishments of Naval Stores for Shore Establishments will be amended in due course) :-

Each Aircraft Carrier, Destroyer, Frigate and Comprehensive Ocean Minesweeper in commission	1 set to each
A Boom Working Vessel in commission to be nominated by Flag Officer-in-Charge, East Australian Area	1 set
A Fleet Tug in commission to be nominated by Flag Officer-in-Charge, East Australian Area	1 set
Commodore Superintendent of Training, Flinders Naval Depot (for instructional purposes and use in attached ships)	1 set
R.A.N. Air Station, Nowra (for School of Air Medicine)	1 set

12. Demands to complete to the above allowances should be lodged with the appropriate (Superintending) Naval Store Officer. As stocks have to be obtained from the United Kingdom, some time will elapse before all demands are satisfied. The set already held by H.M.A.S. TARANGAU should be returned to the Superintending Naval Store Officer, Sydney, for reallocation.

13. Navy Order 136 of 1953 is hereby cancelled.

(4276/4/290)

APPENDIX

Class or Group B9A

Description: Instruments for Measuring Thermal Conditions, complete in box, comprising -

Patt. No.	Class or Group	Perm. or Cons.	Description	No.
(a) 9744	B9A	C	KATA Thermometers 130-125°F	2
(b) 9747	"	C	KATA Thermometers 150-145°F	1
(c) 9742	"	C	Globe Thermometers	3
(d) 9743	"	C	Surface contact Thermometers	4
(e) -	"	P	Whirling Hygrometer (Cassella)	1
(f) 9745	"	C	Thermometers for (e)	4
(g) 93	"	C	Absorbent pendants (wicks) for (e)	6
(h) -	Victualling	P	Thermos Flask	1
(j) 3169	P3	P	Stop Watch	1
(k) -	-	P	BS1472	1
(l) special	-	P	Table of hygrometric data	1
(m) special	-	P	Anemometer	1
(n) -	-	C	Bottle of Distilled water	1

NOTE:- The box complete is to be accounted for as a permanent Naval Store item. Replacements to the contents should be dealt with as permanent or consumable as classified.

60.

OPERATION AND ADMINISTRATION OF THE ROYAL AUSTRALIAN NAVY.

Navy Order 714 of 1954 is to be amended as follows :-

Paragraph 1. Sub-paragraphs (a) (i) and (b) (i) -

For "Navy Order 412 of 1952. Paragraph 10" read "Navy Order 585 of 1954".

Paragraph 3 -

For "Navy Order 295 of 1949" read "Navy Order 341 of 1954".

Paragraph 6 -

To read "Navy Orders 235, 312 and 381 of 1953 are hereby cancelled".

(3031/13/227)

61.

R.A.N. SCHOOL OF METEOROLOGY - FUNCTIONS AND ORGANIZATION.

The R.A.N. School of Meteorology is located at R.A.N. Air Station, Nowra, New South Wales. The functions of the school are -

(a) to provide instruction in naval meteorology for officers and ratings of the Royal Australian Navy and for reserve officers;

(b) to study problems in meteorology in so far as they affect the Royal Australian Navy and to render advice and assistance in connection with such problems.

2. The following courses of instruction are provided :-

(a) Officers' Courses.

Course	Duration	Remarks
1. Instructor officers' introductory course	4 weeks	For officers selected to specialise in meteorology.
2. Radio-sonde course	2 weeks	For qualified meteorological officers only.
3. Reserve officers' course	As required	Syllabus according to individual requirements.

(b) Ratings' Courses.

Course	Duration	Syllabus
4. Meteorological Observers 3 qualifying course	8 weeks	As B.R.1927(52), course No.25
5. Meteorological Observers 2 qualifying course	I - 3 weeks II - 3 weeks	As B.R.1927(52), course No.26. See Appendix A to this Order
6. Meteorological Observers 1 qualifying	I - 4 weeks II - 2 weeks	As B.R.1927(52), course No.27. See Appendix B to this Order

(c) Miscellaneous courses.

Short courses, as required, are given to pilots undergoing the jet conversion course and to aircrewmen under training.

3. The Captain, R.A.N. Air Station, Nowra, is authorized to correspond direct with the following authorities on routine technical matters bearing on the functions of the R.A.N. School of Meteorology and on the R.A.N. Weather Service :-

(a) The Director of Naval Weather Service, Navy Office, Melbourne.

(b) The Director, Commonwealth Meteorological Branch, Department of the Interior, Melbourne.

(c) The Officer-in-Charge, Naval Meteorological School, H.M.S. HARRIER.

Questions of policy are invariably to be referred to the Administrative Authority through the normal channels.

4. Navy Orders 124 of 1950 and 282 of 1951 are hereby cancelled.

(4007/3/114)

APPENDIX A.

Meteorological Observers 2 qualifying course, part II.

The aim of the course is to qualify ratings to operate the radio-sonde ground equipment, to prepare radio-sonde transmitters for flight and to compute the observations for transmission. These duties will be carried out under the supervision of a Meteorological Observer 1st Class.

Syllabus	Time Allowed in Hours
1. General electrical theory: W/T waves, valves, condensors and resistors	3
2. Application of the above to the radio-sonde transmitter	3

Syllabus	Time Allowed in Hours
3. Measuring elements of the radio-sonde transmitter	6
4. General description of the ground equipment. Block diagrams of receiver, amplifier, frequency counter and recorder units	6
5. Operation of ground equipment	6
6. Ascent gear: pre-flight routine	15
7. Flight routine: diagrams and calculators: computations	18
8. Preparation and transmission of "Temp" message	3
9. Practical work	30
10. Revision	3
11. Examinations	6
Total	99

APPENDIX B.

Meteorological Observers 1 qualifying course, part II.

The aim of the course is to qualify ratings to maintain, as users, the radio-sonde ground equipment and stores, to inspect the radio-sonde transmitters, to make the observations during flight, to check the results of the flight and generally to take charge of a radio-sonde station.

Syllabus	Time Allowed in Hours
1. Revision of general electrical theory	6
2. Inspection routine for radio-sonde transmitters	6
3. Speedomax "G" recorder	12
4. Calibration of the ground equipment and user maintenance	6
5. Determination of significant levels and tropopause	6
6. Selection of levels for "Temp" message and methods of checking computations	6
7. Stores and publications	3
8. Practical work	12
9. Revision	3
10. Examinations	6
Total	66

SECTION 2 - PERSONNEL

62.

ACTING ENGINE ROOM ARTIFICERS 4TH CLASS - PROFESSIONAL EXAMINATION FOR CONFIRMATION.

Attention is drawn to the Captain's responsibility to ensure that Acting Engine Room Artificers 4th Class are given the necessary instruction to prepare them for the professional examination for confirmation and that they sit the examination for confirmation as early as practicable in their careers after advancement to Acting Engine Room Artificer 4th Class, if considered likely to pass.

(4006/42/31)

63.

AIR ENGINEERING TECHNICAL TRAINING ESTABLISHMENTS.

This Order outlines the functions of and instructions for the School of Aircraft Maintenance (Engineering), short title S.A.M.(E).

1. The School of Aircraft Maintenance (Engineering). This school is divided into two departments, (A/E) and (O). Both of these departments conduct courses of two types: basic technical training, including advancement courses; and specialist technical courses on particular types of equipment.

2. Basic Technical training embraces the following courses :-

(a) Initial Part II training of Naval Airman Mechanics (A), (E) and (O).

(b) Advancement and conversion courses required by A.B.R.10 of 1953.

(c) Initial training of Aircraft Artificers.

(d) Aircraft Mechanician (A/E) and (O) training.

3. Specialist technical training courses are styled S.A.M.C.(A), abbreviation for School of Aircraft Maintenance Course (Australia). Various courses are available for officers and ratings of the Air Engineering and aircrew branches. Each course deals with a particular type of aircraft or equipment from the servicing and maintenance aspect. There are also Aircraft Armament Courses for A/E officers and Gunnery officers as required.

4. Application for Courses.

(a) Details of courses available will be promulgated in General Orders issued by F.O.I.C., E.A.

(b) Application for courses should be made by signal to N.A.S. Nowra, info F.O.I.C., E.A. and A.C.N.B.

(c) The Commanding Officer, R.A.N.A.S. Nowra, is to inform Commanding Officers concerned of the dates on which officers and men are to be sent on the courses requested.

(d) Commanding Officers are to lend Officers and men to R.A.N.A.S. Nowra for the period of their courses.

Notation on Completion of Course.

5. Ratings.-

(a) On completion, an assessment is to be made of the rating's reception of and ability on the course, including, where applicable, the knowledge shown on local examination. This assessment should be one of the following :-

Poor
Fair
Good
Very Good.

(b) The rating is to be informed of the assessment given.

(c) An entry is to be made in the rating's History Sheet to show -

(i) Course taken, e.g. "S.A.M.C.(A) No.6 - Firefly advanced".

(ii) Date of commencement and completion of course.

(iii) Assessment.

(d) A certificate is to be raised by the School for each rating on completion of the course, and disposed of as follows :-

Original	-	retained in S.A.M.(E)
Duplicate	-	forwarded to F.O.I.C., E.A.
Triplicate	-	forwarded to rating's Commanding Officer for completion and onward transmission direct to Navy Office.

6. Officers.- A report is to be made to F.O.I.C., E.A. of all officers completing courses, giving details of courses taken. Copies of the report are to be forwarded to the Commanding Officers of the Ships and Establishments concerned.

(3031/13/217)

64.

INSTRUCTIONAL FILMS AND FILM STRIPS - A520 - DIVING, (PARTS 3 AND 4) - DISTRIBUTION.

Copies of the new film A520, Diving (Parts 3 and 4), are being obtained and distribution will be made without demand by the Superintending Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments	No. of Copies
H.M.A.S. RUSHCUTTER	1
Flinders Naval Depot	1
R.A.N. Film Library, Sydney	1

2. Details of Parts 3 and 4 are as follows :-

Part 3 - Principles of Mixture Breathing.-

Describes the use of oxygen and oxy-nitrogen mixtures in diving. Running time 19 minutes. 1 spool.

Part 4 - Deep Sea Diving.-

This part describes the main problems encountered in deep diving and shows how they have been solved in the Royal Navy. Running time 29 minutes. 1 spool.

(The foregoing is the text of A.F.O. 2828/1954 altered to meet R.A.N. conditions.)

(4518/61/443)

65.

INSTRUCTIONAL FILMS AND FILM STRIPS - A526 - USE OF OXYGEN IN FLIGHT - DISTRIBUTION.

A copy of the new Film A526, Use of Oxygen in Flight, is being obtained and will be supplied without demand by the Superintending Naval Store Officer, Sydney, to the R.A.N. Air Station, Nowra (for R.A.N. Air Medical School).

2. This film illustrates, in colour, why the body requires oxygen and how it obtains its oxygen supply from the atmosphere under normal conditions. It shows how reduced atmospheric pressure causes oxygen lack and the effects of this are demonstrated in a decompression chamber.

The governing principles of oxygen equipment in its various forms, including pressure cabins, are explained, but the actual equipment as used in aircraft has been deliberately excluded. Running time 22 minutes. 1 spool.

3. It is considered that the full benefit of this film will only be obtained if it is preceded by a lecture from a Medical Officer and if he is also available to answer any subsequent questions.

(The foregoing is the text of A.F.O. 2704/1954 altered to meet R.A.N. conditions.)

(4518/61/448)

66.

MEDICAL - X-RAY OF CLOSE CONTACTS OF PULMONARY TUBERCULOSIS.

Close contacts of open pulmonary tuberculosis should be X-Rayed as soon as possible after exposure, once again at not more than six months, and again at twelve months. Subsequent X-Rays should take place annually.

2. Close contacts of closed pulmonary tuberculosis should be X-Rayed as soon as possible after exposure, and should thereafter be X-Rayed annually.

(The foregoing is the text of A.F.O. 2706/1954 altered to meet R.A.N. conditions.)

(4018/5/73)

67.

NATIONAL SERVICEMEN - CANDIDATES FOR R.A.N. EXECUTIVE COMMISSIONS.

Navy Order 414 of 1954 is to be amended as follows :-

1. Cancel paragraph 5 and substitute -

Selection.-

5. Before the completion of his National Service time, a candidate who is still recommended by the training ship or establishment in which he is serving will, provided he is a volunteer, be required to come before a Fleet Selection Board which will be convened as necessary by the Flag Officer Commanding, Australian Fleet.

Before being passed on to the Fleet Selection Board, candidates serving in H.M.A.S. CERBERUS or in the West Australian Area will appear before a Preliminary Selection Board to be convened by the Commodore Superintendent of Training, Flinders Naval Depot, or the Naval Officer-in-Charge, West Australian Area, as appropriate.

2. Paragraph 6. last sentence is to be amended to read -

" On completion of a total of 6 months' service, (including National Service time), they are to be rated Ordinary Seamen."

3. Paragraph 7. is to be amended to read -

" After entering the Permanent Naval Forces, candidates will then serve 10 months in the Fleet Training Ship ....."

(4002/13/327)

68.

OFFICERS - EXECUTIVE BRANCH (EX AIR BRANCH, AND THOSE OF SHORT SERVICE COMMISSIONS ENTERED DIRECTLY FOR FLYING DUTIES) - QUALIFICATIONS REQUIRED TO BECOME ELIGIBLE FOR ALL EXECUTIVE APPOINTMENTS.

Officers of the Executive Branch holding limited qualifications status are required to obtain the following certificates from the Captain of a seagoing ship before they can become eligible for all executive appointments :-

(a) A full Watchkeeping Certificate, as in Q.N. and A.I., Article 0307 Paragraph 2(a).

(b) A certificate stating that the officer is recommended in all respects as fit for full executive rank and command in his seniority.

2. The Naval Board are anxious that every encouragement shall be given to all officers who wish to do so to obtain these certificates during a period of service in a carrier, either in the ship's Air Department or in an Air Squadron.

3. To this end, Commanding Officers, besides affording these officers an opportunity of acquiring a full Watchkeeping Certificate, should arrange that they receive the maximum possible training in all the duties required of an Executive Officer. To improve the value of such training, certain administrative measures may be possible e.g. -

(a) A specially chosen Lieutenant Commander or Senior Lieutenant to be charged with organizing the executive training of these officers.

(b) Two officers with limited qualification always to be detached for training in attendant destroyers, where they should be given the maximum opportunity to gain executive experience, some interference with flying training being accepted.

(c) Squadron divisional duties to be carried out as far as possible by selected officers with limited qualification.

(d) Every opportunity of giving these officers experience in G.P.Vs. to be taken.

4. The certificates are not to be granted before the officer has served six months at sea.

5. To assist his personal observation of the officer's competence and fitness and, thus to help him to decide whether he can grant the required certificates, the Captain should convene a Ship's Board to examine the officer.

6. The aim should be to ensure that the officer is capable of accepting responsibility for -

(a) the safety of the ship at sea;

(b) the safety of the ship and her boats in harbour; and possess -

(c) sufficient knowledge of organization, administration, discipline and welfare, to enable him to run the routine as Officer of the Watch in harbour, and to act as a Divisional Officer;

(d) sufficient knowledge of general executive duties, to enable him to take his share of those duties, in such matters as ammunitioning and storing ship;

(e) sufficient knowledge of orders and publications to enable him to know where to look for guidance on matters not included in (c) and (d) above.

7. It is not the desire of the Naval Board to lay down the exact form of the examination or the precise passing standard to be exacted. They wish to leave these matters as much as possible to the discretion of Captains, who should treat the examination as an aid, as stated in paragraph 5 hereof, while bearing in mind the aim, as set out in paragraph 6 hereof. In order, however, that some guidance should be given, a suggested form of examination is set out in the Appendix to this Order.

8. The standard to be applied when considering the grant of the certificates should be that the Captain would be prepared to have the officer under his command in the capacity for which he is recommended.

9. Officers serving ashore may apply to go before a Board to take the oral part of this examination. The books needed for study to prepare for the oral examination are Volumes I, II and III of the Seamanship Manual, B.R.67(I), (II) and (III), Revised Edition.

(The foregoing is the text of A.F.O. 3027/1954 altered to meet R.A.N. conditions.)

(4002/22/12)

APPENDIX

Examination of Officers with Limited Qualification

It is suggested that the examination should be on the following lines :-

(a) An oral Seamanship examination;

(b) Practical tests in Seamanship;

(c) Practical tests in Signals;

(d) Oral examinations in Navigation/Direction, Gunnery, T.A.S. and Communications;

(e) Practical tests in Navigation and Pilotage.

2. Seamanship Examination.- A modified form of the Seamanship examination for rank of Lieutenant.

O.O.W. duties	- A thorough knowledge required both for sea and harbour, including the correct methods of dealing with requestmen and defaulters.
Rule of the Road	- A thorough knowledge required.
Rigging	- A knowledge of simple practical jobs of hoisting, slinging and lashing. No detailed knowledge required.
Anchor Work	- General acquaintance with the ship' anchors, cables, capstans, cable-holders and anchor gear, as fitted. Knowledge of letting go anchor, veering and securing cable and securing to buoys. Detailed knowledge of mooring, clearing hawse, laying-out anchors, testing cables or permanent moorings, not required.

Organization	- General acquaintance with the organization of the ship, including the broad responsibilities of the Engineer, Supply and Electrical Officers. A thorough knowledge of Divisional Officer's duties and welfare organization. Knowledge of Damage Control States of Readiness and Fire Fighting Organization.

3. Practical Tests in Seamanship.- To test ability to take charge of simple evolutions such as hoisting a boat, tricing up an accommodation ladder, or hoisting in stores.

4. Practical Tests in Signals.- To Midshipman's standards.

5. Examination in Navigation/Direction.

General Navigation and Pilotage	Chart work, system of lights, buoyage and fog signals.
Ship and Fleet work	Conning and handling ship. Station-keeping.
Warning Radar	Such knowledge of navigational and warning radar as is required by an O.O.W.
A.I.O.	An outline knowledge only.
Meteorology	Reading and logging of meteorological instruments. Estimating and logging weather elements. General acquaintance with weather forecasting and weather reports. No theoretical knowledge of meteorology required.
Tides	General knowledge of the practical effects of tides and tidal streams on the ship and her boats. Knowledge of the use of Tide Tables, Part I, and the Tidal Atlas. Knowledge of the theory of tides not required.
Theoretical Astronomical Navigation Compass - Theory Chronometer Surveying	Nil

6. Practical Tests in Navigation and Pilotage.- To test ability -

(a) to use a sextant, to take a sight, and to work it out, without time limit, with the aid of any tables and examples required;

(b) to fix the ship by shore objects;

(c) to lay off and check a course on the chart.

7. Examinations in Gunnery and T.A.S.- General acquaintance with the organization and work of the Gunnery and T.A.S. departments in the ship; outline knowledge of the capabilities and limitations of the ship's armament and of the principal weapons fitted in other classes of ships.

No detailed knowledge required.

8. *Examination in Communications.*- To be designed to ensure that the officer will be able to act as Officer of the Watch without having to rely solely on communication ratings.

Knowledge required should be confined to Section 4, Table I ("Fleet Work") for Acting Sub-Lieutenants in A.P.O. 3693/52 *(Subordinate Officers - Junior Executive Officers - Training Syllabuses).*

9. *Passing Standard for all Examinations.*- No definite passing standard is laid down, but attention is drawn to the passing percentages required from Midshipmen and Acting Sub-Lieutenants as set out in Q.R. and A.I. Appendix I, Part I, Section I, Paragraph 7(b).

69.

R.A.N. BAND BRANCH - BADGES.

The badges worn by Officers **and** ratings of the Band Branch of the Royal Australian Navy are listed in the Appendix to this Order.

2. Provision is made therein for the following alterations to badges at present worn :-

Chief Bandmasters will wear the lyre, wreath and crown badge instead of the lyre, wreath and star.

3. Chief Bandmasters now serving who are not due for discharge before 31st March, 1955, are to be credited in current ledgers with an amount of £1.4.8 for the replacement of badges.

(4716/1/157)

APPENDIX

Vocab. No.	Patt. No.	Description	For wear by
		Devices for helmets Badges, cap Letters, R.A.N. (for shoulder straps)	All officers and ratings (officers wear also a metal crown above the cap badge).
		Stars, gilt Army type	All officers, as badges of rank, as follows :- 3 stars - Bandmaster Lieutenant. 2 stars - Senior commissioned Bandmaster 1 star - Commissioned Bandmaster.

Vocab. No.	Patt. No.	Description	For wear by
Lyre (for Collars)			
	M.292	Gold wire on scarlet	All officers, Chief Bandmasters and Bandmasters, II Class
35924	M.274	Gilt	
	M.292A	Yellow on scarlet	Corporals and below
35911	M.274A	Gilding metal	
Lyre, Wreath and Crown			
31923	M.314	Gold wire on blue	Chief Bandmasters, as badges of rank
32923	M.317	Scarlet on blue	
86923	M.315	Khaki on khaki serge	
87923	M.316	Khaki on khaki drill	
Lyre and Wreath			
-	M.124	Gold wire on blue	Bandmasters, II Class
-	M.124A	Scarlet on blue	
-	M.124C	Khaki on khaki serge	
-	M.124D	Khaki on khaki drill	
Chevrons			
31930		Gold on scarlet 1 bar	(a) By Corporals, (2 bars) above the elbow as badges of rank; and (b) By other ratings below the elbow, point up, as good conduct badges. NOTE:- Yellow on scarlet chevrons are not worn by Bandmasters, II Class or Corporals; Gold on scarlet chevrons are not worn by Musicians, 1st Class or Musicians, 2nd Class.
31931		Gold on scarlet 2 bars	
31932		Gold on scarlet 3 bars	
32930		Red on blue 1 bar	
32931		Red on blue 2 bars	
32932		Red on blue 3 bars	
86930		Khaki on khaki serge 1 bar	
86931		Khaki on khaki serge 2 bars	
86932		Khaki on khaki serge 3 bars	
35876		Yellow on scarlet 1 bar	
35877		Yellow on scarlet 2 bars	
35878		Yellow on scarlet 3 bars	

70.

R.A.N. EDUCATION SERVICE - VOCATIONAL TRAINING SCHEME - CORRESPONDENCE COURSES.

The Services Education Scheme exists to provide training facilities, through correspondence courses, for officers and men of the Services. Amendments have been made to the enrolling procedure and the following arrangements are operative from 24th January, 1955.

2. Courses Available.-

(a) University Courses - All courses which are made available by Universities in Australia for external study.

(b) Educational and Vocational Courses - The courses available are set out in the Department of Labour and National Service booklet "List of Technical Type Correspondence Courses". This booklet is held by Education Officers. Additional copies may be obtained on demand from Director of Naval Education Service. All courses supplied by the Correspondence Division of State Technical Colleges and certain approved courses supplied by private institutions are available.

3. Eligibility.-

All officers and ratings of the Naval Forces enlisted or appointed for full-time continuous service are eligible to undertake these courses.

4. Procedure for Enrolment.-

(a) A "General Information Form" and "Enrolment Form" are to be completed and forwarded by the student direct to the teaching institution concerned for all courses other than University courses. A supply of these forms will be held by the Education Officer and his advice should be sought by all intending students.

(b) Questions concerning content of course, suitability, etc., to which the Education Officer is unable to provide an answer should be referred by letter to the Institution concerned by the intending student before completion of the General Information and Enrolment Forms.

(c) Enrolment for University courses is also to be effected direct by the intending student but the General Information and Enrolment forms are not to be used for this purpose and the student should make his initial enquiries by letter.

5. Payment of Fees.-

A remittance covering the cost of the course or unit must be forwarded by the student with the General Information and Enrolment Forms direct to the Supervisor of the Correspondence Teaching Institution, except in the case of University courses. Fees for University courses are to be remitted when demanded by the University.

6. Financial Assistance.-

(a) Subject to satisfactory progress on course, fees will be refunded to students up to a limit of £7 in any one financial year. For this purpose the following will be regarded as "satisfactory progress" :-

(i) successful completion of a course or course unit whilst still serving and within two years of the date of enrolment; or

(ii) successful completion of 50% of a course or course unit before discharge from the Service provided that that the period between the date of enrolment and the date of discharge does not exceed eighteen calendar months.

(b) Applications for refund of fees are to be forwarded to Director of Naval Education Service, Navy Office, Melbourne, accompanied by evidence of satisfactory progress as defined above and, in the case of University courses, by receipts for fees paid. Refunds will be effected as credits on the ledger.

7. Completion of Training.-

A course or unit may be regarded as successfully completed when -

(a) all written assignments have been completed regardless of final examination results; or

(b) a final examination, internal or external, has been passed before the completion of all assignments provided that such completion is neither desired by the student nor required by the teaching institution.

8. Navy Order 194 of 1953 is hereby cancelled.

(4016/22/5)

(This Order will be reprinted for posting on Notice Boards.)

71.

STOKER MECHANIC BRANCH - INTRODUCTION OF "SPECIALLY SELECTED STOKER" SCHEME.

In order to provide an avenue of advancement to Mechanician for Stoker ratings at an age which will enable them to qualify for Upper Yardman (E) in accordance with Q.R. and A.I., Appendix I, Part 2, Section II, it has been decided to introduce a scheme permitting accelerated advancement for ratings selected as C.W. candidates.

2. Under this scheme Forms C.W.1 will normally be raised by the Commodore Superintendent of Training in respect of Recruits (Stoker) during their initial periods of training, (i.e. Disciplinary, and Recruit Technical Courses). Advancement of ratings in respect of whom such forms are raised will be governed by the following conditions :-

(a) On completion of Recruit Disciplinary and Technical Courses, a Stoker (Specially Selected), will be drafted to the training ship and after a further three months' training will be required to pass the examination for Stoker Mechanic. He will then undergo a special 3 months' course in Auxiliary Watchkeeping, during which particular emphasis will be placed on the development of leadership potential.

(b) At the end of the three months' course a rating who qualifies will be awarded an Auxiliary Watchkeeping Certificate. Provided that E.T.I. has been passed with 65% in each paper, he will then be rated Stoker Mechanic to date six months' seniority as Stoker. Form A.S.536 E. is to be endorsed to show 12 months' time gained (Specially Selected Stoker) and the advancement is to be reported on Form A.S.161.

(c) On award of the Auxiliary Watchkeeping Certificate, a Stoker Mechanic will be drafted to a suitable ship to complete the necessary six months' sea service for advancement to Acting Leading Stoker Mechanic. This advancement will be made by the Captain after 12 months' service as a Stoker Mechanic, confirmation in rating being effected after a further 12 months' service.

(d) On being rated Acting Leading Stoker Mechanic, he will be drafted to Flinders Naval Depot to undergo the Mechanical Training Course. He will be required to qualify for provisional selection as a Mechanician candidate on completion of this course and will be sent to sea.

(e) After eighteen months' service as Leading Stoker Mechanic (Acting and confirmed), he will be drafted to Flinders Naval Depot to undergo the first available Mechanician Course. If he has not been advanced to Acting Petty Officer Stoker Mechanic from the advancement roster by the day the course commences, this advancement will be made by the Commodore Superintendent of Training.

(f) After advancement to Mechanician, the normal rules for examination and selection for Upper Yardman (E) will apply.

3. FAILURE.-

The term "failure" includes failure to pass examinations and cancellation of Form C.W.1, either by a Commanding Officer or at a rating's own request -

(a) Failure before advancement to Stoker Mechanic involves the return to the general conditions for advancement to Stoker Mechanic and higher rating.

(b) Failure after advancement to Stoker Mechanic, but before advancement to Acting Leading Stoker Mechanic, will involve reversion to the normal rules for roster advancement.

(c) Failure after advancement to Acting Leading Stoker Mechanic will involve reversion to Stoker Mechanic, subsequent re-advancement from the roster depending upon obtaining the qualifications normally required for the higher rating.

(d) Failures in the Mechanician course are to be reported to the Naval Board for decision regarding advancement, together with the recommendations of the Commodore Superintendent of Training.

4. RAISING OF FORM C.W.1 SUBSEQUENT TO INITIAL TRAINING.-

In cases where Form C.W.1 is raised subsequent to a man's initial training in Flinders Naval Depot, his further advancement will be governed by this Order. Care should be taken, however, to ensure that Forms C.W.1 are not raised in respect of men who cannot comply with the conditions set out in Q.R. and A.I., Appendix 1, Part 2, Section II, because of age.

(4008/4/98)

72.

TOOL KITS OF RATINGS PROCEEDING ON DRAFT BY AIR TO MANUS AND DARWIN.

In view of the high costs involved in the transport by air of excess baggage, it has been decided that tradesman ratings proceeding on draft by air for service at Manus and Darwin, should deposit the heavier, non-precision items of their tool kit at the appropriate Baggage Store on the mainland. Prescribed service tool kits will be held at Manus and Darwin, as necessary, for issue on temporary loan to such ratings.

2. The procedure detailed in Navy Order 114 of 1950, should be observed in regard to tools deposited at Baggage Stores.

3. In the event of any tools retained by ratings for use at Manus or Darwin being lost or becoming unserviceable, replacement should be effected in accordance with the procedure set out in paragraphs 7 and 8 of Navy Order 493 of 1953. As indicated in paragraph 18 of the Navy Order, however, compensation will not be payable in respect of loss of any private tools which the ratings may take with them to Manus or Darwin.

4. The component tools of Service Tool Kits held at Manus and Darwin vide paragraph 1 above should be issued on permanent loan to the appropriate Head of Department. The latter should arrange issues on temporary loan to eligible ratings and institute a suitable routine and records to ensure that all tools are duly returned, or appropriate action taken regarding deficiencies, prior to ratings leaving the Establishment.

5. An additional 5 lbs. excess baggage (making a total of 85 lbs.) will be allowed ratings to cover the weight of precision items of their tool kits taken with them.

6. Navycirc 427 Item of 1952 is hereby cancelled.

(4506/18/7)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

73.

MACHINERY - DIESEL ENGINES - PERKINS P6M - CIRCULATING WATER FAILURES.

Investigation of circulating water failures indicates that many cases have been due to failure to keep the water pump primed with grease. This results in an inability to pick up a proper suction, with the possible consequence of a cracked cylinder block or head.

2. The attention of all personnel operating Perkins P6M engines should be drawn to the importance of strictly following the instructions contained in Section 34 of Maintenance Schedule S.1195 (8), D.624 (8).

(The foregoing is the unaltered text of A.F.O. 3253/1954.)

(3760/26/27)

74.

MACHINERY - STEAM HYDRAULIC STEERING GEAR FITTED WITH BROWN BROS. OR HOWDEN ENGINES - REMOVAL OF ECONOMY VALVE GEAR - FRIGATES AND SURVEY VESSELS.

Attention is drawn to Admiralty Fleet Order 196 of 1951.

2. Ships are to report when this work has been completed.

(3771/14/11)

75.

SHAFTING - PROPELLER TAIL SHAFT BEARING BUSHES - RE-RUBBERING.

Rubber lined bearings are now fitted to the "A" brackets of many classes of ships. In some cases similar bearings are fitted in stern tubes.

2. Standard rubber segments, of a Shore hardness of 80/85, will be stocked at R.A.N. Central Machinery and Spares Depot as List III Spares. They are suitable for use as replacements in all rubber lined tailshaft bearings.

3. If segments of lower hardness are supplied, or found to be already fitted the following instructions are to be observed when receiving or replacing segments :-

(a) Standard 80/85 segments are to be fitted in bottom half bushes. In emergency only, segments softer than 80/85 may be fitted in bottom half bushes.

(b) Standard 80/85 segments, or softer segments, may be fitted in top half bushes.

(c) Segments of different hardnesses are not to be mixed in the same half bush.

4. This Order will be incorporated in B.R.1988 (Mechanical Engineering Maintenance Instructions) as soon as possible.

(The foregoing is the text of A.F.O. 2661/1954 altered to meet R.A.N. conditions.)

(3771/11/108)

76.

AIRCRAFT - GUNS, HISPANO, 20 mm. - UNIT MAXIFLUX AND MAXIFLUX STAR - EXCHANGE.

With reference to Admiralty Fleet Order 236/1954 (Aircraft Guns, Hispano 20 mm. Maxiflux Mk. 2 and Maxiflux Mk. 3 - Availability) conversion of EP.116 Unit, Maxiflux Star, to EP.207 Unit, Maxiflux Mk.3, is proceeding. Superintending Armament Supply Officer, Sydney, will withdraw EP.116 Units from users as EP.207 Units become available.

2. It is not intended to convert total stocks of EP.116 Unit and items held surplus to establishment are to be returned to the R.A.N. Armament Depot, Sydney.

3. As frontline aircraft in the Royal Australian Navy do not use the EP.103 Unit, Maxiflux, stocks will not be converted to EP.194 Unit, Maxiflux Mk. 2.

(The foregoing is the text of A.F.O. 2903/1954 altered to meet R.A.N. conditions.)

(4428/53/159)

77.

GUNS - Q.F., 4.5 in., MARK 5, GUNS - MODIFICATION TO INCREASE CLEARANCE BETWEEN BREECH BLOCK AND BREECH RING.

The following modification is approved :-

Gun	Q.F., 4.5 in., Mark 5.
Part affected	BP 001, BLOCK, breech - Assembly.
Purpose	To improve action of breech block and to obviate scoring.

Nature of modification	(1) Remove metal from the front guide surfaces of breech block to give a plan dimension of 5.290 - .002 (N.O.D. 3175/20) dated 10.7.54. (2) Phosphate breech blocks with lanolin finish (Spec. K.1277). (3) After refitting of block, breech block/breech ring clearance to be checked. Minimum clearance necessary is 0.010 in. Any clearance exceeding 0.018 in. is to be reported to Navy Office for record purposes.
Drawing	N.O.D. 3175/20 10.7.54.
By whom to be done	R.A.N. Armament Depots.
When to be done	First available opportunity.

2. Spare BP001 are to be modified concurrently.

3. Schedule of Modification, Part 1, Gun - Q.F., 4.5 in., Mark 5. Add Serial No. 20.

(The foregoing is the text of A.F.O. 3046/1954 altered to meet R.A.N. conditions.)

(4428/26/111)

78.

TARGET TOWING - NO. 723 AIR SQUADRON.

Towed air targets for ships and aircraft in the Sydney-Jervis Bay area will be provided by No. 723 Air Squadron in future. This squadron is based at R.A.N.A.S. Nowra.

2. The following targets are available :-

Ref. 26 FR/94 Winged Target, 25 feet, Mark 1
Ref. 9A/1411 Target, Sleeve, low drag, 4 feet, Type M3, Red (radar)
Ref. 9A/1504 Target, Sleeve, low drag, 2 feet, Type M4, white (radar)
Ref. 9A/1244 Target, Sleeve, low drag, 4 feet, white.

3. Requests, by ships for towed targets to be provided, are to be signalled in the following form :-

F.O.I.C.E.A. INFO F.O.C.A.F. N.A.S. NOWRA.

(A) TIME OF COMMENCEMENT AND DURATION OF EXERCISE.

(B) RENDEZVOUS POSITION FOR TARGET-TOWING AIRCRAFT.

(C) TYPE OF EXERCISE.

(D) TYPE OF TARGET REQUIRED.

(E) W/T AND V.H.F. CALLSIGNS AND FREQUENCIES.

(F) SPECIAL INSTRUCTIONS.

4. The requirements of air squadrons at R.A.N.A.S. Nowra are to be co-ordinated by that station.

5. The exercises are to be carried out in accordance with B.R.2032(1), "Standard Instructions for Sea/Air Exercises, Volume I".

6. Communications are to be in accordance with Admiralty Fleet Order 84/1954 and Australian Fleet Communication Orders.

(3386/10/5)

79.

DIVING AND CLEARANCE DIVING - HOODS, TYPE C, PATTERN 3382 - DEPTH RESTRICTION.

(Unaltered text of A.F.O. 3715/52.)

When diving using Hood, Type C, in depths greater than 33 ft., damage to the ears may occur due to reverse ear pressure, i.e., an excess of pressure on the inside of the ear-drum which is not compensated by a similar pressure on the outside.

2. The use of Underwater Swim Suit, Pattern 3380, with the Hood, Type C, is therefore to be restricted to depths of 33 ft. or less.

3. Admiralty Shallow Water Diving Dress, Pattern 3420, in conjunction with Breathing Apparatus, Pattern 5561, is to be used in depths greater than 33 ft. until a loose-fitting hood for use with the Underwater Swim Suit, Pattern 3380, is introduced into service.

(The foregoing is the unaltered text of A.F.O. 3262/1954.)

(4512/50/191)

80.

NAVAL STORES (GENERAL) (CLASS B, GROUP II, PART D) - PINS GRIPPING, PATTERN 1701 - REVISED ALLOWANCE FOR TOOL KIT, TYPE A1.

Aircraft Carriers, Naval Air Stations.

The allowance of Pins Gripping 3/32 in., Pattern 1701, in Tool Kit, Type A1, has been increased from 1 to 8.

2. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 2917/1954.)

(4506/12/246)

81.

NAVAL STORES (GENERAL) (CLASS F, GROUP 1C, PART 2) - RELAY AND SWITCH BOX, PATTERN 25074 - INTRODUCTION.

Ships concerned.

The following item has been introduced for use with all C.R.B.F. Directors and S.T.A.A.G. Mountings, in lieu of Pattern 12815, and will be added to the Rate Book and Authorized List of Naval Stores under Class F, Group 10, Part 2 :

Pattern	Description	Ships Accounting Classification
25074	Relay and Switch Box to D.E.E. Drg. C.19181	Portable fitting

2. Until stocks are exhausted, relay and switch boxes, Pattern 12815, should continue to be used, except for any Marks of C.R.B.F. Directors suffixed Mod. 2 or Mod. 4 and S.T.A.A.G. Mountings, Mark 2M (Mod. 1).

3. The Rate Book and Authorized List of Naval Stores will be amended.

(The foregoing is the unaltered text of A.F.O. 2977/1954.)

(4518/14/107)

82.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B, PART 2) - SWITCHES WITH LOOSE KEYS FOR LIGHTING SERVICES IN H.M. SHIPS.

It has been decided to dispense with lighting switches operated by triangular hole keys. In future, switches operated by square hole loose keys, Pattern 4213, will be used as follows :-

Pattern	Description	Application
4091B	Switch :- 220V. DC/115V. A.C., 5-amp, double pole, loose key (square), aluminium alloy case, 1-4 hole and 1-2 hole gland, W.T. 6 lbs., operated by Loose Key, Pattern 4213. NOTE:- For 115V. A.C. non-inductive loads the switch may be rated up to 14-amps.	To control group lighting and single lighting units in the following positions and compartments where double pole switching is specified and where the lighting is to be under the control of the ship's officers :- (a) Exposed positions on weather decks including navigating and signalling circuits as specified. (b) Dangerous areas (switch to be sited outside compartment where necessary).

Pattern	Description	Application
		(c) Red and white police lights.
4083A	Switch :- 220V. DC/115V. A.C., 6-amp., single pole, loose key (square), aluminium alloy case, 1-3 hole gland, W.T. 1.5 lbs., operated by loose key, Pattern 4213. NOTE:- For 115V. A.C. non-inductive loads the switch may be rated up to 14-amps.	For use in compartments where a single pole switch is specified and where the lighting is to be under the control of the ship's officers :- e.g., White lighting in living spaces, etc.

2. In consequence, switches, Patterns 4085A and 4093B, actuated by triangular hole keys, Pattern 4214, have been made obsolescent. Ships at present using these switches should continue to use them and if replacement becomes necessary demand the same patterns. Existing installations will not be altered to conform to the revised specification except in modernizations or major refits. The triangular hole keys, Pattern 4214, will be marked "X" in the Rate Book and Authorized List of Naval Stores.

3. The relevant publications are being amended.

(The foregoing is the unaltered text of A.F.C. 2730/1954.)

(4518/25/90)

83.

NAVAL STORES (GENERAL) - ENGINEERING - PACKING - STERN GLANDS - USE OF NEW TYPE.

The use of "Masco" and hemp type packings is to be discontinued for stern glands of H.M.A. Ships. Proprietary brands, which contain a metallic wire in the weave will be stocked under Pattern numbers 8000 - 8006, and are to be used exclusively in future for this purpose.

2. The following types of packing are suitable for the purpose :-

James Walker and Co. Ltd.	-	"STERNTITE"
Beldam Asbestos Co. Ltd.	-	"PATHAN"
Turner Bros. and Asbestos Co. Ltd.	-	"GPN. 327"
Henry Crossley (Packings) Ltd.	-	"HYDREX METALLIC".

3. Existing stocks of patterns 7900 - 7913 inclusive are to be used for purposes other than stern glands.

4. Redundant stocks of "Masco" stern gland packing are to be disposed of in accordance with current instructions.

5. The following amendments will be made to the Rate Book for Naval Stores :-

Patterns 8000 - 8006 inclusive. Delete "Hasco patent for stern glands" and substitute "packing for stern glands".

Patterns 7900 - 7913 inclusive. Delete all reference to stern glands.

(The foregoing is the text of A.F.O. 1615/1954 altered to meet R.A.N. conditions.)

(4501/38/1)

84.

NAVAL STORES (TECHNICAL) (CLASS F, GROUP LA/1) - OBSOLETE W/T STORES - DISPOSAL.

The stores detailed below are now obsolete. Any stocks on board H.M. Ships and in shore establishments are to be returned to the nearest (Superintending) Naval Store Officer for disposal, with any stocks already held, as surplus to requirements in accordance with existing instructions.

2. No items referred to herein require mutilation, for security reasons, before disposal.

3. Items marked * carry embodiment loan components. Care is to be taken to ensure that any of these components likely to be of future service are withdrawn and taken on charge as separate items.

4. The relevant publications will be amended.

Pattern	Description	Pattern	Description
143	Guard Ring	4564	Fitting Base
667	Table	4565	Conductor
*W.1228	Attachment	5970	Fitting
W.1246	Gland	W.6169	Mast
1276A	Switch	W.6610	Insulator
4120	Insulator	*W.6912	Aerial Unit
4121A	Fitting	W.8392	Box
4124	Conductor	*65869	Aerial Coupling Unit.
4125	Shield		

(The foregoing is the unaltered text of A.F.O. 2873/1954.)

(4519/11/875)

85.

NAVAL STORES (TECHNICAL) - MINESWEEPING - MAGNETIC SWEEPS - PULSE TIME CONTROLLERS, PATTERNS 20877, 20877A, 20878 AND 20878A.

Minesweepers, Bases and Dockyards

Reports from sea indicate that some confusion exists with regard to the difference between patterns of Pulse Time Controllers manufactured by the Express Lift Co., Ltd., and the General Electric Co., Ltd.

2. The following information is promulgated for the use of authorities responsible for supplying, demanding and fitting Pulse Time Controllers.

3. Pulse Time Controllers at present in service are as follows :-

(a) Pulse Time Controller (Express Lift Co.), A.P.20877 - Fitted with polarised relay, initiating transformer, etc.

(b) Pulse Time Controller (Express Lift Co.), A.P.20877A - Polarised relay, initiating transformer, etc., removed.

(c) Pulse Time Controller (G.E.C., Ltd.), A.P.20878 - Fitted with polarised relay, initiating transformer, etc.

(d) Pulse Time Controller (G.E.C., Ltd.), A.P.20878A - This controller is a new design incorporating the relay, condenser/resistance unit-circuit and therefore does not require the separate R.C.R. Unit, A.P.26934, to be associated with it.

NOTES.

(i) Pulse Time Controllers, Patterns 20877 and 20878 are obsolescent. They should continue to be demanded and will be issued until stocks are exhausted. The superseding Patterns 20877A or 20878A will be issued automatically by (Superintending) Naval Store Officers when the obsolescent patterns are not available.

(ii) A few Pattern 20878 P.T.Cs. have been repaired and the polarised relays and initiating transformers removed. In view of the small number involved, however, no revised pattern number has been given to these P.T.Cs.

(iii) Relay Condenser/Resistance Units A.P.26934 will be required for use with Pulse Time Controllers Patterns 20877, 20877A and 20878.

4. B.R. 810 *(Rate Book and Authorised List of Naval Stores)* and relevant Mine Countermeasures Outfit Schedules will be amended.

(The foregoing is the unaltered text of A.F.O. 2418/1954.)

(4518/31/38)

86.

PASTE, WATER-FINDING, PATTERN 5226 - INTRODUCTION.

A new water finding paste Pattern 5226 has been adopted for detecting water in fuel oil, gasoline tanks, etc. This paste, on contact with water, reacts immediately with a distinct change of colour. The action of this paste being rapid, it is unnecessary to leave it at the tank bottom for a period exceeding thirty seconds.

2. Stocks are now available at Garden Island, Sydney, and Port Melbourne.

(4514/21/212)

87.

PHOTOGRAPHY - BULBS, PHOTO-FLASH, TYPE G.22, PATTERN 16408 (INTERSERVICE REFERENCE NO. X914910).

Cases have occurred overseas of photo flash bulbs, Type G.22, Pattern 16408 (Interservice Reference No. X914910) shattering in use.

2. These bulbs should not be used where fire hazard or danger to personnel exists.

3. The only Royal Australian Navy ships which would be issued with Type G.22 photo flash bulbs would be ships serving abroad.

4. Issues to Royal Australian Navy ships on the Australia Station will be made from stocks of photo flash bulbs, Type P.F.14, P.F.25 and P.F.60.

5. Reports of the latter types of photo flash bulbs, shattering in use, have not been received, but every care should be exercised.

(The foregoing is the text of A.F.O. 2777/1954 altered to meet R.A.N. conditions.)

(4518/50/210)

88.

PRESENTATIONS, RELICS AND TROPHIES AVAILABLE FOR RE-ALLOCATION.

The presentations, relics and trophies shown in the Appendix to this Order are available for re-allocation. Ships or establishments requiring any of the items should forward details of their requirements to reach Navy Office by 28th April, 1955.

2. Administrative Authorities are requested to consider the possible requirements of ships which are expected to commission in the near future.

(3583/71/372)

APPENDIX

Ship	Item	Quantity	Condition
CASTLEMAINE	Photo - Castlemaine Botanic Gardens	1 No.	Good
	Photo - King George VI	1 No.	Good
KALGOORLIE	Cigarette box, silver	1 No.	Good
	Tray, silver	1 No.	Good
LATROBE	Photo - King George VI	1 No.	Good
	Photo - H.M.A.S. LATROBE	1 No.	Good
	Candlesticks, silver	2 No.	Good
	Rose Bowl, silver	1 No.	Good
MILDURA	Tankards, pewter, 1 pint	4 No.	Fair.

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

89.

MEDICAL STORES - H.M.A. SHIPS IN RESERVE.

In order to provide an immediate supply of dressings in case of accident to working parties or inspection parties in non-living ships of the Reserve Fleet, each party is to take a small first aid satchel with them, when proceeding to such ships for duty.

2. This satchel is to be drawn from the Sick Bay of the Headquarters ship and returned thereto upon return. A signature book of issue and receipt is to be maintained. The non-expendable items are to be checked each time of issue and receipt.

3. Care is to be taken that injuries received by any member of the party are reported to the Sick Bay and entered in Form A.M.209Z upon return of the party. Witnesses are to sign the entry immediately thereafter.

4. The first aid satchel is to contain at least the following items :-

First field dressings	-	No. 6
Bandages, mixed, W.O.W.	-	No. 6
Acrifavine lotion 1/500	-	oz. 1
Scissors, dressing	-	No. 1
Satchel, canvas	-	No. 1.

5. The stores are to be held on charge by the Commanding Officer of the Reserve Fleet Division who is to see that they are properly maintained.

(The foregoing is the text of A.F.O. 3119/1954 altered to meet R.A.N. conditions.)

(4482/2/102)

90.

CAPS, LIGHTWEIGHT, OFFICERS'

A new pattern Officers' lightweight cap has been introduced and supplies are now available from Victualling Yards for issue on repayment.

2. The issuing price of this item is £1. 3. 9.

(4532/56/84)

91.

DEHYDRATED VEGETABLES.

The compulsory issues of dehydrated vegetables prescribed in Navy Order 322 of 1952, need not be made in small ships, where the repayment messing system is in operation.

(4528/65/124)

92.

SCARVES, BLACK - LAUNDERING.

To preserve the appearance of ratings' black scarves, which are now made up of a rayon fabric, it is necessary to launder them carefully.

2. They should either be dry-cleaned, or else washed in lukewarm water and pressed lightly with a warm iron. Boiling, or heavy pressing with a hot iron, is injurious to the fabric and mars its appearance.

(3708/1/34)

93.

VICTUALLING STORES - CLOTHING - TOWELS.

It has been decided to introduce a blue towel of slightly improved quality in place of the white towel which is now stocked for gratuitous and repayment issues. The nomenclature of the new item will be "Towels, bath, medium", and Clothing Accounts and subsidiary forms are to be amended accordingly. Existing stocks of white towels are to be other-denominated to the new heading.

2. Purchase of white towels has been discontinued and, when existing stocks are exhausted, no further supplies will be available from Victualling Yards.

3. The current fixed issuing price for white towels, viz; 8/11d. each, is applicable also to the new item.

4. A larger sized bath towel, white, has also been introduced for issue on repayment to Officers only. The nomenclature of this item will be "Towels, bath, large", and the reference to it in page 4 of the "Official Memorandum - Prices of clothing, etc., maintained for issue to Ships' Companies" is amended accordingly.

(4533/53/222)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

94.

BOOKS - LIBRARIES - SHIPS' LIBRARIES REFERENCE SECTION - ADDITION.

The following title has been added to the list of books approved for issue in the reference section of Ships' Libraries for Destroyers, Frigates, etc. :-

The Law and Custom of the Sea - Smith.

2. This title is accordingly to be inserted in Navy Order 400 of 1954, paragraph 7(c)(ii).

(4575/52/13)

95.

FORMS A.S.1031Z - STATEMENT OF ACCOUNT ON FINAL DISCHARGE - PROMPT RENDITION.

Attention is drawn to the provisions of Naval Account Regulations and Instructions, Article 120.

2. Experience in Navy Office shows that the provisions of this Article are frequently overlooked by Ships and Establishments.

3. The failure to render Forms A.S.1031Z as due prevents prompt payment from Navy Office of amounts due to members on final discharge, and gives rise to legitimate complaints of delays in settlement of accounts.

4. The frequent need to hasten rendition of Forms A.S.1031Z by signal causes unnecessary signal traffic.

5. The necessity to render Form A.S.1031Z immediately it becomes due is to be brought to the notice of all concerned, as is also the necessity to see that "former parts" of accounts are obtained, vide paragraphs 5 and 6 of N.A.R. & I, Article 120.

(3325/3/226)

SECTION 6 - SHORE ESTABLISHMENTS

96.

MOTOR TRANSPORT CENSUS.

With reference to Navy Order 416 of 1953, a return of motor vehicles appropriated to the Department of the Navy is required as at 31st March, 1955.

2. The returns should be completed as at 31st March, 1955, and forwarded to reach Navy Office not later than 30th April, 1955. The returns, which should be rendered in duplicate in numerical order of the Commonwealth number plates, should include particulars of all motor vehicles, trailers, tractors, mobile cranes, etc., under the following headings :-

Regd. No. Make and Type. Engine No. Where Garaged.

3. In the case of trailers, the engine number of any machinery or mechanical equipment (e.g., compressors, generators, etc.,) which may be carried thereon should not be included.

4. It has been apparent in previous similar returns that the information furnished has, in some cases, been compiled from records which are incorrect in some particulars. The returns should therefore be compiled from a physical check of all vehicles or from records which have been verified by physical check within the past twelve months.

5. Attention is again drawn to the necessity of ensuring that every vehicle is maintained and equipped in accordance with the motor traffic legislation applicable to the State or Territory in which the vehicle is operating. Special attention should be given to the manner in which number plates are affixed to vehicles with the object of reducing losses of plates to a minimum.

6. In a number of cases when number plates from unserviceable vehicles have been returned to Navy Office for cancellation it has been found that the standard Commonwealth number plates have apparently been lost and replaced by made-up plates prepared locally. A check should be made to ensure that the plates fitted to all vehicles are standard Commonwealth number plates and in any cases where this is not so, action should be taken to obtain replacement plates in accordance with Navy Office memorandum No. 34124 of 10th September, 1951.

7. Navy Order 318 of 1948 is hereby cancelled.

(4737/45/106)

97.

MOTOR VEHICLE TOOL KITS.

Instances have been reported of vehicles being returned for survey or repair without the complete outfit of tools shown in the List of Tools and Accessories.

2. Attention is accordingly drawn to paragraph 24 of the R.A.N. Motor Transport Instructions, which provides that all tools and accessories are to be mustered in detail at least once a month and reported on the Monthly Record sheet and to the necessity of keeping tool kits complete by replacing unserviceable items.

(4737/4/447)

98.

NAVAL STORES (MOTOR TRANSPORT) - INTERNAL PRESERVATION OF THE STORAGE TANKS ON M/T VEHICLES DESIGNED FOR THE TRANSPORT OF AVIATION GASOLINE OR KEROSINE AND FOR M/T GASOLINE.

The efficient preservation of the internal surfaces of fuel storage tanks in which aviation gasoline or kerosine and M/T gasoline are stored or carried is of paramount importance.

2. Corrosion of the internal surface is caused by small quantities of free water in the fuel and by condensation inside the tank. The corrosion takes the form of surface rust which, if not removed, creates small pockets and allows loose scales of oxide to form, and will eventually lead to the rapid deterioration of the tank. These oxide scales will ultimately find a way to the filters and affect their operation.

3. The storage tanks mounted on M/T vehicles should, therefore, be coated internally with gasoline resisting paint. This paint is insoluble in liquid fuels (even when they contain tetra-ethyl-lead) but not alcohol-blended fuels. The normal life of the internal coating is three years; at the end of this period it should be entirely removed and fresh coatings applied.

4. At six-monthly intervals the tanks should be examined and any necessary restoration of the interior paint effected. The dates of these examinations should be painted on the tank exterior. A metal plate showing the date of the last complete interior repainting should be affixed to a non-exchangeable part of the tank exterior, and when this has been done the dates of the prior six-monthly examinations may be obliterated.

5. In view of the considerable risk of fire, gassing and lead poisoning, the work should be undertaken as follows :-

Vehicles held by.-

(a) R.A.N. Air Stations, Units and Sections - As laid down in A.P.(N) 88, and the Appendix to this Order so far as it may apply.

(b) Superintending Naval Store Officer, Sydney - As detailed in the Appendix to this Order.

(The foregoing is the text of A.F.O. 2551/1954 altered to meet R.A.N. conditions.)

(4737/7/30)

APPENDIX.

Precautions and details of work necessary at the six-monthly examinations.-

1. Precautions and Tests.- (a) In no circumstances should the following operations be carried out in a closed building unless it is a properly ventilated and equipped doping shop. Should an awning be used the roof must be at least 10 feet above the highest point of the vehicle.

(b) The storage tanks should be tested for the presence of inflammable vapour by a qualified Analyst or Air Station Engineer, gas free certificates obtained, and the air inside the tank tested with a Davy Safety Lamp to ensure that the air is not foul before workmen are permitted to enter. These tests should be repeated as necessary before each day's work in the tank is commenced.

(c) Suitable respirators, goggles, and safety belts (with life line) must be worn by operators whenever at work inside the tank and a watcher should be present outside the tank prepared to give immediate aid to the operator if overcome.

(d) Arrangements should be made to ensure a continuous current of air through the tank whenever an operator is inside the tank.

(e) Rubber gloves must be worn by the operators when working with the rust removing solution.

(f) Any additional precautions necessary to comply with the instructions contained in B.R.1754 should be taken.

2. Draining and Ventilation.- (a) Drain all fuel from the tank and leave the cocks open. Particular attention should be paid to the draining of any pump fittings, cocks, drains etc., to ensure that no fuel is trapped in them.

(b) Remove all man-hole and drain-hole covers.

(c) Apply compressed air to the inside of the tank by means of a flexible hose led to the lowest surface for not less than one hour. This process should be continued as necessary until the tank is gas free.

3. Cleaning.- Thoroughly clean all internal surfaces and afterwards wipe down with cloth until completely dry.

(Arrangements should be made for the work detailed in paragraphs 4 and 5 hereof to be undertaken by the appropriate Professional Department and a gas free certificate should be provided for each vehicle passed to that department for examination, scraping or painting.)

4. Examination.- The internal surfaces of the tank should be carefully examined to ensure that the painted surface is intact, paying particular attention to the edge joints of bolts and rivets, baffle plates, girders, angles and stringers. Any minor bare or corroded patches should be scraped clean to bare metal and two coats of gasoline-resisting paint applied to the places. If any extensive corrosion or bareness is discovered the entire tank interior should be scraped and painted as indicated in paragraph 5 hereof.

5. Scraping and Painting.- (a) The tank interior must be scraped clean to bare metal and all scrapings removed. (Chemical paint remover must not be used). Removable baffles should be unbolted and shifted to assist the scraping and painting of their contact areas.

(b) Solution, rust removing, Pattern No. 7072, diluted one part solution to four parts water (by volume) should then be applied with a brush to the whole of the interior surfaces and allowed to remain until a grey film has formed on the metal surface. The tank should then be thoroughly washed out with liberal applications of clean water until the surplus solution has been removed. The tank interior should then be thoroughly dried out.

(c) Painting should be commenced as soon as is practicable after scraping and cleaning to avoid the deposition of further moisture by condensation. Two coats of Tanctectol Grade "W" gasoline-resisting paint should be applied to the whole interior surfaces of the tank; a period of 24 hours should elapse between the first and second coat and before the tank is put in service after the last coat. A complete covering of gasoline-resisting paint on all the tank interior surface is essential to obtain the desired protection from corrosion.

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C.N.Os. 99-120/55

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
1st February, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0056

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SECTION 1 - ADMINISTRATIVE AND GENERAL

99.

NAVAL BOARD - APPOINTMENT.

Commodore J.C. Morrow, D.S.O., D.S.C., assumed the appointment of Second Naval Member and Chief of Personnel on 26th January, 1955, in place of Commodore H.J. Buchanan, C.B.E., D.S.O., A.D.C.

(5036/14/7)

100.

OCEAN PASSAGE OBSERVATIONS BY THE FLEET.

This Order co-ordinates various routine requirements for observations from H.M.A. ships on ocean passages, and consolidates existing instructions.

2. The vast oceans of the world, over which H.M.A. ships roam, remain virtually unexplored, and therefore when on passage, particularly outside the usual shipping routes, Commanding Officers are, as far as possible in addition to their other commitments, to organise on a routine basis the following forms of oceanic observations, thus contributing much needed information for use in naval warfare and general navigation.

3. *Ocean Soundings.*- (a) Contrary to general belief, the ocean-bed is not a featureless plain, but embraces a variety of topography no less complex than that of the land. For lack of reliable soundings beyond the edge of the continental shelves, however, existing knowledge of these parts of the world is still in its infancy.

(b) To provide data from which new charts may be compiled to assist in resolving the problems of navigation in and under the sea, H.M.A. ships fitted with echo-sounding equipment are, whenever practicable outside the 100-fathom line, to run the gear continuously to the limit of its designed operating depth (and beyond if soundings can still be obtained by successive re-phrasing - see Admiralty Notice to Mariners No. 17/54).

(c) Soundings should be corrected, plotted, and rendered in accordance with the instructions contained in Fleet Notice to Mariners No. 122/53. Oceanic plotting sheets, at present supplied on demand by hydrographer, will shortly be available also from chart depots abroad.

4. *Bathythermograph Dips.*- (a) Observations of the temperature gradient in the constantly changing upper layers of the sea are of great value to our understanding of the water-structure and our consequent ability to predict the behaviour of underwater sound propagation in different parts of the oceans at different seasons.

(c) When in water of sufficient depth, H.M.A. ships equipped with bathythermographs should take dips at least once every six hours, the object being to space observations in any series by a distance of not more than 50 miles. When exercising with submarines a dip should be taken at least once each time the submarine dives.

(c) Full instructions for operating the bathythermograph are given in B.R.1891. Bathythermograph grid charts are available on demand from Hydrographic Office, Sydney. Used slides, together with the completed log sheets (Form S.1181d) should be forwarded to the Hydrographic Office in accordance with Confidential Navy Order 49 of 1954.

5. *Magnetic Variation.*- (a) The precise value of the magnetic variation at a given place and time can only be forecast from an accumulation of observations from land and sea. Apart from its obvious importance to mariners, the data has certain other defence applications.

(b) There is at present a serious shortage of basic data in many areas which can only be remedied by routine observations whenever opportunity and weather conditions permit. In such circumstances Commanding Officers should refer to Admiralty Chart No. 2598 to determine how best a series of observations can be distributed, bearing in mind that it is better to space two swings on a line at right angles to the isogonals than along their axes.

(c) Full instructions for swinging H.M.A. ships for observation of magnetic variation are contained in the Admiralty Manual of Navigation (1938 - Vol. III, 1954 - Vol. I). Results should be forwarded to Hydrographer on Form H.488.

(The foregoing is the text of A.F.O. 2942/1954 altered to meet R.A.N. conditions.)

(4232/1/15)

101.

TAM O'SHANTER.

TAM O'SHANTER, a 34 ft. Ocean-going Sloop rigged Yacht, acquired for the promotion of training of Cadet Midshipmen, is to be regarded as a ship's boat under the control of the Commanding Officer, Royal Australian Naval College.

2. The Commanding Officer, Royal Australian Naval College, shall have authority to -

(a) Arrange programmes for TAM O'SHANTER as may be most expedient for training.

(b) Incur such incidental expenses associated with racing as he considers necessary, the cost being borne by the Cadets fund.

3. TAM O'SHANTER is to be fitted out with Naval Stores and victuals in accordance with the regulations.

4. The Flag Officer Commanding H.M.A. Fleet, Naval Officer-in-Charge, South East Australian Area, and, if appropriate, the Flag Officer-in-Charge, East Australian Area, are to be informed of all movements outside the precincts of Westernport.

(3211/4/164)

SECTION 2 - PERSONNEL

102.

ADVANCEMENT - HALF-YEARLY EXTRACT OF ADVANCEMENT ROSTERS - DECEMBER, 1954.

The following extracts from Advancements Rosters are promulgated with the object of giving individuals an indication of the present state of their roster and, where applicable, the qualifications lacking for advancement.

2. As it is possible in some cases to obtain a basic date for advancement some time before actually being placed on the Advancement Roster, it will be realised that a roster date shown in the extract gives no indication of the time a man has been waiting on the roster or of his length of service. Recommendations for Accelerated Advancement also effect the basic dates on the rosters.

3. Requests to ascertain further information on Rosters Positions should not be forwarded, except as provided for in A.B.R.10/53, Article 51.

NOTES:- (i) Before being placed on an Advancement Roster, a rating must possess the following :-

(a) Professional Qualification - when applicable, (see A.B.R.10/53, Article 7(11) re Provisional Examinations;

(b) Service Qualifications;

(c) Educational Qualifications - when applicable.

(ii) 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 3.

(4008/4/101)

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man At Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man At Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
C.P.O.	113	(1) 1. 3.47 (2) 1.12.48 (3) 25.8.51	17.10.53 (Re-entry)	Nil	(1) Lacks specialist qualification. (2) Lacks V.G. Conduct.
P.O.	57	(1) 30.6.50 (2) 31.12.50 (3) 30.6.51 (4) 31.10.51	30.9.54	43	(1) Lacks V.G. Conduct, D.C. and is not eligible to be recommended for 1st Class specialist qualification. (2) Lacks D.C. and recommend for 1st Class specialist qualification. (3) Not recommended. (4) Lacks V.G. Conduct and specialist qualification. 23 L/Smn. not eligible to be recommended for 1st Class specialist qualification. 2 L/Smn. not eligible to be recommended for 1st Class specialist qualification and lack sea service. 1 L/Smn. not eligible to be recommended, for 1st Class specialist qualification. Lacks D.C. and swimming. 9 L/Smn. lack appropriate specialist qualification. 3 L/Smn. lack appropriate specialist qualification and sea service.

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man At Top of Roster. (Adjusted by "Red Recommendations as necessary.) (3)	Roster Date or Points of Man At Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
P.O.	57	(1) 30.6.50 (2) 31.12.50 (3) 30.6.51 (4) 31.10.51	30.9.54	43	3 L/Smn. lack appropriate specialist qualification and swimming qualification. 1 L/Smn. lacked specialist qualification until November, 1954. 1 L/Smn. lacks specialist qualification and damage control. 4 L/Smn. lack sea service. 2 L/Smn. lacked sea service until December, 1954. 1 L/Smn . Medical Category Y and lacks sea service. 3 L/Smn. lack V.G. Conduct.
L/S.M.	68	(1) 31.12.50 (32) 31.12.53	30.9.54	43	1 A/B lacks sea service and specialist qualification. 2 A/B's lack specialist qualification. 1 A/B lacks V.G. Conduct and D.C. 2 A/B's lack D.C. 4 A/B's lack swimming. 1 A/B, not yet recommended. 1 A/B lacks swimming qualification and not eligible to be recommended for 2nd Class specialist qualification. 5 A/B's lack V.G. Conduct. 1 A/B lacks D.C. and specialist qualification.

					9 A/B's not eligible to be recommended for 2nd Class specialist qualification 1 A/B lacks D.C. and is not eligible to be recommended for 2nd Class specialist qualification.
C.Y.S.	10	1.12.50	25.11.53 (Re-entry)	Nil	-
Yeo. Sigs.	5	28.2.52	31.3.53	Nil	-
L/Sigs.	4	30.6.51	22.11.52 (Re-entry)	7	-
C.P.O. Tel.	1	26.7.52 (Re-entry)	-	Nil	-
P.O. Tel.	4	(1) 31.12.51 (3) 31.12.52	31.3.53	5	(1) and (2) lack sea service qualification.
L/Tels.	10	(1) 31.3.49 (2) 1.4.50	30.9.52	6	(1) Not qualified sea service and swimming.
Ch. Sailmaker	Nil	-	-	Nil	-
Sailmaker	1	21.3.52	-	Nil	Lacks swimming qualification.
C.P.O. S.M.	21	(1) 1.1.52 (2) 9.3.53 (3) 2.4.53	1.3.54	Nil	(1) Lacked V.G. Conduct until 25.8.54. (2) Lacks sea service qualification.
P.O. S.M.	69	(1) 1.10.49 (2) 1.4.50 (3) 1.6.50	1.6.52	Nil	(1) Lacks sea service qualification.
L/S.M.	164	(1) 8.6.44 (2) 17.6.44 (3) 2.2.46	28.5.53	Nil	(1) Lacks swimming qualification. (2) Not yet recommended.
Ch. Elect. (P)	8	1.1.49	1.1.51	1	-

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man At Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man at Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
Elect.(P)	2	31.12.54	31.12.54	18	-
L.E.M.(P)	7	(1) 31.12.52 (2) 31.12.53 (3) 31.3.54	30.9.54	9	(1) Lacked V.G. Conduct until 16.10.54. (2) and (3) Lacked swimming qualification until 11.11.54. (4), (5) and (6) Lack swimming qualification.
Ch. Elect. (E)	Nil	-	-	3	-
Elect. (E)	2	31.12.54	31.12.54	10	-
L.E.M.(E)	6	(1) 30.9.53 (3) 31.12.53 (4) 30.9.54	30.9.54	3	(1), (2) and (5) lack swimming. (3) Not qualified by service until 2.11.54. (4) Not yet recommended. (6) Not qualified by service until 27.10.54.
C.P.O. Wtr.	23	1.12.49	18.12.52 (Re-entry)	Nil	-
P.O. Wtr.	17	(1) 30.6.51 (4) 30.6.53	30.6.54	4	(1) Previously not yet recommended. (2) and (3) Previously lacked swimming.
L/Wtr.	16	(1) 30.6.53 (3) 30.9.53	30.6.54	19	(1) Not recommended. (2) Lacked V.G. Conduct until 16.11.54.

Sto. C.P.O. (V)	14	1.12.50	1.10.51	Nil	-
Sto. P.O. (V)	5	(1) 31.12.51 (4) 30.6.54	30.6.54	5	(1) and (2) Lack V.G. Conduct. (3) Not yet recommended.
L/S.A.(V)	18	(1) 31.12.52 (5) 31.12.53	30.6.54	6	(1) and (2) Lack V.G. Conduct. (3) and (4) Not yet recommended.
Sto. C.P.O. (S)	8	24.5.51	1.10.51	3	-
Sto. P.O. (S)	11	(1) 9.9.51 (3) 31.5.54	30.6.54	7	(1) Lacks V.G. Conduct. (2) Lacks swimming qualification.
L/S.A.(S)	19	(1) 30.6.53 (19) 30.6.54	30.6.54	14	(1) Not yet recommended. (2), (10) and (12) Not qualified by service until 5.11.54. (3), (4), (13), (14) and (15) Passed provisionally only. (18), (5), (6), (7), (8), (11) and (16) Lack swimming qualification. (17), (19) and (9) Passed provisionally only and lack swimming.
C.P.O. Ck. (S)	8	1.10.49	2.11.51 (Re-entry)	Nil	-
P.O. Ck. (S)	23	(1) 1.7.50 (2) 1.4.51	1.10.54	3	(1) Not yet recommended.
L/Ck. (S)	13	(1) 1.1.50	1.10.54	16	(1) Lacked swimming qualification until 30.11.54. Remainder lack swimming qualification or are not yet recommended.
C.P.O. Ck. (O)	3	(1) 1.3.51 (2) 1.7.51	1.10.51	Nil	(1) Lacks sea service qualification.
P.O. Ck. (O)	6	1.9.52	1.4.54	1	-

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man At Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man at Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
L/Ck. (O)	5	1.4.53	1.10.54	6	(1), (2) and (5) Lack swimming qualification. (3) Lacks swimming and sea service qualification. (4) Not eligible by service until 30.11.54.
S.B. C.P.O.	7	27.5.52	30.6.54	Nil	-
S.B. P.O.	17	30.5.52	30.6.54	Nil	-
L/S.B.A.	4	31.12.52	30.6.54	5	All lack swimming qualification.
C.P.O. D.A.	2	1.12.50	1.9.51	Nil	-
P.O. D.A.	1	31.12.53	-	1	-
L/D.A.	Nil	-	-	1	-
C.P.O. Stwd.	16	(1) 1.11.47 (2) 1.11.48	1.10.51	Nil	(1) Previously lacked E.T.1.
P.O. Stwd.	10	(1) 30.6.52 (2) 30.10.53	23.7.54	Nil	(1) Lacks V.G. Conduct.
L/Stwd.	10	31.12.51	30.6.54	7	(1), (4), (5), (6), (9) and (10) Lack swimming qualification. (2) and (3) Not yet recommended. (7) Lacks V.G. Conduct. (8) Not qualified by service until 30.10.54.

M.A.A.	1	1.10.52	-	2	-
R.P.O.	4	6.3.53	22.4.53	3	(1), (3) and (4) Not qualified professionally until 22.10.54. (2) Lacked swimming qualification until 15.11.54.
Ch. Bandmaster	Nil	-	-	1	-
Bandmaster	Nil	-	-	1	-
Band Corporal	Nil	-	-	1	-
C.E.R.A.	5	8	2	1	All lack charge certificate and (2) also lacks sea service qualification.
Ch. Mech.	2	-	-	-	Both not qualified by service until 15.10.54. (2) lacks charge certificate.
Ch. R.E.A.	Nil	-	-	4	-
Ch. E.A.	1	6	-		-
Ch. R.E.	63	11.7.48	20.3.50	Nil	-
R.E.	1	31.12.54	-	4	-
L/R.E.M.	3	(1) 31.12.53 (2) 31.3.54	30.9.54	6	(1) Lacks V.G. Conduct. (2) Not yet recommended. (3) Lacks V.G. Conduct and swimming qualification.
Ch. O.A.	1	-	-	Nil	Points commence 31.10.54.
Ch. Blacksmith	3	18	8	Nil	-
Ch. Shipwright	Nil	-	-	1	-
Ch. Joiner	1	20	-	1	-

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man at Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man at Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
Ch. Butcher	Nil	-	-	1	-
Ch. Painter	Nil	-	-	Nil	-
Ch. Plumber	Nil	-	-	Nil	-
C.P.O. Air (A.H.)	Nil	-	-	2	-
P.O. Air (A.H.)	Nil	-	-	8	-
L/Air (A.H.)	6	31.12.50	26.5.54	12	(1) and (3) Lack Damage Control. (2), (4), (5) and (6) Lack swimming qualification.
C.P.O. Air (S.E.)	Nil	-	-	Nil	-
P.O. Air (S.E.)	3	3.7.53	3.7.53	1	-
L/Air (S.E.)	3	(1) 14.8.52 (2) 4.4.53	4.6.53	1	(1) Previously not yet recommended.
C.P.O. Air (Met.)	Nil	-	-	Nil	-
P.O. Air (Met.)	Nil	-	-	Nil	-

L/Air (Met.)	6	7.5.52	1.10.53	Nil	-
C.P.O. Air (Phot.)	Nil	-	-	Nil	-
P.O. Air ((Phot.)	Nil	-	-	1	-
L/Air (Phot.)	Nil	-	-	1	-
Chief A.A.	2	20.8.52	20.5.53	2	(1) Lacks V.G. Conduct. (2) Not qualified by service until 16.10.54.
Chief Air (Mech.)	Nil	-	-	Nil	-
Chief Air Fitter (A)	5	1.4.51	5.4.52 (Re-entry)	Nil	-
P.O. Air Fitter (A)	1	6.5.54	-	8	Lacks V.G. Conduct.
L/Air Fitter (A) L/Air Mechanic	5	22.9.53	23.4.54	13	(1) Lacked Airmanship until 25.10.54. (2), (3) and (5) Lack swimming qualification. (4) Lacks V.G. Conduct.
Chief Air Fitter (E)	13	(1) 30.6.49 (2) 25.10.50	1.1.52 (Re-entry)	Nil	(1) Lacks V.G. Conduct.
P.O. Air Fitter (E)	11	28.4.52	31.3.54	Nil	-
L/A.F. (E) L/A.M.	10	(1) 9.1.52 (2) 17.10.53	6.8.54	17	(1) Lacks Damage Control. (2) and (7) Lack V.G. Conduct. (3), (5), (6), (8) and (10) Lack swimming qualification. (4) Lacked swimming until 19.10.54. (9) Passed Oral Aptitude Test 2.10.54.

For Advancement to (1)	No. now on Roster (2)	Roster Date of Points of Man at Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man at Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
Chief Air Fitter (O)	Nil	-	-	1	-
P.O. Air Fitter (O)	1	16.6.54	-	2	-
L/A.F. (O) L/A.M.	2	23.3.54	30.3.54	8	Both lack swimming qualification.
L/Pilot's Mate	1	11.7.49	-	7	Lacks swimming qualification.
Ch. R.E.A. (Air) Ch. E.A. (Air)	Nil	-	-	Nil	-
Ch. Elect. (Air)	5	1.9.50	1.10.51	Nil	-
Elect. (Air)	6	30.11.53	31.12.54	Nil	-
L/E.M. (Air)	4	(1) 31.12.53 (2) 31.3.54	30.9.54	5	(1) Lacks swimming qualification.
Ch. R.E. (Air)	16	9.10.48	20.9.51	3	-

R.E. (Air)	Nil	-	-	Nil	
L/R.E.M. (Air)	5	30.6.53	30.9.53	5	(1), (3) and (4) Lacked swimming until 15.11.54. (2) Lacks swimming qualification. (5) Not qualified by service until 25.11.54.
Bugle Sergt.	Nil	-	-	Nil	-
Bugle Corp.	Nil	-	-	Nil	-
WRANS					
C.P.O. Wtr. (G)	Nil	-	-	-	-
P.O. Wtr. (P)	Nil	-	-	-	-
P.O. Wtr. (G)	Nil	-	-	3	-
P.O. Wtr. (P)	Nil	-	-	Nil	-
L/Wtr. (G)	Nil	-	-	2	-
(P)	Nil	-	-	1	-
(ST)	Nil	-	-	Nil	-
Stores P.O. (V)	Nil	-	-	Nil	-
L/S.A. (S)	2	17.9.52	21.9.52	Nil	-
L/S.A. (V)	4	21.5.52	21.7.52	Nil	-
C.P.O. Tel.	Nil	-	-	Nil	-
P.O. Tel.	Nil	-	-	Nil	-
L/Tel.	1	5.4.52	-	6	Not qualified by service until 5.10.54.

For Advancement to (1)	No. now on Roster (2)	Roster Date or Points of Man at Top of Roster. (Adjusted by "Red" Recommendations as necessary.) (3)	Roster Date or Points of Man at Bottom of Roster. (Adjusted by "Red" Recommendations as necessary.) (4)	No. advanced During Past Six Months (5)	Remarks (6)
P.O. Cook	Nil	-	-	Nil	-
L/Cook	1	1.12.52	-	1	-
P.O. Stwd.	1	1.4.53	-	1	-
L/Stwd.	3	13.1.52	7.11.52	3	-
L/S.B.A.	2	4.2.52	27.4.53	Nil	-
R.P.O.	1	5.5.52	-	2	-
TELS. (3) BRANCH					
C.P.O. Tel. (S)	Nil	--	-	Nil	-
P.O. Tel. (S)	Nil	-	-	3	-
L/Tel. (S)	Nil	-	-	4	-

103.

DISCIPLINE - MEN SENTENCED TO DETENTION - COMPLETION AND FORWARDING OF FORMS S.264 (DIVISIONAL RECORD SHEET).

An up-to-date Divisional Officer's Report on Form S.264 (Divisional Record Sheet) provides valuable information for the commanding officer of a detention barracks about a man who has been sentenced to detention. From such a report it is often possible to prescribe the correct initial treatment for an offender, which is a particularly important requirement in the case of a man awarded a short sentence of detention.

2. The Form S.264 of a man sentenced to detention is therefore to be completed up to the date of punishment and sent with his other Service documents to the ship or establishment on whose books he is to be borne while in detention. Whenever possible, these documents are to accompany the offender.

3. Q.R. and A.I., Article 2024, is being amended.

(The foregoing is the unaltered text of A.F.O. 3097/1954.)

(3325/3/256)

104.

FILMS AND FILM STRIPS - INSTRUCTIONAL - FOR COMMUNICATION TRAINING.

An extensive programme of instructional films and film strips on communication subjects has been planned in order to achieve the following aims :-

(a) Provide improved visual aids and standard teaching guides for communication instruction generally.

(b) Provide better facilities for pre-advancement course and able rate training in ships.

(c) Provide improved facilities for training of reserve communication officers and ratings.

(d) Provide suitable facilities for the rapid training of communication ratings in the event of mobilisation.

2. The following films and film strips are at present in course of production :-

(a) Films.

A.608 Somebody's Listening Now.
A.607 Basic Fleetwork.

(b) Film Strips.

8A.609 Radiocommunication Organisation.
Part I - World Wide and station.
Part II - Tactical.

(b) Film Strips.

SA.610 Allied Naval Manoeuvring Instructions.
Part I - Organisation and Command.
Part II - Manoeuvring Definitions.
Part III - Special Manoeuvring Rules.
Part IV - Stationing.
Part V - Line Formations.

SA.611 Automatic Telegraphy and Shore station equipment.
Part I - Introduction
Part II - Telegraphy Theory.
Part III - Line Telegraphy.
Part IV - Radio Teleprinter.
Part V - Shore Station Equipment.

Further details of these films and strips will be promulgated by Navy Orders as and when they become available.

3. In addition to further parts of the Film Strips on Radiocommunication Organisation and the Allied Naval Manoeuvring Instructions, a number of films and film strips on other Communication subjects are projected for the financial year 1955-56.

4. The allowance of films and film strips to ships and establishments is shown in the Appendix. They will be distributed initially without demand, as they become available. Ships recommissioning should demand copies from the (Superintending) Naval Store Officer, Sydney. Existing resources of film and film strip projectors and screens should be used. Demands for any additional equipment required should be forwarded in accordance with B.R.1251/50, Appendices B and H.

5. The following notes are provided for the guidance of communication officers and ratings who may not be familiar with the capabilities of this instructional medium :-

(a) The films are intended for use either as an introduction to certain syllabuses or for consolidation at later stages of a course. The instructor must be prepared to introduce the film and to make some amplifying remarks after the showing. He should allow time for questions and discussion.

(b) The film strips are provided to give the instructor the benefit of a first-class visual aid and to assist him in marshalling and presenting his facts in a logical and straightforward sequence. They in no way replace the instructor who must develop and improve his technique to make best use of the teaching aid.

(c) Detailed teaching guides are provided with each film strip, giving outline lecture notes for each picture frame. These notes should be used in preparing the lecture but should not normally be referred to during the lecture. The instructor should never read them out "parrot fashion" while showing the strip.

(d) Satisfactory results can be obtained using film strips for small classes in ships by projecting the picture on to any clear space on the bulkheads or sides of a compartment. A special screen is not essential although it gives a clearer picture. The compartment need not be darkened, provided that the picture area is screened from direct light.

(e) In shore establishments particularly good results can be obtained with film strips by using rear projection apparatus in an undarkened room. The class can then refer to their books and take notes if they wish. A 300-watt projector should be used, if available.

(f) Attention is invited to the following publications :-

B.R.1242 "How to use the Film Strip".
B.R.1251 "Catalogue of Naval Instructional Films and Film Strips".
B.R.1741 "Instructional Technique".

(The foregoing is the text of A.F.O. 2948/1954 altered to meet R.A.N. conditions.)

(As amended by A.F.O. 260/1955.)

(4518/61/432)

APPENDIX

Serial No.	Title	Classification	Carriers	Cruisers and "Darings"	S.O. of Destroyer and Frigate Squadrons. (See Note (i).)	H.M.A. Signal School	"L" School, F.N.D.	Naval Air Stations. (See Note (ii).)	Royal Australian Naval College	Reserve Training Depots	R.A.N. Film Library, Sydney.	
1	2	3	4	5	6	7	8	9	10	11	12	13
	SECTION I - FILMS											
A.607	Basic Fleetwork	R	-	-	-	1	-	-	1	1	2	
A.608	Somebody's Listening Now	C	-	-	-	1	-	-	1	1	2	
A.452	Practical Visual Signalling	U	-	-	-	1	1	-	-	1	2	
	SECTION II - FILM STRIPS											
SA.609	*Radio Communication Organisation*											
	Part I - World Wide and Station Part II - Tactical	R	1	1	2	3	-	1	1	1	4	
SA.610	*Allied Naval Manoeuvring Instructions*											
	Part I - Organisation and Command Part II - Manoeuvring Definitions	C	1	1	2	2	-	1	1	1	4	
	Part III - Special Manoeuvring Duties Part IV - Stationing Part V - Line Formation	C	1	1	2	2	-	1	1	1	4	
SA.611	*Automatic Telegraphy and Shore Station Equipment*											
	Part I - Introduction Part II - Telegraphy Theory Part III - Line Telegraphy Part IV - Radio Teleprinter Part V - Shore Station equipment	R	1	1	1	2	1	-	-	1	2	

NOTES:- (i) Copies of films and film strips supplied to Senior Officers of Destroyer and Frigate Squadrons may be re-issued on loan to private Destroyers and Frigates.

(ii) Naval Air Stations may demand films and film strips indicated if required for communication instruction.

105.

INSTRUCTIONAL FILMS AND FILM STRIPS - A119 - BROWN HYDRAULIC SYSTEM OF STEERING AND TELEMOTOR CONTROL (PARTS 1-4) - REVISED DISTRIBUTION.

The distribution of the Instructional Film A119, "Brown Hydraulic System of Steering and Telemotor Control" (Parts 1-4), has been revised and is now on the following scale :-

H.M.A. Ships and Establishments	No. of Copies
Flinders Naval Depot	1(a)
H.M.A. Training Ship	1
H.M.A.S. HUON	1(a)
H.M.A.S. LEEUWIN	1(a)
H.M.A.S. LONSDALE	1(a)
H.M.A.S. LONSDALE II	1(a)
H.M.A.S. MORETON	1(a)
H.M.A.S. PENGUIN	1(a)
H.M.A.S. RUSHCUTTER	1(a)
H.M.A.S. TARANGAU	1(a)
H.M.A.S. TORRENS	1(a)

(a) indicates copy of film already held.

2. Issue of Parts 1-4 to H.M.A. Training ships, will be effected without demand by the (Superintending) Naval Store Officer, Sydney.

3. All ships and establishments holding copies in excess of the revised allowances are to return them to the (Superintending) Naval Store Officer, Sydney.

(4518/61/A49)

106.

R.A.N. RELIEF TRUST FUND - FINANCIAL STATEMENT.

The Statement of Accounts of the R.A.N. Relief Trust Fund, for the period 1st July, 1953, to 30th June, 1954, is promulgated as an Appendix to this Order.

2. The Assets of the Fund, as shown in the Balance Sheet, comprise -

	As at 30 June, 1954.	As at 30 June, 1953.
Invested Capital, bearing interest	£37,732.18.1.	£53,500.
Money out on loan, bearing no interest	22,233. 6.9.	9,281.
Working Capital, some of which bears Savings Bank interest	7,969.10.5.	3,212.
	£67,935.15.3.	£65,993.

The increase in the money out on loan necessitated the sale of Treasury Bonds. Further Bonds were sold for re-investment in Trustee Stock bearing higher interest. In previous balance sheets Bonds had been shown at their face value which was considerably greater than their actual market value. Bonds, which had been bought at par, were sold at market prices below par, resulting in a book loss of £4,357.3.9.

3. Comparative figures, showing the development of loan business since 1 July, 1950, are given hereunder -

	Loans Made.	Out on loan at 30th June.
1950-51	14,718	6,069
1951-52	20,066	7,140
1952-53	27,372	9,288
1953-54	48,683	22,233

The large increase in the year under review is due to the introduction early in 1954 of substantial long term housing and furniture loans as notified in Navy Order 113 of 1954.

Since 30th June, 1954, there has been a continued increase in the amount of money out on loan. By 31st December the amount had reached approximately £48,000. To finance this it had been necessary to sell further stock, reducing the Fund's Invested Capital to £20,232 at 1st January, 1955.

4. As notified in Navy Order 113 of 1954, the Trustees approved of an arrangement whereby widows and other dependants of personnel who die while serving are given three fortnightly payments, at the compulsory rate, to tide them over the interval between the stoppage of their allotments and the availability of monies from the estate. Assistance of this nature has been afforded in four cases during the year.

5. In Navy Order 398 of 1953 it was announced that the Naval Board had decided that a contribution of 2d. in the pound of gross turnover (but not to exceed £5,000 per annum) should be made by the R.A.N. Central Canteen Fund to the R.A.N. Relief Trust Fund. This is made half-yearly in advance commencing from 1st November, 1954. The provision of this new source of income has made it possible for the Trustees to accept the drastic reduction in income from invested funds which results from the increasing proportion of the Fund's assets represented by money out on loan bearing no interest.

Until the point is reached, probably some two years hence, when monthly repayments will have overtaken monthly disbursements and the loan system has thus become self-supporting, the Trustees must look to the R.A.N. Central Canteen Fund for further financial support. Developments in this direction will be promulgated by separate Navy Order.

6. The various reasons for which loans have been made are indicated broadly hereunder -

Nature	Percentage of Cases
Hospital and Medical Expenses	33
Housing and Accommodation	10
Furniture and Household necessities	10
Travelling and Removals	17
Arrears in household bills	17
Household expenses pending first payment of wife's allotment	3
Other reasons	10
	100

7. The Trustees desire to acknowledge the receipt of the following donations during the year :-

Coronation Ball Committee, Sydney.	£50. 0. 0
Canteen Committee of H.M.A.S. MACQUARIE on paying off.	£42.16.11
Army Canteen, Australia House, distribution of profits.	£158. 3. 0

Further donations from Canteen Funds, Cinema Funds, or other sources will be most welcome.

(4814/51/18)

For Statement of Income and Expenditure and Balance Sheet see Page 28.

ROYAL AUSTRALIAN NAVY RELIEF TRUST FUND.

(I) STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 30TH JUNE, 1954.

1952/53	INCOME	1953/54	1952/53	EXPENDITURE		1953/54
£1,756	Interest on Investments and Bank Balances	£1,962. 7.11	£1,542	Administrative Expenses		£523.11.11
			5	Grants		178. 2. 0
-	R.A.N. Central Canteen Fund Contribution	3,333. 6. 8	154 (profit)	Loss on sale of Investments		4,357. 3. 9
90	Donations	283. 3.11	529	Bad Debts -	£304.11.5	
-	Exchange	51.18. 5		Less bad debts revived	18.10.0	286. 1. 5
			76 (loss)	Excess of Income over Expenditure transferred to Accumulated Funds		275.17.10
£1,846		£5,620.16.11	£1,846			£5,620.16.11

(II) BALANCE SHEET AS AT 30TH JUNE, 1954.

1952/53	LIABILITIES	1953/54	1952/53	ASSETS	1953/54
£65,993	Accumulated Funds. Balance 1/7/53 -	£65,993. 4. 1	£3,212	Cash in Hand, Bank and Agencies Advances	£7,969.10. 5
	Add - Excess of Income over Expenditure for 12 months ended 30/6/54 -	275.17.10	53,500	Investments, Trustee Securities at cost (face value £41,000.)	37,732.18. 1
	Balance 30/6/54	66,269. 1.11			
	R.A.N. Central Canteen Fund Contribution received in advance	1,666.13. 4		Loans Outstanding - Balance outstanding 1/7/53	£9,280.19. 3
				Add - Amounts advanced 1/7/53 - 30/6/54	48,364. 2. 4
					£57,645. 1. 7
				Less - Repayments 1/7/53 - 30/6/54	£35,099.13. 5
				Bad Debts	286. 1. 5
				Loans converted to grants	26. 0. 0
			9,281		£35,411.14.10 22,233. 6. 9
£65,993		£67,935.15. 3	£65,993		£67,935.15. 3

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.

V. J. SKERMER
A/H. Auditor-General for the Commonwealth.

10th January, 1954.

H. J. BUCHANAN — Commodore
P. PERRY — Captain (S)
HERBERT J. FAWELL — CHAPLAIN
C.A. PARKER — Captain (S) (Rtd.)

TRUSTEES, R.A.N. RELIEF TRUST FUND

SECRETARY

107.

WIRELESS - TYPE 691 TRANSMITTER - MARK 4 PLUGS, 12 PIN, PATTERN Z560150 - TREATMENT WITH SILICONE GREASE - INTRODUCTION.

Reports have been received of failure of the Mark 4 Plug, 12 pin, Pattern Z560150, which is embodied in the Transmitter Drawer (Plug PLK) and the Modulator Drawer (Plug PLN) of Transmitter Type 691.

2. As an interim measure, while the cause of breakdown is being finally confirmed, arrangements have been made for a quantity of these plugs to be treated with Silicone grease, which effectively raises the breakdown voltage to an acceptable minimum.

3. The pattern number of the "modified" plug remains unchanged, but it can readily be identified by a red splash on the shell, indicating that the plug has been treated with Silicone grease.

4. Demands for these plugs should call for "Z560150 Plug (Red Splash)".

5. A quantity of plugs so treated will shortly be available and will be issued to H.M.A. Ships concerned without demand by the (Superintending) Naval and Air Store Officer, Sydney.

6. B.R.1917 will be amended accordingly.

(The foregoing is the text of A.F.O. 672/1955 altered to meet R.A.N. conditions.)

(4519/11/896)

108.

AMMUNITION - PROPELLANT - LANDING - DESTRUCTION - REPORTS.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots are to be returned to the nearest Naval Armament 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 the Naval Board for instructions.

Propellant Lot or Sub-lot No.	Propellant Nature and Size	Nature of gun ammunition which may be involved
RNC 245	SC 122	B.L. 6-in.; Q.F. 4.7-in.(S.L.); Q.F. 4.5-in.
RNC 267XA	SC 061	B.L. 6-in.; Q.F. 4.7-in; Q.F. 4.5-in.; Q.F. 4-in.(F.A.); Q.F. 12-pdr., 12-cwt.
RNC 2021XR	SC 103	B.L. 6-in.; Q.F. 4.5-in; Q.F. 4-in.
RNC 2040XR	SC 103	
RNC 2041XR	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.); Q.F. 12-pdr., 12-cwt.
RNC 2045XR	SC 109	B.L. 6-in.; Q.F. 4.7-in. (S.L.).
RNC 2046XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.

Propellant Lot or Sub-lot No.	Propellant Nature and Size	Nature of gun ammunition which may be involved
RNC 2051XR	SC 109	B.L. 6-in.; Q.F. 4.7-in. (S.L.).
RNC 2052XR	SC 122	B.L. 6-in.; Q.F. 4.7-in. (S.L.); Q.F. 4.5-in.
RNC 2053XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNP 1083XH	NF 052	Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 12-pdr.
WA 13631	NA 029	Q.F. 4-in.
WA 13770XA	NA 029	
WA 13925XB	NA 029	
MEC 31XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.

2. Attention is drawn to 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.

(The foregoing is the text of A.F.O. 3257/1954 altered to meet R.A.N. conditions.)

(4433/51/204)

109.

RETURN OF AMMUNITION AVAILABLE ON 30TH JUNE AND 31ST DECEMBER.

Returns of ammunition available on 30th June and 31st December rendered in accordance with Consolidated Orders and Regulations, Article 375A, are, in future, to report stocks of fuzes of the N.80 series under makers and lot numbers.

(4433/1/686)

110.

SMALL ARMS - 9 mm. OWEN GUN - MAINTENANCE IN NAVAL SERVICE.

The instructions contained in this Order are issued for guidance on the maintenance of the 9 m.m. Owen Gun which was introduced into Royal Australian Naval service by Navy Order 374 of 1954.

2. The following publications are approved for use :-

(a) Owen Gun - Instruction Book : contains instructions on the use of the gun, field servicing and stoppage procedure;

(b) 9 m.m. Owen Gun - Notes for Armourers : contains workshop servicing instructions.

The establishment of these publications will be promulgated separately.

3. Instruction on the maintenance of the Owen Gun is to be given at the School of Aircraft Maintenance (Engineering) -

(a) to Air Ordnance personnel undergoing 'O' courses 'O' syllabuses are to be amended accordingly;

(b) to Aircrew as required by Commander (Air), N.A.S. Nowra.

4. When certain component parts are exchanged it is then necessary to check the guns for accuracy, firing single rounds with the barrel in a rest.

These component parts are listed in "Notes for Armourers"; guns requiring their exchange and subsequent firing test should be returned to R.A.N. Armament Depot, Spectacle Island, Sydney.

5. The following allowance of Owen Guns to the School of Aircraft Maintenance (Engineering) is approved :-

Guns 4 No. - suitably engraved "For Stripping Purposes Only".

(4428/80/58)

111.

A/S WEAPONS - DEPTH CHARGE PISTOLS - COMBINED CALIBRATION AND FUNCTIONING TEST - INTRODUCTION.

In all depth charge pistols the firing spring registers have now been pinned in their correct positions and it is no longer necessary for ships to carry out a separate calibration test as at present laid down in B.R.1669 (7), Section II, Chapter VI, paragraphs 87-94.

2. The Calibration Test will henceforth be combined with the Functioning Test and carried out in accordance with paragraphs 98-108 of the above B.R. which are being amended.

3. Apparatus and tools required for the calibration functioning and safety tests will be listed in the amendment.

4. On receipt of the above amendment, the following items, no longer being required, are to be withdrawn from chests, Depth Charge Testing apparatus, and landed at the nearest R.N. Armament Depot :-

Adaptor and cock, St. No. 6066.

Apparatus Testing, St. No. 10005.

Rings I.R., St. No. 6135.

(The foregoing is the unaltered text of A.F.O. 336/1955.)

(4428/32/15)

112.

MARKERS SEA ULUMINIUM MARK 1.

1960-No. Markers, sea, aluminium, Mark 1, held by Superintending Armament Supply Officer, Sydney, are available for use as targets for aircraft bombing and rocket or machine gun firings.

2. Trials have shown that a group of four markers dropped together provides a suitable target for these purposes.

3. Requirements are to be demanded as the occasion arises.

4. Navy Order 201 of 1946 is hereby cancelled.

(4433/91/691)

113.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - PROTECTIVE PX (AUST.) 105 - INTRODUCTION.

Protective PX (Aust.) 105 will be provided in the Royal Australian Navy in lieu of Protective PX-2, Pattern 1178, when present stocks of the latter are exhausted.

2. PX (Aust.) 105 will be purchased to Type D, Grade 2, of Specification S.A.A. Int. 61.

3. Attention is drawn to Navy Order 781 of 1954 regarding precautions to be observed in using protectives.

(4512/71/75)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

114.

MEDICAL AND DENTAL STORES - UNSERVICEABLE - SURVEY AND DISPOSAL IN THE ROYAL AUSTRALIAN NAVY.

The following instructions govern the survey and disposal of unserviceable medical and dental stores in the Royal Australian Navy.

2. The stores are to be surveyed -

(a) When the accounts of the officer-in-charge, or lately in charge, are closed for any reason.

(b) When articles are considered to be unserviceable from any cause.

(c) When articles are considered to be defective in quality.

(d) Annually, twelve months from taking charge.

Reports of survey are to be prepared on Form A.M.176 (in quintuplicate).

3. Two medical officers, to be selected from such ships as the Senior Officer may direct, are to be detailed as the surveying officers except on transfer of charge when the surveying officers are to be the officer giving up charge and the officer taking charge. An independent officer of the rank of Surgeon Commander or Surgeong Lieutenant-Commander should also be detailed to assist if the Commanding Officer considers this to be desirable for any reason. When the services of independent medical officers cannot be obtained, surveys are to be made by officers of the ship, whenever necessary, on the authority of the Commanding Officer. Application to hold a survey is to be made to the Commanding Officer who will request the Senior Officer present to appoint surveying officers.

4. Expendable medical stores, with the exception of dangerous drugs, which are found to be unfit for use are, with the approval of the Commanding Officer, immediately to be thrown overboard, burnt or otherwise destroyed in the presence of an officer designated by him. This officer is to certify on the report that destruction has been carried out. When dangerous drugs and/or surgical instruments are found to be unserviceable, they are to be returned to the R.A.N. Medical Store, Sydney, and a receipt obtained on Form A.M.165Z.

5. The Report of Survey (A.M.176) when signed by the surveying officers, is to be submitted to the Commanding Officer. When signed and approved, it is to be forwarded, in quadruplicate, to the Director of Naval Medical Services, with the account in the case of 2(a) and (d) hereof, or as applicable in cases 2(b) and (c) hereof.

6. Naval Board, or Director of Naval Medical Services, as appropriate, will consider the recommendations. Unserviceable articles, except as laid down in paragraph 4 above, are not to be disposed of by destruction, drowning, or conversion, until approval has been received. Serviceable articles may be drawn in the meantime, however, to complete to scale allowances.

7. Dental Stores - These instructions are also to apply to dental stores except that the surveying officers are to be dental officers wherever possible.

8. Consolidated Orders and Regulations, Articles 593, 594 and 594A will be amended in due course.

(The foregoing is the text of A.F.O. 2537/1954 altered to meet R.A.N. conditions.)

(4481/7/1)

115.

FRUIT JUICES.

It has been decided to re-introduce canned fruit juices in the Royal Australian Navy for general mess use and for issue to repayment messes. As a result of improvements which have been made in the method of processing these juices, their keeping qualities should prove considerably better than was the case when they were last stocked.

2. Stocks of orange and grapefruit juices are held at H.M.A. Victualling Yards and are available on demand. Stocks of pineapple juice will be obtained in the near future.

3. The issuing prices of fruit juices are promulgated in the Fixed Issuing Price List operative as from 1st January, 1955.

4. Fruit powders and tomato juice will continue to be stocked for daily issues on the undermentioned scale to Naval personnel serving ashore or afloat, within the tropics, north of 20° south latitude :-

(a) tomato juice - one fifth of one pint per head

or

(b) lemon or orange powder prepared in accordance with the following formula :-

Dissolve 3¼ ozs. of powder and 15 ozs. of sugar in water and make up to 10 pints with water; one half pint of the mixture so obtained is equivalent to one ration. The mixture should be well stirred before being issued. Each can of powder contains 33 ozs. and is equivalent to 200 rations. As the mixture is liable to deteriorate if kept, only sufficient should be prepared for immediate requirements.

5. It is essential that demands for all items be restricted to minimum anticipated requirements and all stocks be consumed in strict order of age within a reasonable period.

6. Navy Order 118 of 1953 is hereby cancelled.

(4528/13/52)

SECTION 5 - BOOKS, FORMS, CORRESPONDENCE, STATIONERY

116.

FORM AE.190A (OBSERVER) (REVISED 1954) - INTRODUCTION.

Form AE.190A (Observer) (Revised 1954), a record of each officer or rating during his training as a Naval Observer, is being introduced. Compilation of the record will be commenced by the Naval Board and then is to be kept in accordance with the instructions stated in the form.

2. The procedure to be followed when an officer or rating is transferred from pilot to observer training is laid down in Navy Order 180 of 1954.

3. Where results of observer pre-flight training have been recorded on a locally-produced form, these should be transcribed on to Form AE.190A (Observer) as soon as the latter form is received.

(3526/17/8)

117.

TRADE CERTIFICATES FOR AIR RATINGS - INTRODUCTION.

The following Trade Certificates for Naval Airmen (A.H.), (S.E.), (Met.), and (Phot.) have been introduced :-

A.S.430H	Trade Certificate for Naval Airman (Aircraft Handler)
A.S.430J	Trade Certificate for Naval Airman (Safety Equipment Rating)
A.S.430K	Trade Certificate for Naval Airman (Photographer)
A.S.430L	Trade Certificate for Naval Airman (Meteorological Observer).

2. Supplies of the form are to be demanded as necessary from the (Superintending) Naval and Air Store Officer, Sydney, by ships and establishments for naval airmen, at present borne, of the categories concerned. On receipt, forms are to be inserted in each rating's documents. Thereafter, the insertion of forms is to be done at R.A.N. Air Station, Nowra, when ratings first qualify in the respective categories.

3. The preparation of these certificates is to be in accordance with Q.R. and A.I., Article 1061.

(3526/12/1300)

118.

TRADE CERTIFICATES - ELECTRICAL BRANCH.

The undermentioned Trade Certificates which are available on demand have been introduced for the Electrical Branch :-

A.S.430	Electrical Artificer (Ship)
A.S.430A	Radio Electrical Artificer (Ship)
A.S.430B	Electrical Artificer (Air)
A.S.430C	Radio Electrical Artificer (Air)
A.S.430D	Electrician
A.S.430E	Radio Electrician
A.S.430F	Electrician (Air)
A.S.430G	Radio Electrician (Air).

2. The preparation of these certificates is to be in accordance with Q.R. and A.I., Article 1061.

3. Paragraph 2 of Navy Order 227 of 1952 is hereby cancelled.

(3526/12/1300)

SECTION 6 - SHORE ESTABLISHMENTS

119.

ESTABLISHMENTS - PIPED AND ELECTRICAL SYSTEMS - PRECAUTIONS IN INSTALLING.

Whenever water, gas or other piped services are to be installed near electrical systems, whether cables, wires or conduit, the pipes are to be prevented from coming into contact with the electrical system under any possible conditions of service. Pipes and electrical systems are not to be supported one from the other and are not to be connected by any metal. Where these precautions cannot be taken by adequate spacing, suitable insulation is to be interposed between the piped services and the electrical system.

2. Where hot water pipes are to be installed near electrical systems, the pipes are to be so spaced and positioned that, when the pipes are at their maximum temperature and the electrical circuits are not alive, a thermometer placed on the nearest portion of the electrical system does not read in excess of the ambient temperature by more than 10° F.

3. The same precautions are to be observed when electrical systems are being installed near water, gas or other piped services.

4. Nothing in the foregoing shall be construed as being contrary to the provisions of Civil Regulations covering installation of Electrical Equipment in buildings, particularly with regard to the earthing of equipment to pipes.

(The foregoing is the text of A.F.O. 510/1955 altered to meet R.A.N. conditions.)

(3161/2/10)

SECTION 7 - CANCELLED LIST

120.

CANCELLATION OF NAVY ORDERS.

Navy Orders 10, 106 and 441 of 1953, having been sufficiently promulgated or no longer applicable, are hereby cancelled.

(3712/120/8)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954)

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
900	231/54	-
931	-	244/54
932	-	245
933	223	-
935	-	248
936	244	-
937	-	292
938	249	-
940	-	331
942	296	-
947	-	436
948	357	-
950	-	221
974	206	-
978	-	233
984	-	360
985	-	344
994	-	269
999	-	240
1001	-	371
1004	-	242
1005	-	243
1007	-	247
1008	441	-
1009	303	-
1010	-	304
1011	-	C.C.N.O. 36
1019	253	-
1042	295	-
1046	-	311
1055	-	343
1056	-	361
1060	-	816
1071	-	700
1072	-	375
1074	222	-
1076	-	309
1080	-	353
1083	-	254
1084	442	-
1085	-	459
1116	-	342
1128	-	397
1132	-	275
1134	-	252
1136	278	-
1137	255	-
1139	-	432
1148	336	-
1158	-	339
1181	302	-
1182	393	-
1184	288	-
1187	-	351
1189	-	579
1190	684	-
1193	-	437
1198	-	560

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1216	-	260/54
1241	-	359
1251	-	419
1255	-	325
1256	-	290
1259	291/54	-
1262	-	377
1263	-	709
1269	-	379
1270	-	435
1275	-	440
1276	-	335
1299	-	321
1310	-	518
1317	546	-
1323	-	589
1324	-	363
1340	-	469
1343	-	349
1344	-	350
1345	-	326
1346	-	327
1348	-	686
1349	305	-
1352	-	356
1353	-	334
1355	-	358
1357	-	452
1369	-	480
1370	-	630
1405	-	550
1406	-	420
1408	324	-
1409	-	372
1411	378	-
1413	-	822
1418	-	599
1419	-	54/55
1441	-	399/54
1444	401	-
1475	-	471
1477	499	-
1480	-	621
1482	-	478
1527	369	-
1531	-	472
1532	-	373
1533	-	453
1538	-	763
1539	-	495
1548	460	-
1549	559	-
1595	-	479
1614	-	461
1615	-	83/55
1616	-	500/54
1617	392	-
1622	-	581
1623	-	598
1624	-	380
1646	384	-

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1653	-	466/54
1660	-	449
1661	-	450
1664	-	421
1665	425/54	-
1666	457	-
1670	-	497
1672	434	-
1673	475	-
1674	-	557
1675	-	474
1676	438	-
1677	433	-
1680	370	-
1700	-	464
1727	-	645
1729	473	-
1730	-	426
1734	558	-
1744	-	522
1759	-	561
1772	-	602
1791	-	491
1793	533	-
1795	-	48/55
1800	-	597/54
1822	-	604
1835	525	-
1849	-	618
1853	536	-
1859	498	-
1860	-	570
1864	521	-
1892	507	-
1900	526	-
1912	-	516
1914	-	568
1916	-	11/55
1917	-	620/54
1918	-	538
1920	651	-
1925	-	571
1952	-	619
1966	-	672
1970	539	-
1973	623	-
2010	506	-
2029	-	534
2031	555	-
2075	-	578
2085	-	682
2086	551	-
2089	-	674
2090	-	673
2092	-	592
2094	554	-
2095	-	615
2100	-	642
2112	826	-
2113	-	583
2124	824	-

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2145	562/54	-
2147	-	591/54
2148	-	614
2196	-	613
2205	624	-
2206	-	569
2250	-	696
2256	-	4/55
2257	-	751/54
2260	-	775
2262	-	677
2265	683	-
2298	-	764
2306	-	729
2311	-	791
2327	-	698
2338	-	699
2339	-	676
2340	647	-
2341	-	648
2342	-	45/55
2345	-	636/54
2346	637	-
2348	711	-
2353	-	725
2354	-	760
2412	670	-
2418	85/55	-
2452	-	768
2470	-	671
2471	675/54	-
2472	-	8/55
2473	-	736/54
2476	-	759
2478	-	685
2480	707	-
2484	724	-
2498	-	728
2516	-	15/55
2526	5	-
2527	752	-
2530	-	720/54
2531	-	702
2534	-	762
2535	-	780
2551	-	98
2577	-	41/55
2590	774	-
2593	717	-
2594	-	858/54
2595	-	719
2596	-	776
2597	-	754
2598	721	-
2603	-	805
2604	738	-
2660	-	792
2661	-	75/55
2662	-	46
2663	-	777/54
2666	-	779

A.P.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2688	-	807/54
2696	-	786
2704	-	65/55
2705	-	40
2706	-	66
2724	803/54	-
2728	-	823/54
2730	82/55	-
2753	-	39/55
2755	-	785/54
2765	-	834
2768	806/54	-
2777	-	87/55
2779	-	796/54
2780	-	44/55
2781	-	796/54
2783	-	846
2785	-	821
2791	-	53/55
2823	852	-
2828	-	64
2836	788	-
2845	-	839/54
2847	-	842
2852	843	-
2862	-	860
2873	84/55	-
2890	-	855
2902	-	841
2903	-	76/55
2905	-	43
2906	-	797/54
2908	-	50/55
2914	-	9
2915	863/54	-
2917	80/55	-
2941	-	814/54
2961	857/54	-
2964	-	802
2965	47/55	-
2966	-	49/55
2967	-	52
2969	-	861/54
3027	-	68/55
3045	-	859/54
3046	-	77/55
3048	817/54	-
3049	-	6
3051	844	-
3060	-	862/54
3110	42/55	-
3114	51	-
3119	-	89/55
3253	73	-
3262	79	-

NOTE:- A.P.O's subsequent to 900/1954, which are not listed above, can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206 of 1954 to 98 of 1955, dated 1st June, 1954, to 25th January, 1955.)

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C.N.Os. 121-149/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.

8th February, 1955.

The following 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, and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

N.0052

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SECTION 1 - ADMINISTRATIVE AND GENERAL

121.

AUSTRALIA DAY MESSAGE FROM HIS EXCELLENCY THE DEPUTY PRIME MINISTER AND MINISTER FOR NATIONAL DEFENCE, GREECE.

The following are the texts of an Australia Day message received by the Minister for Defence from His Excellency P. Kanellopoulos, The Deputy Prime Minister and Minister for National Defence of Greece, and the Minister for Defence's reply thereto :-

" ON THE OCCASION OF YOUR NATIONAL HOLIDAY I SHOULD LIKE TO EXPRESS TO YOU AND THE AUSTRALIAN ARMED FORCES ON BEHALF OF THE GREEK ARMED FORCES AND MYSELF WARMEST CONGRATULATIONS. THE COMMON STRUGGLES WHICH UNITED OUR TWO NATIONS IN THE PAST ARE A GUARANTEE OF THE SOLIDARITY WHICH IS SO ESSENTIAL TO OUR PEOPLES WHOSE COMMON TASK IS THE PRESERVATION OF PEACE SIGNED THE DEPUTY PRIME MINISTER AND MINISTER OF NATIONAL DEFENCE P. KANELLOPOULOS."

" I THANK YOU MOST SINCERELY FOR YOUR TELEGRAM CONVEYING THE WARMEST CONGRATULATIONS OF THE GREEK ARMED FORCES AND YOURSELF TO THE AUSTRALIAN ARMED FORCES ON THE OCCASION OF AUSTRALIA DAY. THE AUSTRALIAN ARMED FORCES WILL ALWAYS REMEMBER WITH PRIDE AND GRATITUDE THEIR COMRADESHIP IN WAR WITH THE ARMED FORCES OF YOUR GALLANT NATION. OUR COMMON EFFORTS TODAY IN THE CAUSE OF FREEDOM AGAINST AGGRESSION FURTHER STRENGTHEN OUR UNWAVERING FRIENDSHIP SIGNED THE MINISTER FOR DEFENCE P.A. McBRIDE."

(3325/10/102)

(This Order will be reprinted for posting on Notice Boards.)

122.

MEDICAL - DOPE AND PAINT SPRAYING - PRECAUTIONS.

All personnel (naval or civilian) employed on doping work or in M/T paint shops in service establishments are to have a quarterly medical inspection, irrespective of where the work is carried out.

2. The danger of inhalation of fumes is often not fully appreciated and cases of poisoning and fatalities may occur if strict precautions are not carried out.

General symptoms produced by most solvents used in dope or paint spraying are symptoms causing a feeling of intoxication, headache and drowsiness, which may lead to unconsciousness. Toxic symptoms which may lead to fatal results include anaemia, jaundice, kidney disease, paralysis and loss of vision.

3. Ventilation.

(a) The extract fans should be fitted as near as possible to the floor. They should not be provided with louvres, but should have turnover discharge bends on the outlet side.

When permanent exhaust fans are not fitted, temporary ones must be rigged whenever doping is carried out in enclosed spaces.

To lessen the danger from fumes, personnel should work back from the fan towards the air inlet while applying dope.

No unprotected personnel should be allowed in enclosed spaces whilst doping is in progress, and unprotected personnel must not approach within 30 ft. of the work.

(b) Alternation of work.

If possible, personnel should not be employed continuously on doping, but should be transferred periodically to other work, outdoors for preference.

(c) Consumption of food.

No food or drink should in any circumstances be consumed in the room where doping or paint spraying is being carried out.

(d) Smoking.

Smoking is to be prohibited where doping or paint spraying is carried out.

(e) Dope Masks.

All personnel should wear an approved type dope mask while spraying. The "Air Wash" mask, which consists of the following items, is an approved make, and supplies should be demanded from the appropriate (Superintending) Naval Store Officer :-

Air Washer Mask.
Samson "M" Type Air Conditioner.
"Nu Plac" Charcoal Filter.

(f) Periodic Medical Inspections.

At the routine quarterly inspection of dope workers, the medical officer will carefully note any change in the worker's physical condition, and if such be observed, he will take steps to remove the worker from dope work, or arrange to keep him under observation.

(g) Small repairs to local areas of finish on aircraft may be done in the open air or in a well ventilated hangar when weather conditions are suitable. It is essential, however, that whenever doping or painting operations are carried out, all the above-mentioned precautions to avoid endangering the health of the operatives be observed.

While such doping is in process, other ratings are not to be working in the vicinity unless they take the necessary precautions as for doping. These regulations apply irrespective of the method of application of the dope, i.e., spray or brush, etc.

4. All cases developing symptoms of poisoning are to be reported to the Director of Naval Medical Services. The report should contain a brief summary of the signs, symptoms and the circumstances attending each case.

5. Wherever practicable, the provisions of this Order are also to be observed when paint spraying is carried out in H.M.A. ships, and the operation is invariably to be supervised by an officer under conditions satisfactory to the Senior Medical Officer.

(The foregoing is the text of A.F.O. 2403/1954 altered to meet R.A.N. conditions.)

(4227/52/2)

SECTION 2 - PERSONNEL

123.

INSTRUCTIONAL FILMS AND FILM STRIPS - A538 - REPLENISHMENT AT SEA (PARTS 1-4) - DISTRIBUTION.

Copies of the new Film A.538 "Replenishment at Sea" (Parts 1-4) are being obtained and distribution will be made without demand by the (Superintending) Naval and Air Store Officer, Sydney, on the following scale :-

H.M.A. Ships and Establishments	No. of copies
H.M.A. Training Ship	1
R.A.N. Film Library, Sydney	2
Flinders Naval Depot	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
H.M.A.S. WATSON	1

2. This film is intended primarily for the instruction of young officers and key ratings of the Executive and Engineering Branches of the Royal Australian Navy and Reserves in the various forms of replenishment at sea. It is also intended for the instruction of officers and men of the Royal Fleet Auxiliary Service, and, in wartime, of retired officers and pensioners, and officers and men of the Merchant Navy employed in ships of the Fleet Train.

3. The film has been divided into spools so that the various methods of transfer can be shown separately: Part 1, which is a general introduction, should normally be shown before each of the other parts or sections. Details of the film are as follows :-

Part 1. "General Principles and Procedures".

This shows the general principles and procedure applicable to all forms of transfer, e.g., gun-line, distance line, messengers, telephone cables, etc., for establishing contact between two ships close aboard of each other.
Running time 6 minutes. 1 spool.

Part 2. "Transfer of Solids by Jackstay".

This shows the method of transferring light stores and men by means of the light jackstay.
Running time 10 minutes. 1 spool.

Part 3. "Transfer of Liquids - Abeam Method".

This shows the transfer abeam of furnace fuel oil:-

(i) from a tanker to a warship using the tanker's derrick;

(ii) from one warship to another using the larger warship's crane;

(iii) from a tanker to another ship using a jackstay.

Running time 20 minutes. 1 spool.

Part 4. "Transfer of Liquids - Astern Method".

(i) the transfer astern of furnace fuel oil from a tanker to a warship by means of a single hose;

(ii) the method of establishing contact by gun-line for astern transfer methods;

(iii) the transfer of two or three different fuels from a tanker to a warship by three hoses.

Running time 22 minutes. 1 spool.

(The foregoing is the text of A.F.O. 3154/1954 altered to meet R.A.N. conditions.)

(4518/61/437)

124.

LAUNDERING OF CLOTHING AND MESS LINEN.

The cost of laundering the following items is to be accepted as a charge to public funds :-

(i) Items of compulsory kit -

White working dress of Cooks and Sick Berth Attendants up to a maximum of two shirts and two pairs of trousers weekly per rating; and up to a maximum of 2 tunics, white drill, with blue facings, weekly per Steward.

(ii) Clothing issued on personal loan -

Working dress of W.R.A.N.S. Cooks and Sick Berth Attendants up to a maximum of 2 dresses/gowns, 2 aprons and 2 caps weekly per rating; and up to a maximum of 2 jackets, white drill, weekly per Stewardess.

(iii) Loan clothing (including hospital clothing) and loan bedding except that an officer is responsible for the laundering of cabin bedding during the period of his occupancy of the cabin.

(iv) Mess linen, including table cloths, glass cloths, tea cloths and napkins.

2. Navy Order 542 of 1954 is hereby cancelled.

(3708/1/38)

125.

LIFE ASSURANCE POLICIES.

The Life Offices' Assurance Association has advised that personnel may not be aware that it is to their financial advantage to have their Life Assurance Policies transferred to their State of domicile.

2. The advantages of transferring policies are -

(a) All States

On the death of a person resident in one State or Terrirory having personal property (including Life Assurance Policies) in another State or Territory, his Executor or Administrator must have the Probate of the Will or Letters of Administration resealed in the other State or Territory before the Life Offices can settle the policy claim. This involves the Estate of the deceased person in additional legal expenses and delay.

(b) Australian Capital Territory.

Commonwealth Estate Duty only is payable on the Estates of deceased A.C.T. residents, including proceeds of Life Policies transferred to the A.C.T. policy register of a Life Office.

(c) Queensland.

Although a policy issued outside Queensland and transferred to the Queensland Policy Register of a Life Office will involve the policy-holder in payment of stamp duty on the policy at the rate of 1/- per cent in respect of the first £1,000 of sum assured, and 2/- per cent in respect of any excess, this duty is small in comparison with the additional legal expenses referred to in sub-paragraph (a) hereof, if the policy is not transferred.

3. In order to simplify administration and save unnecessary expense in such cases, it is suggested that where personnel at present have premiums paid to a Life Office in a State other than that in which domiciled they arrange with the Company concerned for transfer of their policies to the Life Office Policy Register in their State of domicile.

4. Where policies are transferred to the Life Office Policy Register in the State of domicile of a member, the premiums for which are paid through the allotments system, Forms A.S.63 must be forwarded into Navy Office to permit of transfer of allotments being effected.

(4837/1/2)

(This Order will be reprinted for posting on Notice Boards.)

126.

OUTFIT ALLOWANCE.

With reference to Interim Pay Instructions, instruction 173/2, the period qualifying payment of the short term visit rate of Outfit Allowance has now been reduced from under 12 months to under 6 months.

2. Interim Pay Instructions will be amended in due course.

(4716/31/59)

127.

R.A.N. CENTRAL CANTEEN AND RELIEF FUND - COMMITTEE MEETING.

With reference to Navy Order 565 of 1954, the items recommended as the responsibility of the Central Fund in paragraph 3(I) were considered by the Trustees, and it was decided that these commitments should be accepted in the following amended form :-

(i) grants to institutions outside the Naval Service providing amenities for serving Naval personnel;

(ii) grants to various commands for representative sporting fixtures involving teams representing the Naval Service;

(iii) freight on cinema films to ships and remote establishments;

(iv) cinema equipment (35 m.m.) for newly commissioned ships;

(v) omit. (The responsibility in such cases would be that of the individual ship or establishment but, clearly, such losses should not occur).

(4814/1/3)

128.

REMOVALS AT DEPARTMENTAL EXPENSE.

The following amendment is to be made to the conditions of removal promulgated in Navy Order 330 of 1952, as amended by Navy Orders 250 of 1953 and 239 of 1954 :-

Paragraph 48.- Insert after the words "if they were available" appearing in clause (viii) the following new sub-clause :-

" Rental Allowance is not payable in respect of unfurnished premises, but payment of an allowance will be considered in special circumstances where a member has no alternative but to accept the tenancy of an unfurnished residence at a rental which would impose extreme hardship, subject to satisfactory evidence being submitted that the rental paid is fair and reasonable for the type of residence concerned."

(4822/8/13)

129.

UNIFORM - UPPER YARDMEN - AMENDMENTS TO UNIFORM REGULATIONS.

The following amendments, which amplify existing instructions for the wearing of items of dress peculiar to Upper Yardmen, i.e., white cap bands and white flashes on sleeves of blue uniform, are to be made to the Uniform Regulations in the Appendix to the Navy List :-

Uniform Regulations (Ratings)

Section II

Add new paragraph -

14. Upper Yardmen

" Upper Yardmen are to wear the uniform of their basic rating with the addition of the following distinguishing marks :-

(a) White cap band 1½-in. wide. In Class I and Class III uniforms the band is worn over the cap band but under the lower part of the badge; in Class II uniform the white band is worn in place of the cap ribbon, except by Upper Yardmen in the Training Squadron, who wear their ship's cap ribbon over the white band.

(b) A curved white flash 1-in. x 4-in. on both sleeves of blue uniform suits in a position immediately below the seam of the sleeve and the shoulder."

Section IV

Item 3. Delete sentence beginning "White cap ribbons" and Note. Insert "(See also Section II Paragraph 14)."

Uniform Regulations (N.C.Os. and Men, Royal Marines)

Section II

Add new paragraph -

" 16. *R.M. Cadets (Upper Yardmen)* are to wear the uniform of their rank with the addition of the following distinguishing marks :-

(a) White cap band 1½-in. wide worn over the cap band but under the lower part of the badge.

(b) A curved white flash 1-in. x 4-in. on both sleeves of blue uniform suits in a position immediately below the seam of the sleeve and the shoulder."

(The foregoing is the unaltered text of A.F.O. 3107/1954.)

(4716/1/200)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

130.

AIRCRAFT CARRIERS - PHOTOGRAPHIC RECORDS OF AIRCRAFT ARRANGEMENTS.

The Naval Board require collections of photographs of aircraft arrangements in aircraft carriers to assist them in aircraft carrier planning.

2. Prints, or, where this is more convenient, negatives of any of the following subjects should be sent to the Secretary, Department of the Navy (for Director of Air Warfare Organisation and Training) :-

Operations Room Aircraft Direction Room	Layout of bulkheads, plots and instruments.
Briefing Room Carrier Controlled Approach Room Ready Rooms Flying Control Position Aircraft Control Room Hangar Control Position Flying Clothing Cloakrooms Safety Equipment Section Buzzer/Voice Training Room Air Training and Lecture Room Air Intelligence Office Air Intelligence Room Air Chart and Intelligence Store Aircraft Repair Workshops Photographic Rooms	General Layout and special fittings.
Hangar	Overhead stowages; bulkhead stowages and fittings; various stowages of aircraft and views from Hangar Control Position.
Flight Deck	Various ranges and parks of aircraft; stowages of mobile equipment; Deck Landing Aid; L.S.O's position; electric starting arrangements, etc.
Crash equipment	Any special trollies or gear made up on board.

Air Wireless and Radar Maintenance Rooms, including Sonobuoy Test Rooms and A.E.W. Workshops. Aircraft maintenance arrangements	To include offices, special equipment and appropriate stowage arrangements for mobile and general maintenance equipment.

2 The above list is only a guide. Miscellaneous items connected with aircraft arrangements, including unusual or specially interesting repairs and maintenance methods, in the form of picture sequences and copies of any prints should be submitted with special reports.

3. Carriers should forward photographs as soon as possible after completion and after structural alterations, alterations and additions, etc., have been carried out.

4. All prints sent should be full plate (8½-in. by 6½-in.), in triplicate. Each should be endorsed with a brief description of the subject and the date on which the photograph was taken.

(The foregoing is the text of A.F.O. 3043/1954 altered to meet R.A.N. conditions.)

(4278/1/60)

131.

AMPLIFIERS - AUTO AIMING OF GUN MOUNTINGS, ETC. - STOWAGE OF SPARE AMPLIFIERS.

It has been reported that adequate stowage arrangements for spare amplifiers supplied in connection with auto aiming installations have not in all cases been provided.

2. Spare trays for amplifiers are supplied for maintenance failures, not to make good action damage, and are therefore to be stowed, if possible, in the compartments containing the amplifiers for which the spares are provided. Where the amplifiers are distributed in more than one compartment and more than one spare amplifier is provided, the latter should be distributed to the best advantage between the compartments. If, however, because of space limitations, this is not possible, the positions proposed are to be selected as a result of consultation between dockyard officers, ships' officers and ship overseers to give the best compromise possible in the above spirit.

3. The spare trays are supplied resiliently mounted in wood boxes. The stowage arrangements should secure the box in position in such a manner that the box with the spare tray may be easily removed without having to use tools. A suggested method would be to provide a tray for the box to stand in and to secure the box by a steel band hinged to the tray and secured to the bulkhead by a quick release clip.

4. In ships where the existing stowages are not in accordance with the sense of the above, a defect item should be raised to provide stowages, quoting this Order as authority.

5. This Order applies to the older type amplifiers only, since with the new type amplifiers the stowage of spare trays is catered for in the amplifier racks.

(The foregoing is the unaltered text of A.F.O. 3250/1954.)

(4429/99/84)

132.

FLUORESCENT ELECTRIC LIGHTING FITTINGS - DEFECTIVE RESILIENT MOUNTS.

It has been the practice to support fluorescent lighting fittings on resilient mountings Pattern W3116 or commercial mountings of similar type. Reports have been received of these mountings failing at their rubber-to-steel bond. Used in this particular application, in an inverted position, they do not fall to safety.

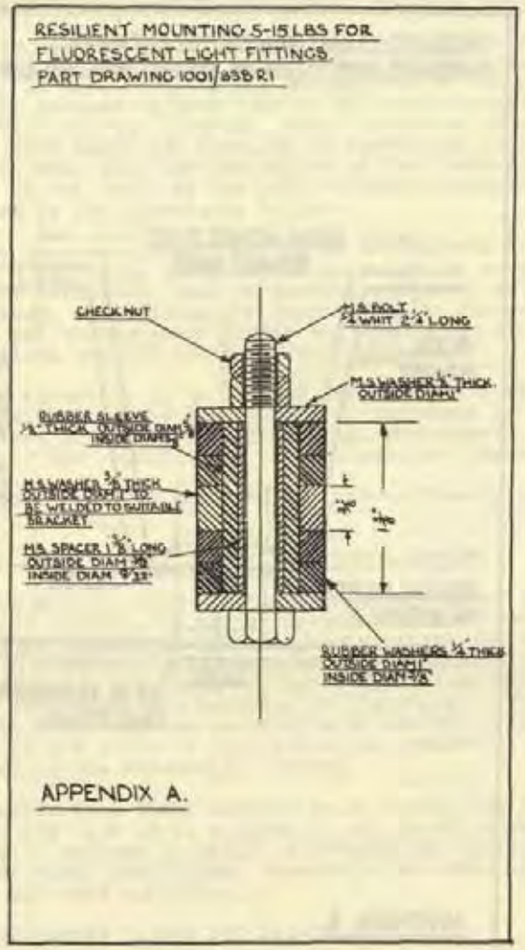
2. It has been decided to adopt a type of mounting which will not allow the fitting to fall in case of failure.

3. This fitting, which is known as Resilient Mounting 5-15 lbs. is shown in Appendix "A" to this Order. Four in number resilient mountings are to be used for each vapour proof type fluorescent lighting fitting and two in number for each fluorescent lighting fitting of other types. They are not directly interchangeable with mountings Pattern W3116 but need a welded bracket, the dimensions of which will be determined by the distance of the fitting from the deckhead, proximity of cables, pipes, etc. A typical method of supporting the mounting is shown in Appendix "B" to this Order.

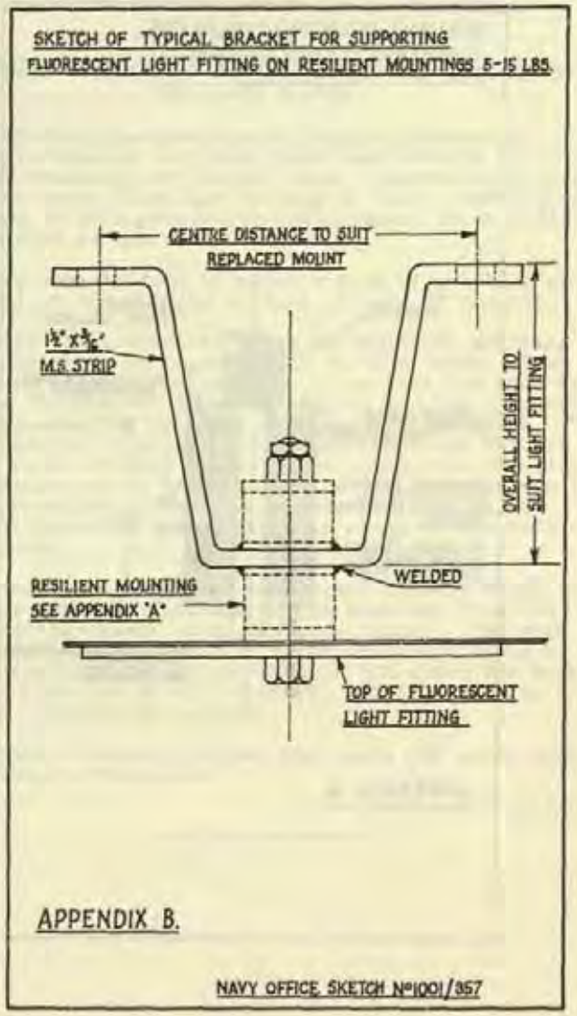
4. The resilient mountings to replace Pattern W3116 for fluorescent lighting fittings may be demanded from the (Superintending) Naval Store Officer, Sydney. The work of making and fitting brackets to these mountings is to be done by ship's staff as far as practicable but where the work is beyond the capacity of ship's staff, a defect item is to be raised for dockyard assistance.

5. Separate arrangements have been made for ships under construction or conversion.

(4519/31/474)



APPENDIX A.



133.

HALF YEARLY ELECTRICAL AND RADIO REPORTS.

Optional Half Yearly Reports on matters of detail affecting Ships' General Electrical Material and Radio Equipments may be rendered on 31st May and 30th November by all R.A.N. Ships and Establishments.

HALF YEARLY GENERAL ELECTRICAL MATERIAL REPORT.

2. This Report, which is to be prepared by the Ship's Electrical Officer, is to be forwarded by the Commanding Officer, in duplicate, to the Administrative Authority, who is to forward it with remarks and recommendations to Navy Office for the Director, Naval Electrical Branch. Reports from ships not carrying an Electrical Officer should be made with the assistance of the Electrical Officer on the staff of the Administrative Authority, and forwarded by the Commanding Officer.

3. The reports should cover minor maintenance difficulties - including those due to deficiencies in space and layout of workshops, lack of testing equipment or tools - performance, suggestions for improvement to future designs, layouts and allowance of stores and spare gear and Admiralty publications used by the Electrical Department.

4. The report is to be divided into sections, each dealing with a particular equipment, component or aspect of the work of the Ship's Electrical Department. Each section of the report is to be on a separate sheet.

5. Reports are not required for matter already covered on Form A.S.1183.

HALF YEARLY RADIO EQUIPMENT REPORT.

6. This Report, which is to be prepared by the Ship's Electrical Officer, is to be forwarded by the Commanding Officer, in duplicate, to the Administrative Authority, who is to forward it with remarks and recommendations to Navy Office for the Director, Naval Electrical Branch. Reports from ships not carrying an Electrical Officer should be made with the assistance of the Electrical Officer on the staff of Administrative Authority, and forwarded by the Commanding Officer.

7. Reports have their maximum value during the first few years of the life of an equipment, and should normally be confined to matters of detail affecting the following types and their variations, together with their associated outfits and test equipment :-

(a) Equipments fitted for trials.

(b) New types of equipment fitted subsequent to the date of this Order.

(c) The following Radar Equipments :-

Types 262, 274, 275, 285, 293, 960, 974.

(d) The following Wireless Equipments :-

Types 86, 87, 601-5, 622, 691, B40, B41, P104, 62H.

(e) All Third Wireless Office Equipment. Ships should include reports on any other radio equipment if they consider the matter to be of importance or general interest.

8. GENERAL.

If ships have nothing of interest to report concerning their equipment, no report need be rendered, and nil reports are not required. Full use of Forms A.S.1183 for reporting defective equipment or components in accordance with Navy Order 515 of 1954 will frequently obviate the necessity for including an item in a Half Yearly Report.

9. The information contained in Half Yearly Reports should enable the Authorities concerned with design and maintenance to -

(a) Render advice on difficulties connected with particular types of equipment.

(b) Obtain up-to-date information on the operation and efficiency of equipment.

(c) Collate the experience obtained under operational conditions with existing equipment and incorporate it in the design of new equipment.

(d) Design and produce modifications to existing equipment to improve performance, reliability and ease of maintenance.

(e) Improve auxiliary services connected with operation and maintenance, such as drawings, handbooks, supply of stores, etc.

10. These reports are not to be used to raise questions involving policy or principle, nor are they appropriate when matters affecting operational efficiency or the safety of personnel are at issue. In such cases, an immediate report should be rendered to the Administrative Authority for onward transmission to the Naval Board through normal Service channels.

11. It is emphasised that any item of outstanding or unusual interest may be reported through the Administrative Authority at any time.

12. Navy Order 279 of 1952 is hereby cancelled.

(3325/3/263)

134.

AIRCRAFT BOMBS - PISTOL, BOMB TAIL, NO. 75 MK. 2 - INTRODUCTION.

Pistol, Aircraft, Bomb Tail, No. 75, Mk. 2, is hereby introduced into Naval service. This pistol will supersede the pistol No. 75, Mark 1, as supplies become available, as the former may in certain circumstances fail to initiate detonators. The new pistol differs from the Mark 1 in that a new creep spring is fitted permitting greater striker protrusion, the creep spring holder being slightly altered in dimensions to accommodate the new spring.

2. H.M.A. Ships and R.A.N. Air Stations are to demand Pistols, Aircraft, Bomb No. 75, Mark 2, to replace their present allowance of Mark 1.

3. The new pistols will be packed in Boxes C.190 (100 per box).

(The foregoing is the text of A.F.O. 1130/1954 altered to meet R.A.N. conditions.)

(4443/3/6)

135.

NAVAL STORES (AIR) - LADDER, PILOT RESCUE - SECTION 4G - INTRODUCTION.

The undermentioned item is hereby introduced :-

Ref. No.	Description
4G/5335	Ladder, Pilot Rescue.

The primary purpose of this ladder is to save life and it should only be used in such an emergency. When not in use it should be stowed vertically and fully rigged on some special mounting attached to the island in the case of an aircraft carrier, or a rescue truck in the case of an air station.

2. This ladder will be allowed on the following basis :-

Aircraft Carriers operating aircraft	1 No.
R.A.N. Air Station, Nowra	1 No.

3. Supplies will not be available for some time and will be arranged without demand.

4. The Air Store Establishments A.P.(N) 377 and A.P.(N) 378 will be amended.

(The foregoing is the text of A.F.O. 2413/1954 altered to meet R.A.N. conditions.)

(4403/4/375)

136.

NAVAL STORES (GENERAL) (CLASS B, GROUP 8, PART B, CLASS D, GROUP 3) - RE-INTRODUCTION OF STORES INTO THE RATE BOOK AND AUTHORISED LIST OF NAVAL STORES.

It has been decided to re-introduce into the Rate Book and Authorised List of Naval Stores the undermentioned items -

Pattern	Description	Class and Group	Remarks
4673	Gauge, pressure, oxygen 5-in. face, 6,500 lbs. per sq. in.	B.8B	Formerly used for enriched air
C.1518	Twine, upholsterers, medium	D.3	-
C.1519	Twine, upholsterers, fine	D.3	-

2. As the result of the re-introduction of twine, Patterns C.1518 and C.1519, the following patterns have been made obsolescent :-

Pattern	Description	Class and Group
C.1509	Twine, upholsterers, medium	D.3
C.1510	Twine, upholsterers, fine	D.3

3. The items detailed in paragraph 2 will be deleted from the Rate Book and Authorised List of Naval Stores in due course. No further purchases will be made of these patterns. This action is being taken to reduce the number of different patterns of twine in use in H.M. Naval Service and thus simplify storekeeping and store accounting. Future requirements of the patterns made obsolescent are not, therefore, to be obtained by local purchase when stocks are exhausted, except in very exceptional circumstances which should be reported to the Admiralty, accompanied by full reasons for the necessity for supply and an estimate of the future scale and duration of requirements.

4. The Rate Book and Authorised List of Naval Stores and the relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 3338/1954.)

(4505/80/143)

137.

NAVAL STORES (GENERAL) (CLASS B, GROUP 8, PART 1) - TECALEMIT GREASE AND OIL GUNS FOR AIR PURPOSES - ALLOWANCES - CARRIERS, R.A.N. AIR STATIONS.

Tecalemit grease and oil guns will, in future, be allowed for air purposes in lieu of Uniguns, Nos. 1 and 2, as follows :-

Pattern	Classification	Air Stations	Carriers	Ship Classification
6330	Gun, Tecalemit, grease	17	9	P
6331	Gun, Tecalemit, oil	9	5	P
6332	Connector, hook-on	3	1	C
6333	Connector, thrust-on	3	1	C
6334	Connector, miniature	17	9	C
6335	Connector, hydraulic	9	5	C
6336	Connector, Tecazek	3	1	C
6337	Delivery tube, rigid	9	5	C
6344	Delivery tube, double ball jointed	17	9	C

2. Tecalemit guns are not to be demanded until Uniguns held become unserviceable and require replacement.

3. Existing stocks of Uniguns held by the (Superintending) Naval and Air Store Officer, Sydney, are, however, to be supplied to the above services in lieu of Tecalemit guns until exhausted.

4. The Air Stores Establishment concerned will be amended.

(The foregoing is the text of A.F.O. 2979/1954 altered to meet R.A.N. conditions.)

(4505/88/125)

138.

NAVAL STORES (GENERAL) (CLASS F, GROUP 1C, PART 3) - DISCS (DIN PROOF) PATTERN 32092 FOR AUTOMATIC TELEPHONES - INTRODUCTION.

Where an Automatic Telephone is sited in a very noisy compartment it may be necessary to reduce the pick-up of ambient noises by the transmitter in order to obtain satisfactory speech. To achieve this, the metal ring used for clamping the transmitter in position and located under the mouthpiece moulding must be replaced by a disc generally similar to the ring but having a solid centre pierced by a small hole.

2. The disc required has been added to the Rate Book under Class F, Group 1C, Part 3, and the description is as follows :-

Pattern	Description	Ships' Accounting Classification
32092	Disc (Din Proof) for Automatic Telephones, A.Ps. 12686 and 12687	Consumable

3. An initial purchase of 200 discs has been made and stocks are now available and when required demands should be forwarded to the appropriate storing yard, quoting this Order.

4. The discs should be fitted by ship's staff.

(The foregoing is the unaltered text of A.F.O. 3182/1954.)

(4518/15/329)

139.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2A, PART 3) - LAMPS, ELECTRIC, X952293 AND X965732 - INTRODUCTION.

Lamps, X952293 and X965732, have been introduced and added to the Rate Book and Authorised List of Naval Stores under Class F, Group 2A, Part 3, as detailed below. It has also been necessary to introduce as a separate pattern article the vacuum jacket which is required to complete the sodium vapour lamps, X965732 -

Ref. No.	Description	Ships' Accounting Classification
X952293	Lamp, electric, 12 volt, 12 watt, SBC, length 56 mm., diameter 38 mm., for use with amplifiers, Pattern A111B, in Fixed Defence stations	Consumable

Ref. No.	Description	Ships' Accounting Classification
X965732	Lamp, electric, 100/260 volt, 140 watt (with jacket, Pattern 16467), sodium discharge ceramic bayonet cap for use in Flare Units for type F, Portable Flare-paths at Naval Air Stations	Consumable
Patt. No.		
16467	Jacket, vacuum, for lamp, X965732	Consumable

2. Flare Units for Type F, Portable Flare-paths are not used in the Royal Australian Navy.

(The foregoing is the text of A.F.O. 2272/1954 altered to meet R.A.N. conditions.)

(4518/22/237)

140.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B, PART 2) - SAFETY AND LIMIT SWITCHES PATTERN 18066 - INTRODUCTION, AND PATTERN 18052 - MODIFICATION AND REPLACEMENT OF END BEARING CAPS.

Since the safety and limit switches, Pattern 18052, fitted on Bofors gun mountings, rocket flare launchers, Mark 5, and A/S mortars, Mark 10, are not completely watertight, an improved switch Pattern 18066, has been introduced under Class F, Group 2B, Part 2, and is being fitted on mountings, etc., now being manufactured.

2. For switches, Pattern 18052, already fitted on mountings, improved end bearing caps are being provided having a correctly toleranced diameter hole with two grease grooves. To identify them the new bearing caps will be stamped with an "M" on the hexagon flange at two positions across the diameter. Switches, Pattern 18052, which are sited where watertightness is essential, are to be replaced by switches with improved end caps. The modified switches, Pattern 18052, are to be demanded from the nearest (Superintending) Naval Store Officer - to whom also the unmodified switches are to be returned - quoting this Order as authority.

3. The modification of any unmodified switches, Pattern 18052, held in store or returned by ships, is to be undertaken in H.M.A. Dockyards. The caps are being dealt with under Class F, Group 2B, Part 2, but are not being given a pattern number.

4. Special care must be taken in modifying the switches to ensure that the two bearing holes are in line to ensure freedom of action of the plunger. The plunger is of ⅜-in. nominal diameter with negative tolerance and the new bearing caps will be provided with an undersized hole of 23/64-in. diameter. To fit the new bearing cap the following operations are necessary :-

(a) remove bearing caps at each end of switch and withdraw spindle complete with contacts;

(b) replace large bearing cap;

(c) insert new bearing cap, with red lead;

(d) insert special cutting tool (to be manufactured locally) and which has ¼-in. pilot, through the new bearing cap, until pilot engages in large bearing cap;

(e) reamer hole in new bearing cap to correct diameter for spindle - the location of tool ensuring concentricity of the two bearing holes;

(f) remove large bearing cap and replace with red lead after clearing burrs and replacing spindle assembly.

(The foregoing is the text of A.F.O. 1547/1954 altered to meet R.A.N. conditions.)

(4518/25/98)

141.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B, PART 4) - "ADCOLA" SOLDERING IRONS - RESTRICTION OF EXPENDITURE.

In future, in view of excessive expenditure, internal issues in H.M. ships and fleet establishments of "Adcola" soldering irons, Pattern 19660, which are classified "Consumable" for ship's accounting purposes, are to be made on Form S.156 in accordance with Article 33(3) of B.R.4 (Naval Storekeeping Manual) to which these soldering irons will be added.

2. Replacements of the components heating elements and bits are to be dealt with under the provisions of Article 33(2), B.R.4.

(The foregoing is the unaltered text of A.F.O. 3270/1954.)

(4518/27/133)

142.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2C, PART 5) - SLEEVES, RUBBER, CANVAS RE-INFORCED - RE-INTRODUCTION INTO RATE BOOK AND AUTHORIZED LIST OF NAVAL STORES.

It has been decided to re-introduce into the Rate Book and Authorised List of Naval Stores the following item :-

Pattern 24891 (formerly 20514). Sleeve, Rubber, Canvas re-inforced.

2. This item was previously dealt with under Class F, Group 2C, Part 2 (Magnetic Minesweeping Equipment), as Pattern 20514. It is no longer required for this service, but has been re-introduced for Wiping/Deperming purposes under Class F, Group 2C, Part 5.

3. Stocks of Sleeves, Pattern 20514, held at dockyards and depots are to be transferred to F.2C, Part 5, as Pattern 24891.

4. B.R.810 (Rate Book and Authorised List of Naval Stores) and B.R.825 (Manual of Degaussing) will be amended.

(The foregoing is the unaltered text of A.F.O. 2978/1954.)

(4518/34/7)

143.

NAVAL STORES (GENERAL) (CLASS F, GROUP 3B) - MOTOR GENERATOR FOR PATTERN 2005 GYRO COMPASS FOLLOW-UP SYSTEM - NEW DESIGN.

To facilitate production and increase general efficiency, Motor Generator, Pattern 1919A, for Pattern 2005, Gyro-Compass follow-up system, has been re-designed. The new machine, which incorporates the same governor, is interchangeable with and can be fitted in place of Pattern 1919A. The generator main spares differ, however, and these, together with the new generator, have been allocated pattern numbers and will be added to the Rate Book and Authorised List of Naval Stores under Class F, Group 3B, as follows :-

Pattern	Description	Ships' Accounting Classification
1919B	Motor Generator, complete with governor, 22-volt D.C. input, 333 cycles 50-volt single phase output	Permanent
1979	Armature, assembled	Permanent
1980	Coil, motor field	Permanent
1981	Coil, A.C. exciter	Permanent
1982	Stator, A.C.	Permanent
1983	Coil, interpole	Permanent
1984	Holder, brush	Permanent

2. Motor Generator, Pattern 1919A, is now obsolescent, but services should continue to demand this pattern and stocks should be utilised until they are no longer economically repairable. The spares, which are peculiar to this generator, will be retained (marked X in the Rate Book and Authorised List of Naval Stores) for replacement purposes. Future purchases will be made to the new design.

3. Details of the two generators, indicating the common items of spares and the new allowances of spares for ships fitted with Pattern 1919B, are included in the Appendix to this Order.

4. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 3340/1954.)

(4518/37/143)

APPENDIX

(a) Old Generator and Spares		(b) New Generator and Spares		(c) Allowances and First Outfit Quantities of (b)				
				Ships Fitted with Master Compasses, Pattern 2005			Destroyer Depot Ships	Repair Ships
Pattern	Description	Pattern	Description	3 Compasses	2 Compasses	1 Compass		
			Permanent					
1919A	*Motor generator*	1919B	Motor generator					
2932	Armature, assembled	1979	Armature, assembled					
2933	Coil, motor field	1980	Coil, motor field					
2934	Coil, A.C. exciter	1981	Coil, A.C. exciter					
2935	Stator, A.C.	1982	Stator, A.C.					
2936	Coil, interpole	1983	Coil, interpole					
5222	Holder, brush	1984	Holder, brush, motor					
*2019	Governor, speed	2019	Governor, speed					
*2976	Holder, brush	2976	Holder, brush, governor					
*2021	Weight	2021	Weights, spring and contact assembly	—	—	—	2	2
	Consumable		*Consumable*					
2020	Brush, governor	39214	Brush, with spring (F.2A)	4	4	2	12	12
*2022	Contact, adjustable	2022	Contact, adjustable	—	—	—	6	6
*2975	Contact, rotating	2975	Contact, rotating	—	—	—	6	6
2977	Spring, brush	14050	Brush, carbon, motor (F.2A)	4	4	2	12	12
5232	Brush, carbon motor	8370	Bearing (B.10)	2	2	2	12	12
8531	Bearing (B.10)							

* Common items of spares.
(A.F.O. 3190/54 is cancelled.)

144.

NAVAL STORES (GENERAL AND TECHNICAL) (CLASS F, GROUP 3B) - COMPASS REPEATERS 1900 AND 2954 - REVISED SECTOR MARKINGS.

Azimuth Repeaters, Patterns 1900 and 2954, were originally marked in 60° sectors, lettered A, B, C, D, F, G. To conform with the requirements of the Allied Naval Manoeuvring Instructions, however, these sectors should now be re-lettered A, B, C, D, E, F.

2. A new sector card bearing the revised markings has been introduced and will be added to the Rate Book and Authorised List of Naval Stores under Class F, Group 3B, as follows :-

Pattern	Description	Ships' Accounting Classification
1779	Card, mica, sector marked, for Repeaters, Pattern 1900 and 2954	Permanent

3. Ships, establishments, and dockyards concerned are to return to store all spare Cards Pattern 1789, draw-off Cards Pattern 1779, and make arrangements to modify all repeaters, Pattern 1900, by fitting the new sector marked Card. All modifications can be carried out by ship's staff with assistance, if necessary, from the dockyard gyro compass workshops. The old Cards Pattern 1789, should be returned to store immediately for modification to Pattern 1779.

4. Dockyard gyro compass workshops are to modify Naval Store stocks of Cards Pattern 1789 and 2959 for repeaters, Pattern 1900 and 2954, respectively, in accordance with paragraph 1 hereof, as they become available.

(The foregoing is the text of A.F.O. 2861/1954 altered to meet R.A.N. conditions.)

(4518/37/152)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

145.

VICTUALLING STORES - AIR STORES - SAFETY EQUIPMENT - WHISTLE, PATTERN B9/9469 (REF. 22C/1186) FOR LIFEJACKETS, AIRCREW, MARK 2 AND MARK 3.

Under present arrangements, the waistcoat portions of Lifejackets, Aircrew, Mark 2 and Mark 3 (Ref. Nos. 22c/1181 and 22c/1350 respectively) are supplied from Victualling Yards complete with a Whistle, Pattern B9/9469 (Ref. 22c/1186), and Whistles required as spares for use with lifejackets are supplied by (Superintending) Naval Store Officers.

2. In future, the waistcoat portions of Aircrew Lifejackets, Mark 2 and Mark 3, will be supplied from Victualling Yards without the Whistles. Whistles required to complete new lifejackets should be demanded by Ships and Establishments from (Superintending) Naval Store Officers and fitted to lifejackets by Safety Equipment personnel before issue. Spares whistles will continue to be supplied by (Superintending) Naval Store Officers.

3. The Flying Clothing Appendices to A.P.(N) 377 and 378 have been amended.

(The foregoing is the unaltered text of A.F.O. 1678/1954.)

(4505/91/100)

146.

VICTUALLING STORES - FLYING CLOTHING - HELMET, FLYING, PROTECTIVE, MARK 1A AND HELMET, FLYING, TYPE "F" - ARRANGEMENTS FOR GENERAL ISSUE.

From receipt of this Order, Protective Helmets must be worn by -

(a) All aircrew borne for flying duties in Front and Second Line Squadrons (including R.N.V.R.).

(b) All aircrew in addition to those in (a) above, who are required to fly regularly from Carriers and Air Stations.

Exceptions -

(i) Aircrew flying helicopters and communication aircraft.

(ii) Aircrew who cannot wear helmets without physical discomfort and have obtained exemption from their Commanding Officer.

(iii) Aircrew who fly infrequently and as a result cannot be expected to have flying clothing always available.

NOTES:- (a) The provisions in (iii) above do not prevent men from drawing helmets if they wish.

(b) Passengers required to fly in service aircraft other than communication aircraft should normally be given a Protective Helmet and Flying Helmet Type "F" on temporary loan in accordance with the arrangements authorised in A.P.(N) 5, Naval Air Supply Instructions, Article 462.

2. With reference to paragraph 6 of A.F.O. 2181/53 *(Victualling Stores - Flying Clothing - Helmet, Protective, Flying, Mark 1A and Helmet, Flying, Type "F" - Introduction)* sufficient Helmets, Flying, Protective, Mark 1A and Helmets, Flying, Type "F" are now available to allow issues to be made generally in accordance with paragraph 1 above.

3. *Helmet, Flying, Protective, Mark 1A.*- With reference to paragraph 2 of A.F.O. 2181/53, there are now four sizes of Protective Helmets with a Narrow, Regular and Broad fitting in each. The Mark has been advanced to 1A. A revised list of items, including details of Vocabulary and Stores reference numbers, sizes and scales of allowances, of the Helmet, Flying, Type "F" and Helmet, Flying, Protective, Mark 1A is set out in Appendix A to this Order which supersedes and cancels the Appendix to A.F.O. 2181/53.

4. Experience has shown that to be comfortable and safe a Protective Helmet must fit correctly; instructions about this are given in Appendix B to this Order.

5. When a Protective Helmet fits properly a record of its size and fitting should be entered in the Flying Clothing Certificate (Form S.1055)

6. Aircrew having a Protective Helmet which has proved uncomfortable should arrange for the size to be checked and the helmet to be exchanged where necessary.

7. *General.*- Demands for Helmets, Flying, Protective, Mark 1A and Helmets, Flying, Type "F", which should include details of sizes and fittings in accordance with Appendix A to this Order, should be lodged with : Superintending Victualling Store Officer, Sydney. Demands for Naval Store components pertaining to Helmet, Flying, Type "F", should be lodged with the (Superintending) Naval and Air Store Officer, Sydney.

(The foregoing is the text of A.F.O. 3194/1954 altered to meet R.A.N. conditions.)

(4533/4/4)

APPENDIX A

Stores Ref. No.	Description	Victualling or Naval Stores (Air) Item	Denom. of Quantity	Scale of Personal Issue	*Stock per 25 or Part of 25 Aircrew Borne in Carriers or Air Stations (V. Items)	Allowances (Naval Stores (Air) Items)					
						Carriers				Air Stations	
						1–25	26–50	51–75	76–100	Class "A"	Class "B"
	Helmet, Flying, Type "F"										
	Comprising :—										
	Fabric head cover (complete with chin strap and elastic neck adjustment)										
22C/1389	Size 1	V	No.	1	1	—	—	—	—	—	—
22C/1390	Size 2				2	—	—	—	—	—	—
22C/1391	Size 3				2	—	—	—	—	—	—
22C/1392	Size 4				1	—	—	—	—	—	—
22C/1393	Ear capsule, Mark 1, left	V	No.	1	4	—	—	—	—	—	—
22C/1394	Ear capsule, Mark 1, right	V	No.	1	4	—	—	—	—	—	—
22C/1395	Bush, Rubber, Split (for ear capsule)	V	Set of 4	1	6	—	—	—	—	—	—
22C/1396	Clips, oxygen mask	V	No.	1	4	—	—	—	—	—	—
10/HA/13158	Connector, Type 10041, back entry ..	S	No.	1	—	8	16	24	32	24	16
—	Rivets (for attachment of oxygen clip to helmet)	—	No.	2	Any suitable type of Service supply item	—	—	—	—	—	—
10/HA/8679	Connector, Type 3518	S	No.	1	—	4	8	12	16	12	6
10/AH/19	Earpiece, Type 53	S	No.	2	—	12	24	24	36	24	24
—*Spares for* 22C/1397	Elastic neck adjustment	V	No.	—	4	—	—	—	—	—	—
	Helmet, Flying, Protective, Mark 1A										
	(Complete with chin strap and goggle retaining loop)										
22C/1515	Size 1. Narrow	V	No.	1	1	—	—	—	—	—	—
22C/1516	Regular				1	—	—	—	—	—	—
22C/1517	Broad..				1	—	—	—	—	—	—
22C/1518	Size 2. Narrow				2	—	—	—	—	—	—
22C/1519	Regular				2	—	—	—	—	—	—
22C/1520	Broad..				2	—	—	—	—	—	—
22C/1521	Size 3. Narrow				2	—	—	—	—	—	—
22C/1522	Regular				2	—	—	—	—	—	—
22C/1523	Broad..				2	—	—	—	—	—	—
22C/1524	Size 4. Narrow				1	—	—	—	—	—	—
22C/1525	Regular				1	—	—	—	—	—	—
22C/1526	Broad..				1	—	—	—	—	—	—
—*Spares for* 22C/1419	Strap, chin	V	No.	—	1	—	—	—	—	—	—
22C/1420	Goggle, retaining loop	V	No.	—	2	—	—	—	—	—	—

* These allowances may be increased where necessary to meet requirements for temporary loan issues in accordance with A.P.(N) 5, Article 462.

APPENDIX B

Helmet, Flying, Type "F" and Helmet, Flying, Protective, Mark 1A - Instructions for Fitting

These helmets are designed to be worn together to combine good noise exclusion with protection against buffeting, damage from displaced or ruptured canopies and crash hazards.

2. *Helmet, Flying, Type "F".*- (a) There are four sizes. As a rough guide Size 1 corresponds with hat sizes 6½-6¾, Size 2 with 6⅞-7, Size 3 with 7⅛-7⅜ and Size 4 with 7½-7¾.

(b) In selecting a helmet, check that the ears fit neatly within the ear capsules. Too large a helmet will permit the capsules to hang low on the face and foul the lifejacket. A small helmet will feel tight and mark the skin very quickly.

(c) A good fit of inner helmet is essential for -

(i) the correct fit of the Protective Helmet;

(ii) the correct fit of the oxygen mask.

It may prove impossible to fit a pressure breathing mask if too large a helmet is worn.

3. *Helmets, Flying, Protective, Mark 1A.*- (a) There are four sizes, 1, 2, 3 and 4, with three fittings in each size : Narrow, Regular and Broad. The three fittings have the same circumference, but vary in the relation of length to breadth.

(b) When selecting a Protective Helmet the following points should be remembered :-

(i) Different sizes as well as different fittings should be tried on, as, for example, a Size 2, Broad, may be more comfortable than a Size 3, Narrow.

(ii) Once the size and fitting has been established a number of helmets of the same nominal size should be tried on as some small variations in measurement are inevitable in manufacture.

(c) The correct size is the smallest that can be worn with comfort. If too small a helmet is selected progressive discomfort will be felt.

(d) A properly fitted helmet should exert firm, even pressure all round the head. There should be the least possible clearance between the brow and the inside of the front of the helmet. It should not be easy to tilt the helmet forward over the eyes.

(e) Both inner and outer helmets tend to adapt themselves to the wearer's head; in particular the ear doughnuts of the inner helmet tend to collapse with use. For this reason a tight fit over the ears is acceptable initially.

(f) If too loose a helmet is selected -

(i) the protection afforded in the event of crash may be reduced;

(ii) when arresting, the helmet may tend to tip over the eyes;

(iii) on jettisoning the canopy prior to ejection or crash landing the helmet may be torn from the head involving possibly a severe snatchhead on the neck from the chin strap.

4. *General Remarks concerning the wearing and maintenance of Helmets.*- (a) The chinstraps of both helmets should be fastened in wear.

(i) In the event of the inner helmet being lost on ejection at high altitude the oxygen mask will be lost also, resulting in possible anoxia and frost-bite;

(ii) Failure to fasten the Protective Helmet may result in its loss at a time when it is most valuable. If lost during catapulting with the canopy open it may damage the tail of the aircraft.

(b) The Protective Helmet is finished in a solar-reflecting paint. Repainting, when necessary, should be done only with Finish, glossy, aluminium, Ref. 33B/865 (D.T.D. Specification No. 772A) so as to retain the heat-reflecting properties. This finish is obtainable on demand from the Naval Store Officer (Air), R.A.N. Air Store Depot, Randwick.

(c) The Protective Helmet is made of material which is only moderately elastic and maltreatment may result in permanent distortion of shape possibly causing inconvenience and even danger to the wearer. Great care should therefore be observed by all personnel in the handling of this helmet.

147.

VICTUALLING STORES - LOAN CLOTHING - BLANKETS SEAMEN'S, COLOURED, LOAN.

A new type of seamen's loan blanket has been introduced and stocks will be available for issue at an early date.

2. The new blanket is of the same dimensions and weight as the white seamen's blanket, but is coloured grey, with three black stripes running lengthwise.

3. No further purchases of Army pattern coloured blankets will be made, nor will stocks of white seaman's blankets be transferred to loan stocks in future.

4. Existing stocks of the smaller Army pattern blankets and of marked white blankets are to be used to exhaustion. The Army pattern blankets are to be reserved for issue to personnel sleeping in bunks and for issue, when necessary, as extra blankets to ratings sleeping in hammocks who are already in possession of a seaman's blanket.

5. The nomenclature of the new item is "Blankets, seamen's, coloured, loan", and the price to be used for charges in cases of losses by neglect, etc., is £3/11/6d. each.

6. Page 13 of the current official memorandum - "Prices of Clothing, etc., Maintenance for issue to ships' companies" is to be noted accordingly.

(3190/5/43)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

148.

DESPATCH OF CORRESPONDENCE TO NAVY OFFICE.

Despite numerous reminders, H.M.A. Ships and Establishments are failing to observe the necessity for economy in the use of envelopes and postage for the despatch of correspondence to Navy Office.

2. Apart from personal messages, all mail received at Navy Office, whether addressed to the Secretary or individual Directors, is opened in Central Registry.

3. Separate envelopes are not therefore to be used for correspondence and forms for the various directorates at Navy Office. Papers for each directorate or branch should be separated, fastened together and the addressee indicated by a small square of paper (particularly Forms A.S. 161 and 165, the original and duplicate copies of which go to separate directorates). All correspondence is then to be inserted in one suitably sized envelope addressed to the Secretary, Navy Office, Melbourne, S.C.1.

4. The despatch to Directors of information copies of correspondence addressed to the Secretary, Navy Office, is normally unnecessary as the originals are referred to the appropriate directorates for information and/or action.

5. Commonwealth Navy Order 411 of 1951 is hereby cancelled.

(3911/51/139)

SECTION 6 - SHORE ESTABLISHMENTS

149.

NAVAL STORES - ACCOUNTING VOUCHER IN PACKAGE SYSTEM - EXTENSION TO ISSUES ON FORMS A.D.66 AND A.D.623.

With reference to Navy Order 221 of 1952, it has been decided to extend the principles of the accounting voucher in package system to the issue of Naval and Air Stores from Naval Store Depots on Forms A.D.66 (to other Naval Store Depots) and A.D.623 (to other Branches, repayment services, etc.).

2. As from 1st July, 1955, copies Nos. 3 and 4 of Forms A.D.66 and A.D.623 are to be placed in the package with the stores in addition to copy No. 1 of the packing note, Form A.D.71. Particular care is to be taken to ensure that all copies of issue vouchers are in complete agreement regarding description, quantities, etc., before they are released from the issuing storehouse.

3. In the case of "over-the-counter" issues on Form A.D.623, the person receiving the stores is to furnish a receipt for the stores on copies Nos. 1, 2, 3 and 4. Copies Nos. 3 and 4 are then to be handed to the person drawing the stores. Copy No. 4 is to be produced to the Foreman of Storehouses, who will issue a pass note authorising removal of the stores from the yard or depot. Copies Nos. 3 and 4 are to be retained by the drawer of the stores and handed to the demanding officer for action as indicated in paragraph 4 below.

4. The use of Forms A.D.66A and A.D.401 for the purpose of despatching supply notes to consignees and obtaining receipts for the stores concerned is to be discontinued. Instead the consignee is to furnish the following certificate on the reverse side of copy No. 4 of the issue voucher :-

"The stores detailed overleaf have been received and agree with copy No. 3 of this voucher by means of which they have been taken on charge, except as follows :-

.....
.....
.....

..... Signature
..... Rank
..... Date"

(pending inclusion on Forms A.D.66 and A.D.623 when next reprinted, this certificate is to be impressed on copy No. 4 by means of a suitable rubber stamp, when the voucher is "issue authorised")

and forward the certified copy No. 4 to the (Superintending) Naval Store Officer concerned immediately the associated stores have been checked.

5. The relevant publications will be amended in due course.

(4501/6/56)

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C.N.O. 150/55

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(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
15th February, 1955.

The following 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, and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

TABLE OF CONTENTS

150.

NAVAL STORES (TECHNICAL) - DANLAYING EQUIPMENT - INSTALLATION AND OUTFIT SCHEDULE.

The success of any minesweeping operation depends to a very large extent on accurate and effective marking of the area swept. War-time experience has shown that specially fitted vessels are needed for prolonged operations but every minesweeper must expect to be required without notice to act in a danlaying role to the extent that her facilities allow.

2. There are three types of Danbuoys, viz :—

PELLET (with a variation of lighter weight),
DEEP WATER and
STANDARD

Components of these types are shown in the appendices to this Order. Where a more visible or permanent mark is needed than is provided by the standard danbuoy, e.g., as a datum, the components of the rig may be suitably varied from the standard to meet the particular requirements.

3. *Pellet Danbuoys.*—In sheltered waters lighter types of Danbuoys (known as Pellet Dans), more suited to the restricted space and handling facilities of small vessels, may be acceptable. They can be improvised by base staffs from articles drawn from the Naval stores. Components which have proved suitable in the past are listed in Appendix 1.

4. *Deep Water Danbuoy.*—The Deep Water Danbuoy has been designed for use in depths of water of from 100 to 300 fathoms, and in favourable conditions 450 fathoms. This equipment is not carried in ships but is embarked for special operations. Details of Deep Water Danbuoy equipment which may be so embarked in ships and of other equipment to be landed in compensation will be promulgated later. Components for rigging a Deep Water Danbuoy are shown in Appendix 2.

5. *Standard Danbuoy.*—Appendix 3 shows :—

Section A .. .. The handling equipment to be carried by each class of ship, the number of unit sets of Danbuoy components allowed, the weights of the whole outfit and the scales on which base maintenance spares are provided.

Section B .. .. Several different scales of allowances of handling equipment, lettered for ease of reference.

Section C .. .. The components of the standard unit set, some useful multiples and a blank column in which own ships allowance may be inserted in pencil.

6. Standard Danbuoy equipment at present carried on board ships concerned is to be completed to the new allowances shown in Appendix 3. Ships in commission, and Senior Officers Reserve Fleet on behalf of ships in Reserve Classes I, II and II*, are to forward demands to their Storing Yards as necessary.

7. The allowance of small quantities of Danbuoys, etc., *for other than Minesweeping purposes*, at present shown in the various Establishments of Naval Stores is not affected by this Order.

(The foregoing is the text of A.F.O. 3691/1953, as amended by A.F.O. 1519/1954.)

(4301/32/163)

APPENDIX 1

Components for Rigging Pellet Dan Set

(a) *Pellet Dan (Standard)*—Pattern 9160

		No. per set	
8796A or 5962	Float, cylindrical	1	Welded up in Base
—	Steel tube, ¾-in. ext. dia. × 9-ft. long	1	
9159	Iron bobbin, weight 17 lb. approx. (4-in. dia. bar 6-in. long, bored 1⅜-in. dia. is suitable).	1	
4001 or 4015	Eyeplate to take ¾-in. pin	1	
8717	Float, elliptical	2	
8797	Sinker, concrete, 1½ cwt.	1	
5343	Shackles	3	

Spans and moorings of 1-in. F.S.W.R., made up by base staff or on board, to suit with Thimble, Pattern 5083 (4 in No.) if required.

Flags as required.

(b) *Pellet Dan (Light Weight)*

Pattern No.		No. per set
8717	Float, elliptical	1
8798	Sinker, concrete, ½ cwt.	1
5342 or 5442	Shackles	3
—	Wooden staff, 5-ft. approx., not exceeding ¾-in. dia. Rocket stick is suitable.	1
—	Weight—3 lb. of scrap metal	1

Mooring etc., of 1½-in. manila or sisal made up to suit.

Flag as required.

Note

The pellet dan is to be made up, as required, by base staff.

APPENDIX 2

Components for Rigging of Deep Water Dan Set

Pattern No.		No. per set
8944	Deep water dan, complete, comprising :- Float, Frame, Drum, Pattern 8944A, wound with 600 fms. wire, Plates, sinker (1 pair), Pattern 8944B, Staff (12-ft. long), Pattern 8944G	1
8944C	Pendant, ¾-in., E.S.F.S.W.R. × 6 fms	1
8944D	Pendant, 1-in., F.S.W.R. × 2-ft. 9-in.	2
247	Sinkers, iron, 1½ cwt.	2
5342	Shackle	1

Flag as required.

8945	Weights, test, comprising :— Weight, 100 lb.—1 in No. Counter weight, 10 lb.—1 in No.	1 set per ship

Note

The deep water dan is not carried in ships but is embarked for special operations Details of equipment to be landed in compensation will be promulgated later.

Appendix 3

The Standard Danbuoy—Installation and Outfit Schedule

1. This Installation and Outfit Schedule is divided into three Sections to show :—

Section " A ". Table of ship's outfits and base maintenance outfits (comprising handling equipment and standard danbuoy unit sets) allowed to ships employed as danlayers or minesweepers and minesweeping bases respectively.

Section " B ". Details of handling equipment allowed to ships and for base maintenance outfits. This section is sub-divided into three parts.

(i) Vote 8/III, Portable Fittings.
(ii) Vote 8/IIA, Portable Fittings.
(iii) Vote 8/IIA, Permanent and Consumable Stores

Section " C ". Details of—

(i) components of standard danbuoy unit set (from which allowances for individual ships can be calculated).
(ii) allowances for base maintenance outfits.
(iii) details of allowances for certain ships.
(iv) blank column in which allowances for individual ships can be inserted as necessary.

2. The responsibility for supply is as follows :—

Classification	Supplying Authority at :—		
	Admiralty	Minesweeping bases	Dockyards
Vote 8/III—Hull Fittings	D. of D./D.N.C.	—	M.C.D.
Vote 8/IIA—Portable Fittings	D. of S.	B.S.O.	(S) N.S.O.
Vote 8/IIA—Permanent and Consumable Stores			

3. Accounting procedure is shown as a preamble to Sections " B " and " C ".

4. The terms " outfits " and " sets " as used throughout this Schedule have the following definitions :—

Unit Set .. .. The stores which comprise the *complete* rig of one standard danbuoy plus a percentage of spares.
Outfit .. .. An outfit comprises a number of unit sets plus handling equipment.

Section " A "—Table of Outfits and Standard Unit Sets

Explanatory Notes

(X) The weights of items of Vote 8/III equipment are not included and, when necessary, must be separately assessed.
(Y) Under consideration and will be promulgated later.

Class of Ship	Reference Letter of Handling Equipment. (*See* Section " B " for details of pertinent outfit)	No. of Standard Unit Sets of Danbuoys alld. (*See* Section " C " for details of equipment)	Wt. of Danning Outfit, Vote 8/II Equipment, Tons. (*See* X)		
			Handling Equipment, etc. Approx. (X)	Dan Unit sets	Total (X)
(1)	(2)	(3)	(4)	(5)	(6)
Outfits for Ships					
" Isles " Class Trawler Danlayers	A	54	2·7	30·942	
Fishing Trawler Conversion Danlayers	A	(Y)	2·7		
M.M.S. Conversion Danlayers	C	20	0·85	11·46	
C.M.S. (N.C.) Conversion Danlayers	B	(Y)			
M.F.V. Danlayers	C	12	0·86	6·876	
I.M.S. (N.C.) Conversion Danlayers	C	(Y)			
M/S M.L. Conversion Danlayers	C	(Y)	0·55		
" Algerine " Class M/S	D	15	0·18	8·595	
Trawlers M/S	E	4	0·025	2·292	
C.M.S., Type 1 (N.C.)	E	6	0·025	3·438	
C.M.S., Type 2 (N.C.)	C	10		5·73	
C.M.S., Type 1 (M.M.S.)	E	4	0·025	2·292	
Auxiliary C.M.S., Type 2 (M.M.S.)	E	6		3·438	
I.M.S., Type 1 (N.C.)	F	2	—	1·146	
I.M.S., Type 2 (N.C.)	E	6		3·438	

SECTION "A"—TABLE OF OUTFITS AND STANDARD UNIT SETS—*contd.*

Class of Ship	Reference Letter of Handling Equipment. (*See* Section "B" for details of pertinent outfit)	No. of Standard Unit Sets of Danbuoys afld. (*See* Section "C" for details of equipment)	Wt. of Danning Outfit, Vote 8/II Equipment, Tons. (*See* X)		
			Handling Equipment, etc. Approx. (X)	Dan Unit sets	Total (X)
(1)	(2)	(3)	(4)	(5)	(6)
Outfit for Ships—contd.					
I.M.S., Type 1 (M.F.V.)	F	2	—	1·146	
Aux. M.S., Type 2 (M.F.Vs.)	F	4	—	2·292	
I.M.S., Type 1 (M/S M.L.)	F	2	—	1·146	
Auxiliary M.S., Type 2 (River Craft)	—	6 Pellet Dans with 1¾ cwt. Sinkers			
Destroyers with Sweep, W.T., Mark 1	F	4	—	2·292	
M/S H.Q. Ships	(Y)	(Y)			
Base Maintenance Outfit					
Ocean M/S Squadron .. .. }	Z	180		103·14	
Trawlers M/S Squadron .. .. }					
Coastal M/S Squadron	Z	120		68·76	
Inshore M/S Squadron	Z	60		34·38	

SECTION B—PART (I)—HANDLING EQUIPMENT—VOTE 8/III—PORTABLE FITTINGS

The fittings in this section are Vote 8/III items. They will be supplied for initial fitting by the Technical Department concerned without demand except where specifically stated to be Shipbuilder's Supply. Ships in Commission and Reserve requiring repairs or replacements are to obtain them by inserting an item in the Ship's Defect List.

2. The items are to be accounted for in the Departmental Officer's List of Portable Fittings. Vote 8/III Hull and ship fittings will not normally be stored at Minesweeping Bases.

Explanatory Notes

(*a*) Shipbuilder's Supply.

(*b*) Arrangement not yet approved.

(*c*) As necessary—*see* ship's drawings.

(*d*) Design not yet approved.

(*f*) *See* ship's drawings.

Dept. Responsible for supply	Description	List of Outfits (*see* Section A)																			
		"Isles" Class Trawlers		Trawler Conversions		"Cominas" Class Conversions		M.M.S. Conversions		M.F.V. Dualayers		"Inglesham" Class Conversions		M/S.M.L. Conversions		"Algerine" Class M/S		M/S H.Q. Ships "Sharpshooter"		N.C. Ocean M/S	
		No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks
	Vote 8/III Portable Fittings						(*b*)						(*b*)		(*b*)				(*b*)		(*d*)
D.N.C.	Winch with Warping drum.	2	Duty 1 ton Thos. Reid Drg. 3157	2	Duty 1 ton Thos. Reid Drg. 3157					1	5 cwt. Wisconsin double-barrelled diesel drive										
D.N.C.	Windlass ..							1	Existing Anchor Windlass used												

SECTION B—PART (I)—HANDLING EQUIPMENT—VOTE 8/III—PORTABLE FITTINGS—*contd.*

Dept. Responsible for supply	Description	List of Outfits (see Section A)																			
		"Isles" Class Trawlers		Trawler Conversions		"Coulston" Class Conversions		M.M.S. Conversions		M.F.V. Danlayers		"Ingleborn" Class Conversions		M/S.M.L. Conversions		"Algerine" Class M/S		M/S H.Q. Ships "Sharpshooter"		N.C. Quasi M/S	
		No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks	No.	Remarks
	Vote 8/III Portable Fittings—contd.																				
D.N.C.	Stowage for sinkers.	2	(f)	2	(a) (f)			2	(a) (f)	2	(a) (f)						(e)		(e)		
D.N.C.	Stowage rack for Danleaves	3	(f)	3	(a) (f)			1	(a) (f)												
D.N.C.	Stowage for elliptical floats.		(e)		(e)			2	(a) (f)						(e)						
D.N.C.	Chequered deck plates.		(e)		(e)				(e)		(e)				(e)						
D.N.C.	Wooden sheathing on ship's side.		(e)		(e)				(e)		(e)				(e)						

SECTION B—PART (II)—HANDLING EQUIPMENT—VOTE 8/IIA—PORTABLE FITTINGS

The stores in this section are Vote 8/IIA items which require Dockyard or other technical assistance to fit and install. They are to be demanded on Form D.184 by the Dockyard Technical Department concerned or in the case of New Construction or Conversion in Private Shipyards on Forms D.501 by the Overseers concerned. Ships requiring repairs or replacements are to insert an item to that effect in the Ship's Defect List.

2. Stores are to be accounted for as follows :—

Outfit items .. .. .. Stores are to be accounted for in the Ship's Departmental Officer's List of Portable Fittings.

Base Maintenance items .. Stores are to be accounted for in the Naval Store Account of the Base. Classification of items, where necessary (Permanent or Consumable) is shown by the suffix (P) or (C). Allowances are increased by 50 per cent. for Bases abroad.

Explanatory Notes

(*g*) The preparatory work necessary for the fitting of these items will be done by shipbuilder but the items may be supplied direct to bases for fitting and not necessarily to shipbuilders.

(*h*) M/S M.Ls. (Conversions) will be supplied with vice, Pattern 2955 (4½-in.) and not Pattern 2986.

(*k*) Already included in minesweeping outfits.

Pattern No.	Description	Weight each in lbs.	Outfit Reference Letter (*see* Section A)											Squadron Base Maintenance Outfit Z	Remarks
			A	B	C	D	E	F	G	H	J				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
—	*B.3* Fairleads, Sylvana		2												For "Isles" Class Danlayer Trawlers.
			2												For Trawler Danlayer Conversions.
					2										For M.M.S. Danlayer conversions.
					2										For M.F.V. Danlayers.

SECTION B, PART (II)—HANDLING EQUIPMENT—VOTE 8/IIA—PORTABLE FITTINGS—*contd.*

Pattern No.	Description	Weight each in lbs.	Outfit Reference Letter (*see* Section A)											Squadron Base Maintenance Outfit Z	Remarks
			A	B	C	D	E	F	G	H	J				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	B.5														
9203	Davits	*See* Note (X) in Section A.	2												
9204	Davits				1										For M.F.V. Danlayers—for lifting sinkers on to launching platform.
9205	Derrick				1										For M.F.V. Danlayers.
9206	Derricks, 1 ton		2												For "Isles" Class Danlayer Trawlers.
9207	Derricks, ½ ton		2												For Trawler Danlayer conversions.
9208	Derricks											2			For M/S H.Q. ships—outfit under consideration.
9289	Stump mast, w/swivel head and block.		2												For "Isles" Class Danlayer Trawlers.
9290	Stump mast, w/swivel head and block.		2												For Trawler Danlayer conversions.
9291	Stump mast, w/swivel head and block.				2										For M.M.S. Danlayer conversions.
9292	Stump mast											2			For M/S H.Q. ships—outfit under consideration.
9293	Gallows				2										For M/S.M.L. Danlayer conversions (as used for acoustic sweeps).
9294	Gallows					2									For "Algerine" Class M/S (for recovery on wings of bridge).

9 or 9185	Reel with brake (*g*) ..	56	4	4	2	2								1 (P)	Pattern 9185 for New Construction Coastal Minesweeper, Type 2 and for Type 1 when converted to Danlayer only.
5295	Fairleads (*g*)	—	As required												
8926	Block, snatch	37	As necessary for leading blocks of Davit or Derrick purchase ropes—if not already supplied.												
—	Purchase rope consisting of F.S.W.R. 1¼-in., length as required.														
—	Thimble, Pattern 5082, 1 in No.		Numbers as required to suit Davits or Derricks fitted.												
	Recovery hook rope, consisting of F.S.W.R. 1¼-in., length as required fitted with :—		3	3	2	2	2	1							
	Thimble, Pattern 5084 1 in No.														
	Spring Hook, Pattern 2181 1 in No.														
	Shackle, Pattern 5344 1 in No.														
	B.10														
4006	Eyeplates (*g*)		As required for leading blocks for weighing Dan Buoys (*f*)											10 (P)	
21	Oil Tanks	20	3	2	1										To be fitted with bracket stowage as required by ship's officers.
2986	Vices, parallel jaw, 6-in. (*g*)	112	1	1	1(h)	(c)									

SECTION B—PART (III)—HANDLING EQUIPMENT—VOTE 8/IIA—PERMANENT AND CONSUMABLE NAVAL STORES

The stores in this section are Vote 8/IIA items. For new construction ships' demands S.134 will be raised by the (Superintending) Naval Store Officer at the Warrant Yards. In ships in commission, new stores and replacements are to be demanded on Form S.134 by the ship's Storekeeping Officer. In ships in Reserve, demands are to be prepared in accordance with Reserve Fleet General Orders.

2. Stores are to be accounted for as follows :—

(*a*) *Components of Outfits.*—Permanent Stores are to be taken on charge in the Ship's Naval Store Inventory Account and issued, where appropriate, on Permanent Loan to the Departmental Officer.

Consumable Stores are to be issued outright to the Departmental Officer of the ship.

(*b*) *Components of Base Maintenance Sets.*—Stores are to be accounted for in the Naval Store Account of the Base. Allowances are increased by 50 per cent. for bases abroad.

Explanatory Notes

(*k*) Already included in minesweeping outfits.
(*m*) Not to be supplied if articles are already included in minesweeping outfit.
(*n*) Not required in vessels without battery charging facilities.
(*p*) British mine mooring wire 1 $\frac{1}{16}$-in., may be used for Base Maintenance for Ocean minesweepers only until stocks are exhausted.

SECTION B—PERMANENT NAVAL STORES

Pattern No.	Description	Weight each in air lb.	List of Outfit (*see* Section A)											Squadron Base Maintenance Outfit Z	Remarks
			A	B	C	D	E	F	G	H	J				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	B.5														
8722	Hook, recovery	5	4	4	2	(*k*)	2 (*m*)	1 (*m*)						10	
8735	Socket, for hook, Pattern 8722	2	6	4	4	(*k*)	4 (*m*)	2 (*m*)						20	
7805	Hook, Davey	48	3	2	2	(*k*)	1 (*m*)							5	
8748	Shackle, roller	30	*	*	*	*	*	*	*	*	*			5	As necessary for lead for Gallows or roller Fair-leads to warping drum.
	B.10														
1420	Creepers, iron, 6 lb. ..	6	—	1	1	1	(*k*)	1	—					10	
1421	Creepers, iron, 3 lb. ..	3	6	6	4	(*k*)	2 (*m*)	2						20	
1425	Creepers, iron, 10 lb. ..	10	1	—	—	—	—	—						5	
	B.11														
517	Bolt-croppers, 24-in. ..	6	1	1	1	1(*m*)	—	—						4	
	D.4														
1056	Bags, tool	2	2	2	2	(*k*)	1 (*m*)	1 (*m*)						10	
	F.1C														
2807	Voltmeter, 0–10 volts, portable.	1	(*n*) 1	(*n*) 1	(*n*) 1	(*k*)	—	—						2	
	F.3A														
498	Meters, Marine Distance, Stuarts.	1½	1	1	1	(*k*)	—	—						2	

SECTION B—CONSUMABLE NAVAL STORES

	B.5														
9085	F.S.W.R., 1½-in. fms.	1 fm. = 2 lb.	100	40	—	—	—	—						500	
9087	F.S.W.R., 1½-in., for making up danbuoy moorings of special lengths. fms.	1 fm. = 1 lb.	1,200	—	—	—	—	—						7,200 (*p*)	
	B.9														
5754	Hydrometers, "Guider" ..	5 oz.	(*n*) 1	(*n*) 1	(*n*) 1	(*n*) 1	(*n*) 1	(*n*) 1						6	
	B.10														
2181	Hooks, spring	1	3	3	3	3	2	2						15	
5444	Shackles, straight, screw, size ⅞-in.	2½	*	*	*	*	2	*						36	As required for leads of purchase, etc.
2096E	Springs, for hooks, Pattern 8722.	¼ oz.	8	8	8	(*k*)	2 (*m*)	—						½ gross	
5084	Thimbles, M.S., galvd. ..		8	8	8	(*k*)	4 (*m*)	—						36	

SECTION B—CONSUMABLE NAVAL STORES—*contd.*

Pattern No.	Description	Weight each in air lb.	List of Outfit (*see* Section A) A	B	C	D	E	F	G	H	J			Squadron Base Maintenance Outfit Z	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	B.11														
525	Blade, L.H. } Spare for croppers, bolt, Pattern 517.	½	1	1	1	1 (*m*)	—	—						4	
533	Blade, R.H. }	½	1	1	1	1 (*m*)	—	—						4	
	D.3														
C.3203	Rope, sisal, rot-proofed, 1-in. × 120 fms. .. coils	24	2	1	—	(*k*)	—	—						6	
C.3205	1½-in. × 120 fms. .. coils	60	2	1	1	(*k*)	1 (*m*)	—						6	
C.1446	Spunyarn, rot-proofed, Pads	28	2	2	1	(*k*)	1 (*m*)	—						10	
	E.3														
6951	Staves, boathook, 10-ft. ..	5	6	4	4	(*k*)	4 (*m*)	2 (*m*)						20	
	E.6														
95	Potash, solid, caustic, 84 per cent. pure .. lb.	—	(*n*) 28	(*n*) 14	(*n*) 7	(*n*) 3½	(*n*) 1¾	(*n*) 1¾						56	
	E.70														
564	Pans, acid, mixing	4	(*n*) 1	(*n*) 1	(*n*) 1	(*n*) 1 (*m*)	(*n*) 1 (*m*)	(*n*) 1 (*m*)						4	
	E.11														
106	Gloves, leather, pairs ..	½	18	12	12	12 (*m*)	8 (*m*)	4 (*m*)						72	

SECTION C—STANDARD DAN BUOY UNIT SET—SHIPS AND BASE MAINTENANCE ALLOWANCES—VOTE 8/IIA—PERMANENT AND CONSUMABLE NAVAL STORES

The stores in this section are Vote 8/IIA items. For new construction ships demands S.134 will be raised by the (Superintending) Naval Store Officer at the Warrant Yard. For ships in commission, new stores and replacements are to be demanded on Form S.134 by the ship's Storekeeping Officer. In ships in Reserve, demands are to be prepared in accordance with Reserve Fleet General Orders.

2. Stores are to be accounted for as follows :—

(*a*) *Components of Outfits.*—Permanent Stores are to be taken on charge in the Ship's Naval Store Inventory Account and issued, where appropriate, on Permanent Loan to the Departmental Officer.

Consumable Stores are to be issued outright to the Departmental Officer of the ship.

(*b*) *Components at Base Maintenance Sets.*—Stores are to be accounted for in the Naval Store Account of the Base. Allowances are increased by 50 per cent. for bases abroad.

Explanatory Notes

(*r*) The numbers shown should be doubled in vessels without battery charging facilities, one half of outfit being left ashore for charging at the Base.

SECTION C—PERMANENT NAVAL STORES

Pattern Number	Dan Buoy Unit Set — Description (including components which may be needed for rigging one dan buoy and a proportion of spares)	Number in Unit Set	Weight each in air lb.		Allowances comprising Squadron Base Maintenance Outfits — Ocean	Coastal	Inshore	Some typical outfits for ships (*see* Section A) — Number of Unit Sets allowed							Own ship's Outfits — Pouch in	Remarks — Quantities in Cols. 8 to 15 multiples of allowance in Column 3
					180	120	60	54	40	20	15	10	5			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	B.4														
21002	Anchors, boat, iron-stocked, 45–60 lb.	1	45–60		180	120	60	54	40	20	15	10	7		
	B.5														
8719M	Buoys, dan, steel	1·1	60		198	132	66	59	44	22	17	11	8		
8727	Chain, rigging, ⅜-in. × 2 fms.	1·25	21		225	150	75	68	50	25	19	13	9		

Section C—Permanent Naval Stores—*contd.*

Pattern Number	Dan Buoy Unit Set — Including components which may be needed for rigging one dan buoy and a proportion of spares. Description	Number in Unit Set	Weight each in air lb.		Allowances comprising Squadron Base Maintenance Outfit — Ocean	Coastal	In-shore	Some typical units for ships (see Section A)						Own ship's Outfit — Pencil in	Remarks — Quantities in Cols. 6 to 15 multiples of allowances in Column 3
					Number of Unit Sets allowed										
					180	120	60	54	40	20	15	10	7		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	B.5—contd.														
8717	Floats, elliptical	6·6	8		1188	792	396	356	264	132	99	66	46		
	Ropes, mooring, for dan buoys, fitted with thimbles, Pattern 5082 each end :—														
8796A	F.S.W.R., 1½-in. × 50 fms.	1·5	50		270	180	90	81	60	30	23	15	11		
8796B	F.S.W.R., 1½-in. × 20 fms.	1·5	20		270	180	90	81	60	30	23	15	11		
8796C	F.S.W.R., 1½-in. × 10 fms.	1	10		180	120	60	54	40	20	15	10	7		
8796D	F.S.W.R., 1½-in. × 5 fms.	1	5		180	120	60	54	40	20	15	10	7		
8796E	F.S.W.R., 1½-in. × 2 fms.	1	2		180	120	60	54	40	20	15	10	7		
8797	Sinkers, concrete, 1¾ cwt. ..	1·25	246		225	150	75	68	50	25	19	13	9		
8798	Sinkers, concrete, ¾ cwt. ..	1	112		180	120	60	54	40	20	15	10	7		Staves, Pattern 8734M are to be issued until stocks are exhausted.
9201	Staves for dan buoys	1·25	36		225	150	75	68	50	25	19	13	9		
	Wire, picking-up, 1½-in. × 4 fms. fitted 2-in. soft eye one end and 8-in. soft eye other end.	1	6		180	120	60	54	40	20	15	10	7		
	Span for elliptical floats, 1½-in. F.S.W.R. × 3 fms. fitted Thimble, Pattern 5082 one end, other end whipped.	1	4		180	120	60	54	40	20	15	10	7		
	* *B.10*														
246	Sinkers, iron, 5 cwt.	0·18	560		32	22	11	10	8	4	3	2	1		

	F.3.A														
8854	Lamp, electric	0·5	6¾		90	60	30	27	20	10	8	5	4		
8856A	Accumulators for lamp, Pattern 8854	0·75	4		135	90	45	(r) 41	(r) 30	(r) 15	(r) 11	(r) 8	(r) 5		
16402	Light, electric, flashing, for Dan buoy complete except for lamps and batteries.		18		90	60	30	27	20	10	8	5	4		This light is *NOT* to be issued to minesweepers until specific instructions to that effect are received.

Section C—Consumable Naval Stores

	B.4														
21022	Forelocks for boats anchors ..	0·5	2 oz.		90	60	30	27	20	10	8	5	4		
	B.5														
723	Grips, bulldog, for 1½-in. rope	2	3 oz.		360	240	120	108	80	40	30	20	14		
9087	F.S.W. rope, 1½-in. .. fms.	10	1 fm. = 1 lb.		1,800	1,200	600	540	400	200	150	100	70		
9131	Wire, seizing, ⅛-in. .. fms.	2	5 fm. = 1 lb.		360	240	120	108	80	40	30	20	14		
8971	Clamps, stave, dan	2·2	¼		396	264	132	119	88	44	33	22	15		
8719A	Plugs, gas thread	0·25	1 oz.		45	30	15	14	10	5	4	3	2		
8717A	Plugs, gas thread	1·7	½ oz.		306	204	102	92	68	34	26	17	12		
8866	Rings, I.R., for lamp, Pattern 8854.	1	½ oz.		180	120	60	54	40	20	15	10	7		
8719B	Screw, clamping, and lock nut	0·25	5¼ oz.		45	30	15	14	10	5	4	3	2		
	B.9														
100	Clips, G.M., with swivel ..	1·1	1½ oz.		198	132	66	59	44	22	17	11	8		
101	Clips, G.M., without swivel ..	1·1	4 oz.		198	132	66	59	44	22	17	11	8		
	B.10														
5342	Shackles, bow, screw, size ½-in.	3·3	¼		990	660	330	297	220	110	83	55	39		
5441	Shackles, straight, screw, size ⅜-in.	2·2	6 oz.		396	264	132	119	88	44	33	22	15		
5442	Shackles, straight, screw, size ½-in.	1·1	¼		198	132	66	59	44	22	17	11	8		
5082	Thimbles, M.S., Galvd. ..	2·2	4¼ oz.		396	264	132	119	88	44	33	22	15		

SECTION C—CONSUMABLE NAVAL STORES—*contd.*

Pattern Number	Description	Dan Buoy Unit Set: Number to Unit Set	Dan Buoy Unit Set: Weight each in air lb.		Allowances comprising Squadron Base Maintenance Outfits: Ocean (180)	Coastal (120)	In-shore (60)	Some typical outfits for ships (see Section A): (34)	(40)	(20)	(15)	(10)	(7)	One ship's Outfits — Vessel in	Remarks Quantities in Cols. 6 to 12 multiples of allowances in Column 3
		Including components which may be needed for rigging one dan buoy and a proportion of spares.			Number of Unit Sets allowed										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	D.4 Flags, Signal, Naval Code :—														
F.402	A														*Note.*—A maximum of four flags (total) may be demanded for each unit set carried. Danlayers should aim to have no fewer than fifteen of a kind, the number of patterns being adjusted as necessary. Other ships as order by S.O.
F.463	E														
F.453	G														
F.415	I														
F.413	L														
F.419	O (Oboe)	4	1		720	400	240	216	160	80	60	40	28		
F.460	R														
F.408	Y														
F.410	Z														
F.416	ONE														
F.417	TWO														
	E.3														
6949	Staves, boathook, 16 ft.	1·1	8		198	132	66	59	44	22	17	11	8		
	F.1A														
65081	Radar Flag DD							2							Allowances shown are at present only for each "Isles" class or trawler danlayer.
58509	Radar Flag A							2							
65083	Radar Flag B							2							
65082	Radar Flag C							2							
58511	Radar Flag D							2							
58518	Radar Flag F							2							
58513	Radar Flag H							2							
58517	Radar Flag (Oboe)								2						Allowances shown are at present only for each "Isles" class or trawler danlayer.
58506	Radar Flag 3								2						
58505	Radar Flag 8								2						
58512	Radar Flag AC								2						
	F.2A														
X.952204	Bulb, large, 2·4 volt	0·6	—		108	72	36	32	24	12	9	6	4		
1047A	Connections, terminal block	0·25	—		45	30	15	14	10	5	4	3	2		
16403	Lamp, white (For lantern flashing, Pattern 16402. (Not yet to be supplied.))														
16404	Lamp, red (For lantern flashing, Pattern 16402. (Not yet to be supplied.))														
16405	Lamp, green (For lantern flashing, Pattern 16402. (Not yet to be supplied.))														
	F.2B														
19192	Glass, dome (For lantern flashing, Pattern 16402. (Not yet to be supplied.))														
14092	Batteries (For lantern flashing, Pattern 16402. (Not yet to be supplied.))														
19173	Shades, glass, white (For lantern, Pattern 8854)	1·2	11 oz.		216	144	72	65	48	24	18	12	8		
19174	Shades, glass, green (For lantern, Pattern 8854)														
19175	Shades, glass, red (For lantern, Pattern 8854)														
		Total Max.: (Colours to be decided by Senior Officer).													

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
22nd February, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0083

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SECTION 2 - PERSONNEL

151.

MEDICAL - CARE OF HEARING - NECESSITY FOR WEARING EAR DEFENDERS.

The arrangements for issue of Ear Defenders are set out in the Victualling Manual, B.R. 93 (51), Appendix 62, III.

2. It has now become clear that in some cases permanent damage to hearing may result if ear defenders are not worn when the noise in a compartment exceeds a certain value (which can only be determined by the use of acoustic measuring instruments) and personnel have to remain in that compartment for a considerable time. As a practical guide, therefore, ear defenders are to be worn when the noise in a compartment is such that orders have to be shouted at a distance of 2-ft. and normal speech cannot be heard.

3. The provisions of the Victualling Manual are to be interpreted accordingly.

4. B.R. 93 (51) will be amended in due course.

(The foregoing is the unaltered text of A.F.O. 3388/1954.)

(4533/21/50)

152.

MEDICAL - TRICHLORETHYLENE - PRECAUTIONS FOR USE IN DEGREASING PLANTS, ETC.

Commercial trichlorethylene for use in degreasing is sold under a great variety of trade names. The vapour is narcotic and anaesthetic, and injurious to the eyes, the liquid causes dermatitis.

2. The following precautions are essential if cases of poisoning and fatalities are to be avoided :—

(a) Men employed in degreasing are to wear boots, P.V.C. bib and brace overall (or similar) and P.V.C. gauntlet gloves (the P.V.C. protective clothing should be wiped with a dry absorbent cloth from time to time to minimise very gradual deplasticising action of the solvent) ; the eyes are to be protected with Panorama Industrial Perspex Goggles, Pattern 5228.

(b) Unprotected personnel are to be denied access to degreasing plant, protected personnel, if they begin to feel drowsy, are to leave the affected area at once and proceed to the open air.

(c) Degreasing tanks are to have adequate mechanical exhaust ventilation and if cooling coils are fitted in the tanks these are to be fully operative. Trichlorethylene is to be poured from containers only under exhaust ventilation or in the open air. Although trichlorethylene is non-inflammable the vapour is decomposed by heat with the formation of the highly toxic gas, phosgene ; for this reason an open flame or smoking in the vicinity is to be forbidden, and notices to this effect are to be exhibited. Articles raised out of the degreasing tank are to be allowed to drain completely into it before being transferred elsewhere.

(d) When degreasing tanks have to be cleaned out the drain tank must first be thoroughly ventilated with an electric blower and on no account is any man to enter the tank without all the precautions for entry into confined spaces being observed. Personnel so employed are to be equipped with Breathing Apparatus, Pattern 230. As the hose may be permeable to trichlorethylene vapour the air is to be supplied under pressure ; a diving pump with suitable adapter made for the purpose may be used.

3. In cases of poisoning the following first aid instructions are to be followed :—

(a) The patient is not to be walked about as this may precipitate unconsciousness. He is to be removed to the fresh air, laid down and kept warm with hot water bottles. Mild cases will recover quickly when removed from the poisonous atmosphere.

(b) In severe cases with unconsciousness and cessation of breathing all the usual methods of recuscitation should be employed, particularly artificial respiration and admixture of oxygen.

(c) If the eyes are contaminated they should be irrigated immediately with the first clean water to hand followed by boric-saline solution as soon as this is available, and finally a non-irritant oil should be instilled.

(*d*) If trichlorethylene has been swallowed there is a grave danger to life and urgent action is necessary. The treatment is that for an irritant poison. An emetic should be given and the stomach washed out.

(*e*) In the simple cases of trichlorethylene coming in contact with the skin personnel are to be instructed to wash it off immediately and completely with soap and water.

(The foregoing is the unaltered text of A.F.O. 3389/1954.)

(4227/1/4)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

153.

EQUIPMENT - PRE-FLIGHT TESTS OF AIRBORNE RADIO AND NAVIGATIONAL EQUIPMENT - DETAILS.

Details of Pre-Flight Tests of Airborne Radio and Navigational Equipment for use by Observers and other rear cockpit aircrew are given in the Appendix to this Order.

2. These tests constitute a final "user" check of the serviceability of this equipment and are complementary to the Pilot's cockpit check.

3. It is appreciated that Observers do carry out a cockpit check and that these tests vary in detail with different aircraft. This Order is intended to standardize the procedure as far as possible.

4. Where controls for radio equipment are fitted in the Pilot's cockpit, serviceability checks of that equipment should be incorporated in the Pilot's cockpit check.

APPENDIX

Pre-Flight Tests of Airborne Radio and Navigational Equipment

1. *Before Entering Aircraft*

Whenever practicable, check security and cleanliness of all external units (e.g. Aerials, Connections, Radomes, etc.)

2. *Inside Aircraft*

(1) *Security.*—Check security of all units and cable connections.

(2) *Fuses.*—Check that serviceable spare fuses are carried.

3. *With Engine Running*

(1) *Inter-Communication*

(*a*) Check for serviceability.

(*b*) Check security of microphone and telephone leads and sockets.

(*c*) Check emergency inter-communication.

(2) *HF W/T and Voice Equipment (e.g. TR 5206, etc.)*

(*a*) Check morse keys for correct adjustment.

(*b*) Set up transmitter and receiver to frequency in use.

(*c*) Adjust receiver noise level.

(*d*) Where radio silence policy permits, carry out two-way communication check on frequency(ies) to be used.

(3) *Radar Equipment*

Where safe, and when radio silence policy permits :—

(*a*) Set up equipment and tune for echoes.

(*b*) Check that range marks are correct on all ranges.

(*c*) Check other controls for correct functioning. Reference should be made to relevant N.A.M.O./General/R.

(4) *I.F.F. (AN/APX-2)*

(*a*) Switch on and check that A.C. and D.C. supplies are on.

(*b*) Check that there is no interference on Radar Screen.

(*c*) Check interrogator for correct functioning.

(*d*) Switch off radar and I.F.F.

(5) *Navigational Equipment (A.D.R.I.S.)*

(*a*) Check alignment of compasses, check variation set to zero.

(*b*) Carry out functional tests of A.P.I., G.P.I. and W.F.A.

(*c*) Set up counters to required readings.

(*d*) Set on variation and deviation for first course *either* at Compass *or* at A.P.I.

(*e*) Switch off A.P.I., G.P.I. and W.F.A.

(6) *A/S Equipment (Sonobuoy Receiver)*

Carry out functional check for type of receiver in use.

(The foregoing is the unaltered text of A.F.O. 31/1955.)

(4519/51/207)

154.

CABLES, GLANDS AND WIRING - MODIFICATION TO CABLES A.Ps. 13460, 13461 AND 13580.

Attention is drawn to the existence of a revised specification for cables A.P. 13580, 13460/1.

This specification is an addition to Table 5 Standard Electrical Specification No. 17, Part VI, and an abbreviated table of details is appended.

2. Cable, A.P. 13461, which has been the subject of a number of complaints of inadequate strength is now provided with conductors of 14/·0076 instead of 7/·0076, and the two screened cores are screened individually instead of collectively, thereby permitting the cable to be manufactured without any increase in overall diameter.

3. The three cables, A.Ps. 13460/13461/13580 are now provided with p.v.c. insulation and sheathing as experience has shown this to be a more satisfactory medium for microphone leads and similar services.

Cable A.P. No.	*Conductor Size*	*Details of Screen*	*Diameter over laid up cores*	*Radial Thickness of p.v.c. Sheath*	*Nominal Diameter over sheath*
13460	14/·0076	Tinned copper braid (over pair).	0·168	0·04	0·287
13461	14/·0076	Tinned copper braid (over core).	0·23	0·04	0·325
13580	14/·0076	Tinned copper braid (over core).	0·28	0·04	0·375

(The foregoing is the unaltered text of A.F.O. 3320/1954.)

(4518/13/225)

155.

TRANSMISSION SYSTEMS - MAGSLIPS - LACK OF FREEDOM OF BRUSHES.

Reports from Sea indicate that occasional faulty operation of transmission chains in Fire Control, Radar and other systems, has been traced to individual magslips.

2. Inspection of defective magslips has revealed that the faults are predominantly due to lack of freedom of the brushes in the terminal mouldings.

3. Design requirements provide for the following dimensions and tolerances :—

3-in. Elements—Brush Diameter 0·187-in. $^{+0}_{-0\cdot003}$-in.
Brush Hole Diameter 0·189-in.
(Drill No. 12)

2-in. Elements—Brush Diameter 0·126-in. $^{+0}_{-0\cdot003}$-in.
Brush Hole Diameter 0·1285-in.
(Drill No. 30)

4. Where brush trouble is suspected, these dimensions should be checked, and the holes reamed out to the appropriate size. The terminal moulding must be removed before reaming to avoid the possibility of swarf entering the magslip.

5. If the slip rings are discoloured, they should be cleaned with a dry fine linen cloth, no abrasive material being used.

6. There is at present no evidence to indicate that brush wear is significant over a long period, nor that the brush springs lose tension. Distortion of the springs due to mishandling can, however, produce similar symptoms to lack of freedom of brushes.

(The foregoing is the unaltered text of A.F.O. 3405/1954.)

(4518/12/92)

156.

NAVAL STORES (GENERAL) (CLASS B, GROUP 5, PART B) - MINESWEEPING AND PARAVANE TOWING EQUIPMENT - REDUCTION OF THE NUMBER OF PATTERNS IN THE RATE BOOK AND AUTHORIZED LIST OF NAVAL STORES.

A.F.O. 560/54 (*title as above*) is to be *amended* as follows :—

Delete. Paragraph 5.

Insert. New paragraph 5 as follows :—

" 5. Cutters, Pattern 8871, will in future be described as complete in box. Box Pattern 8862, has therefore, been made obsolescent."

(The foregoing is the unaltered text of A.F.O. 46/1955.)

(4505/51/88)

157.

NAVAL STORES (TECHNICAL) (CLASS F, GROUP 1A/1) - OBSOLETE W/T STORES - DISPOSAL.

Dockyards, Naval Store Depots, H.M. Ships (including Submarines) and Fleet Establishments at Home and Abroad.

The stores detailed in the Appendix to this Order are now obsolete. Any stocks on board H.M. Ships and in Fleet Establishments are to be returned to the nearest (Superintending) Naval Store Officer for disposal with any stocks already held, as surplus to requirements, in accordance with existing instructions.

2. No items referred to herein require mutilation, for security reasons, before disposal.

3. Items marked * carry embodiment loan components. Care is to be taken to ensure that any of these components likely to be of future service are withdrawn and taken on charge as separate items.

4. The appropriate publications will be amended.

APPENDIX

Pattern No.	*Description*	*Pattern No.*	*Description*
W.1638/A	Inductance	65513	Spring Set
W.3431/A	Box of Spares	65651-3	Connection
54118	Transformer	65698-700	Connection
54736	Brakes for Dial	65748	Cabinet
56218	Oscillator G.220	65749	Stand
56222	Amplifier M.85	65750-1	Cabinet
57159	Transformer	65752	Stand
57521	Supply Unit	65804	Brush, Carbon
58756	Thermostat	65867	Scale
59478	Switch	66085	Connection
59511	Adapior	66106	Connection
59894	Oscillator G.227	66134	Box of Spares
59895	Rod, Aerial	66135	Spring
60259	Can, Screening	66140	Connection
61737	Connector	66273	Cable form
65380	Connection	*67632	Cabinet Assembly
65474-5	Transformer	67687-8	Cabinet Assembly
65478	Connection	67689	C.R.T. Unit
65498-9	Switch Unit	*67928	Receiver, P.117
65500-01	Box, Junction	100917	I.F.4 Unit

(The foregoing is the unaltered text of A.F.O. 3364/1954.)

(4519/11/932)

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C.N.Os. 158-177/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
1st March, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0066

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SECTION 1 - ADMINISTRATIVE AND GENERAL

158.

ADMINISTRATION, ACCOUNTING AND EQUIPPING OF NAVAL AIRCRAFT, POWER PLANTS AND AERO-ENGINES. (SHORT TITLE: A.E.N.A.).

Navy Order 22 of 1953 is to be amended as follows :-

Delete existing Chapter X and insert the following in lieu :-

POWER PLANT AND ENGINE STANDS AND CASES - ACCOUNTING AND RETURNS :

(1.) Accounting.-

(a) All cases and stands, including associated adaptor sets and back plates, for power plants and aero-engines, under Section 40B of the R.A.F. vocabulary are purchased under Treasury Vote for Aircraft and Aero-Engines Purchase (corresponding to Admiralty Vote 8/III) and are under the control of the Air Equipment Authority. Certain items which do not bear R.A.F. vocabulary Section 40B identity are also included, details of which will be issued separately by the Air Equipment Authority.

(b) Accounting for the above items held by units is the responsibility of the Custodian.

(c) Cases and stands are to be accounted for by the Custodian on Forms A.A.53 enclosed in binders A.S.155.

(d) Cases or stands lost, destroyed or damaged beyond repair are to be dealt with on Form A.S.126, prepared by the Custodian who is to retain one copy to support a provisional adjustment of his account. The Commanding Officer is to obtain, through the Air Equipment Authority, covering Naval Board approval for the write-off of the items.

(e) Transfers of cases and stands between units are to be made on Forms A.A.11. In addition, details are to be entered of adaptors fitted on transfer of -

(i) Power plants fitted to stands;
(ii) Engines in cases;
(iii) Spare power plant stands;
(iv) Spare engine cases.

If no adaptors are fitted, this is to be indicated.

(f) Stands under vocabulary Section 40 are dealt with as Air Stores.

(2.) Returns.- Details of all power plant and engine cases, stands and associated equipment held are to be reported on Forms A.A.10a, which are to be rendered monthly together with Forms A.S.10. Details required on Forms A.A.10a are -

(a) Cases and stands held, showing -

(i) Numbers in use;
(ii) Numbers spare;
(iii) Numbers fitted with adaptors, quoting types of adaptors.

(b) Adaptors fitted to equipment held, e.g. -

Item	In use	Spare	Remarks
40B/929	8	4	4 in use fitted with 938 4 in use fitted with 945 2 spare fitted with 945 2 spare unfitted
40B/950	3 sets	1 set	2 sets fitted to 934 1 set fitted to 949

NOTES:- (i) For cases and stands, "in use" means "being used to hold a power plant or engine". For adaptors and propeller shaft supports "in use" means "fitted to cases or stands, whether the cases or stands are in use or spare".

(ii) For cases, stands and propeller shaft supports, the unit of quantity is number. For adaptors, the unit is set.

(c) Despatches and receipts, for which purpose Custodians are to maintain appropriate records.

(d) Any miscellaneous equipment not shown on Forms A.A.10a.

(e) Nil holdings.

(4404/52/56)

SECTION 2 - PERSONNEL

159.

A.B.R.10/1953 - R.A.N. ADVANCEMENT INSTRUCTIONS - AMENDMENT.

Approval has been given for A.B.R.10/1953 to be amended as follows :-

Appendix 92 (B) (i) line 3.

Delete the words "as Regulating Petty Officer" and insert the following words in lieu "in the Regulating Branch".

Appendix 93 (B) (i).

Delete the words "including one year's sea-going service".

2. A.B.R.10 will be amended by R.I. series in due course.

(4008/4/94)

160.

DUTIES - TELEPHONE EXCHANGE OPERATORS IN SHIPS.

A ship's main Telephone Exchange is to be operated at all times, including ACTION, by seamen.

2. Provision will be made in the next issue of the Revised Quarter Bills, accordingly.

(The foregoing is the text of A.F.O. 2242/1954 altered to meet R.A.N. conditions.)

(4002/52/37)

161.

INSTRUCTIONAL FILMS AND FILM STRIPS - SA583 - "DAILY INSPECTION OF NAVAL AIRCRAFT - SEA VENOM" (PARTS 1-2) - DISTRIBUTION.

Copies of the new film strip SA583, "Daily Inspection of Naval Aircraft - Sea Venom" (Parts 1-2), are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments	No. of Copies
R.A.N. Air Station, Nowra, for School of Aircraft Maintenance (Engineering).	1
Director of Aircraft Maintenance and Repair, Navy Office.	2 (with 7 copies of Training Guide).

2. Details of the strip are as follows :-

Part 1. Before Flight Inspection (Pilot's Mate) 41 frames.

Part 2. Daily, Daily*, Daily** and Daily*** Inspections (Pilot's Mate). 95 frames.

This strip is a guide to carrying out the Before Flight and Daily Inspections on Sea Venom Mark 20 aircraft, clearly illustrating each item of the inspection. The classification is "Restricted".

(The foregoing is the text of A.F.O. 2827/1954 altered to meet R.A.N. conditions.)

(4518/61/442)

162.

JEWISH SACRED FESTIVALS - 1955.

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 :-

Festival of Passover	- 7th April to 14th April, 1955. inclusive.
Festival of Pentecost	- 27th and 28th May, 1955.
New Year	- 17th and 18th September, 1955.
Day of Atonement	- 26th September, 1955.
Festival of Tabernacles	- 1st and 2nd October and 8th and 9th October, 1955.

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 the officers and ratings in question.

4. Navy Order 98 of 1954 is hereby cancelled.

(4022/1/136)

(This Order will be reprinted for posting on Notice Boards.)

163.

R.A.N. CENTRAL CANTEEN AND RELIEF FUND - COMMITTEE MEETING.

With reference to Navy Order 62 of 1954, a meeting of the Central Canteen Fund Committee was held at Navy Office, Melbourne, on Thursday, 4th November, 1954.

2. The following were present :-

Acting Captain R.I. Peek, O.B.E., D.S.C., R.A.N. - Director of Personal Services.

Captain (S) P. Perry, O.B.E., R.A.N. - Director-General, Supply and Secretariat Branch.

Captain (S) E.D. Creal, R.A.N. - Representing F.O.C.A.F.

Commander (S) E.H. Currey, R.A.N. - Representing C.S.T., F.N.D.

Lieutenant-Commander H.A.E. Cooper, R.A.N. - Representing F.O.I.C., E.A.

Chief Petty Officer R.J. Fleming, O/N. 14237 - Flinders Naval Depot.

Chief Petty Officer N. Toose, O/N. 20631 - Shore Establishments, Sydney.

Petty Officer R.J. Gill, O/N. 28565 - Representing Destroyers.

Petty Officer Air Fitter J.R. Elliot, O/N. A.35386 - Representing Carriers.

A/Petty Officer V.N. Smith, O/N. 34925 - Representing Frigates.

Leading Stores Assistant D.R. Papadopoulos, C/N. 29822 - R.A.N. Air Station, Nowra.

Commander (S) A.L. Freer, V.R.D., R.A.N.R. - Secretary.

3. Acting Captain R.I. Peek in the chair opened the meeting and the Committee proceeded to the following items appearing on the Agenda :-

(A) CINEMA EQUIPMENT FOR NEW SHIPS.

After discussion it was decided not to recommend any change in existing policy.

(B) HONORARIUMS FOR CANTEEN SERVERS.

It was noted that honorariums paid varied from ship to ship. The desirability of laying down standard rates was discussed but it was felt that as conditions and hours of service differed in each canteen the amount to be paid should be decided by the Welfare Committee concerned.

(C) ESTABLISHMENT OF A NAVAL HEALTH BENEFITS SOCIETY.

The proposal was carefully considered and all representatives made a contribution to the discussion. It was moved by Petty Officer Gill, seconded by Chief Petty Officer Toose that this Committee recommend that a Naval Health Benefits Society be formed and that the Central Canteen Fund make a grant of £15,000 to the Society - Carried.

The Committee noted that the Army had included Civilian Officers of the Department in their Scheme and a discussion on the practicability of a similar arrangement within the Navy Scheme led to the conclusion that there were administrative difficulties which the Committee were unable to resolve. It was not known if Civilian Officers desired inclusion and it was decided that the Chairman make enquiries and recommendations on behalf of the Committee.

The Committee also requested that full details of the Scheme be promulgated by Navy Order as early as practicable.

4. A request for additional financial assistance was received from the R.A.N. Relief Trust Fund Committee.

It was moved by Acting Captain Peek, seconded by Chief Petty Officer Fleming that this Committee recommend that the annual grant to the R.A.N. Relief Trust Fund be increased by £5,000 a year, i.e., to £10,000 a year, commencing with payment due on 1st November, 1954.

5. The Chairman informed representatives that proposals regarding amenities to be undertaken by the Central Canteen Fund, e.g., building of clubs, cinemas, etc., should be forwarded in time for inclusion in the Agenda of the next meeting of the Committee and that at that meeting the Committee should be prepared to recommend an order of priority for such projects as may be accepted.

(3238/3/25)

164.

SCHOOLS OF AIRCRAFT MAINTENANCE.

Navy Orders 113 and 274 of 1953 are to be amended as follows :-

For "R.A.N.A.S. Schofields" read "R.A.N.A.S. Nowra".

For "Captain (Air)" read "F.O.I.C., E.A.".

(5073/64/13)

165.

THE CHARTERED INSTITUTE OF SECRETARIES - CONCESSION TO OFFICERS OF THE ROYAL AUSTRALIAN NAVY.

The Chartered Institute of Secretaries is a professional association of qualified secretaries of joint-stock companies and other public bodies. One of its objects is to exercise professional supervision over its members and to secure for them professional standing to assist in the performance of their duties. Its membership is comprised of chartered secretaries who may be either Fellows (F.C.I.S.) or Associates (A.C.I.S.).

2. Gentlemen seeking membership must possess certain minimum qualifications, become registered students of the Institute and pass its intermediate and final examinations in professional subjects.

3. To assist Officers of the Royal Australian Navy in following a secretarial career on retirement from the Service, the Council of the Institute has decided to admit them as registered students and to grant exemptions from the subjects English, Accountancy and Company Law in the Intermediate Examination to the following Officers if holding the qualifications prescribed below -

Executive Officers.

(a) Passing of destroyer command examination, or

(b) Specialisation in Gunnery, Torpedo and Anti-Submarine, Communications, Navigation or Navigation and Direction, or Submarine duties, or qualification as Pilot or Observer.

Supply and Secretariat Officers.

Qualification in the Supply and Secretariat Advanced Course or earlier equivalent, or, for officers of earlier seniority, qualification in the professional examination for the rank of Paymaster Lieutenant-Commander/Lieutenant-Commander (S).

Engineer, Electrical and Instructor Officers.

Promotion to Lieutenant-Commander's rank.

Officers of any Branch.

Passing Staff Course.

4. Officers possessing the above qualifications will be required by the Institute to pass only in the subjects General Principles of English Law, Economics, and Secretarial Practice in the Intermediate Examination before proceeding to the Final Examination.

5. Full particulars of the objects, qualifications for membership and the examination regulations of the Institute may be obtained direct from Mr. A.E. Dent, F.C.I.S., Australian Secretary, The Chartered Institute of Secretaries, Australian Branch, 19 Bligh Street, Sydney, N.S.W.

(The foregoing is the text of A.F.O. 1964/1954 altered to meet R.A.N. conditions.)

(3131/71/6)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

166.

SAFETY EQUIPMENT - HEAD-SET, TELEPHONE SOCKET, TYPE 626 - PROVISION OF RETAINING POCKET.

With the introduction of the short, quick release head set connector for aircraft fitted with static seats, it is necessary to provide a fabric pocket to retain the socket, Type 626 (Ref. 10/H18574) which terminates the connector, Type 3518 (Ref. 10HA/8679).

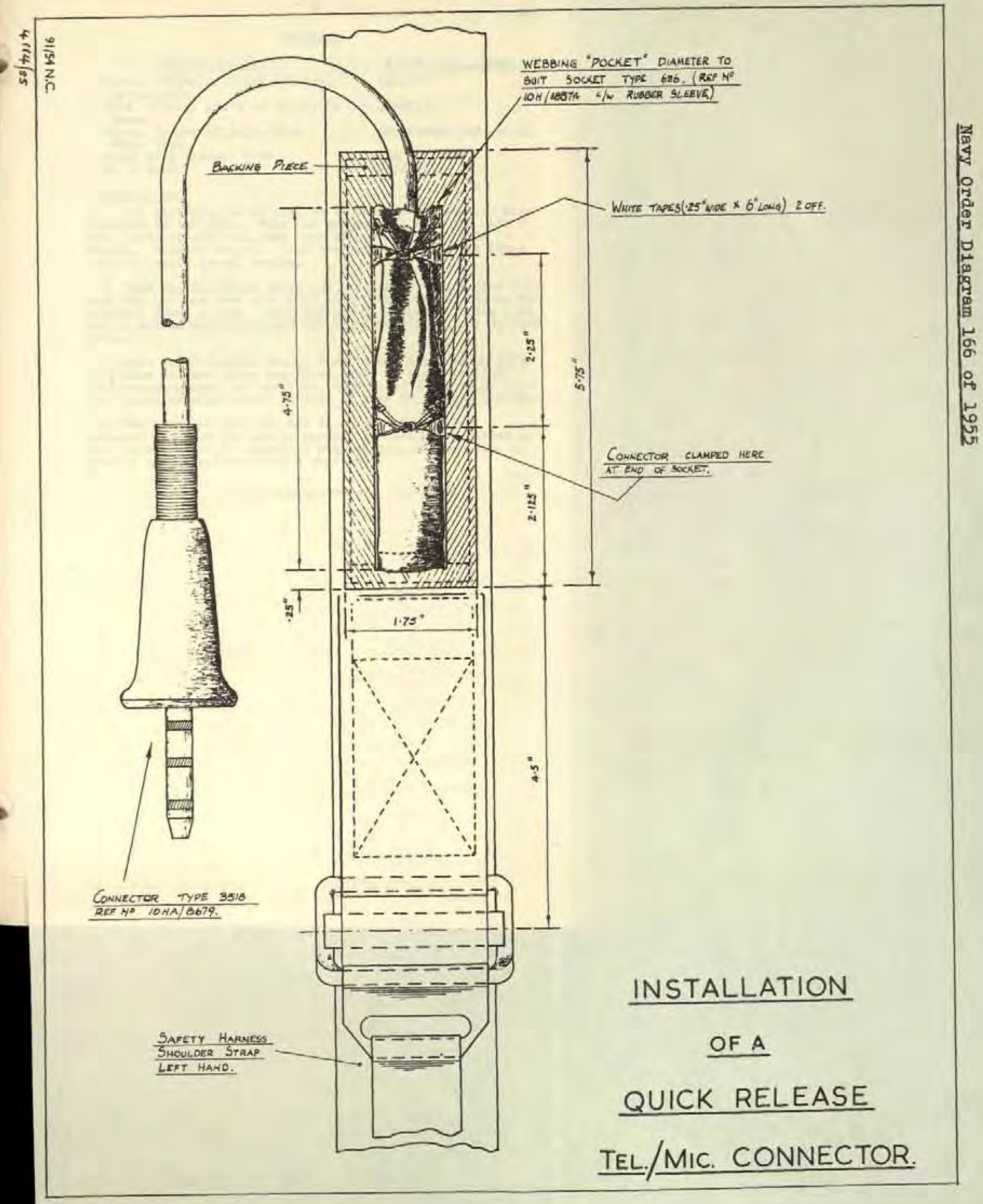
2. Pockets should be manufactured in the Safety Equipment Sections of H.M.A. ships and R.A.N. air stations as required.

3. The pocket should be attached to the port shoulder strap of the safety harness by the securing tapes, about 4½ inches above the adjustment buckle.

4. Instructions for manufacture are contained in the Appendix to this Order and in Navy Order 166 of 1955 Diagram.

(The foregoing is the text of A.F.O. 2901/1954 altered to meet R.A.N. conditions.)

(4519/52/22)



APPENDIX

Stores Required	Stores Ref. Number
6½-in. length of light webbing, 1¾-in. wide	15A/116
6-in. x 3-in. piece of Willesden Green	32B/111
14-in. length of ¼-in. wide white tape	Stationery Code 60/43
Khaki silk thread, 8 lb.	15A/511
No. 8 Cord	15A/108

Construction

All stitching to be done on a machine regulated to nine stitches to the inch. Take the webbing and turn the ends over ½-in. at each end, sew down with 8 lb. khaki silk thread. Measure in ½-in. from each side and draw two lines down the whole 5½-in. length.

2. Take the Willesden Green and turn the two ends over ½-in. each end and sew down with 8 lb. khaki silk thread making the material 5-in. x 3-in. Take the 14-in. length of white tape, cut in halves and lay across the light webbing to act as draw cords.

3. Take the Willesden Green, turn in the 3-in. width ¼-in. each side and sew along the lines drawn on light webbing, thus securing down the two 7-in. lengths of ¼-in. white tape. Tie figure of eight knots in ends of tape to prevent fraying.

4. The complete unit can now be secured to the left shoulder strap of the safety harness by making one stitch of No. 8 cord, ½-in. in length at each corner, and securing at back of shoulder strap with a reef knot.

167.

AIRCRAFT RADIO - RADIO MODIFICATIONS (AIR) - INTRODUCTION OF NEW TYPE MODIFICATION LABELS.

A new type of modification label has been devised and will be introduced as follows :-

(a) On all new radio equipment during production.

(b) On such current radio equipment as may be decided by the Australian Naval Aircraft Modifications Committee. The introduction of the new modification label on these equipments will denote a certain modification standard which must be satisfied before the new label is fitted. This standard will be detailed in the relevant modification leaflet.

2. The system comprises a gridded label numbered 1-12 or 1-25. The incorporation of any modification subsequent to the fitting of the modification label will be recorded by striking off the appropriate number as detailed in relevant leaflet. The label may be detachable or engraved, dependent upon the space available. Each sub-assembly will have its own modification labels, which will be duplicated on the main equipment chassis and on the outside of the equipment package.

(The foregoing is the text of A.F.O. 3040/1954 altered to meet R.A.N. conditions.)

(4519/51/179)

168.

WIRELESS - CONTROL OUTFIT KHH - FITTING-OUT INFORMATION.

A.S.R.E. Installation Specification No. B.804 has been prepared to show the fitting and wiring of Wireless Control Outfit KHH.

2. Distribution will be made by Australian Commonwealth Naval Board in due course without demand to the Authorities concerned.

3. Any advance fitting-out drawings, etc., which may have been distributed, are superseded by this specification and should be disposed of as confidential waste.

(The foregoing is the text of A.F.O. 3168/1954 altered to meet R.A.N. conditions.)

(4519/11/907)

169.

AIRCRAFT - PYROTECHNICS - KF 017 MATCHES, WATERPROOF, SAFETY, NO. 1, MARK 1 - ADHESION OF INNER AND OUTER CYLINDER.

It has been reported that the match composition applied to the inside of Containers No. 38 can be applied in such a manner as to cause the inner and outer cylinders to become stuck together and difficult to separate.

2. Users are to examine all Containers No. 38 (which hold 30 Matches, Waterproof, Safety, No. 1, Mark 1) in dinghy or emergency packs at the first opportunity and to examine all others before they are fitted into packs. Any found to be defective due to the inner cylinder failing to withdraw easily from the outer cylinder when the screwed cap is removed are to be returned to R.A.N. Armament Depots for disposal.

3. *R.A.N. Armament Depots.*- Containers are to be similarly examined prior to issue and packages marked accordingly, quoting this Order.

4. The following notation should be made in Restriction List (B), Sheet 309 :-

Column 1	2.
Column 2	Matches, waterproof, safety, No. 1, Mark 1(A).
Column 3	All.
Column 4	Examine containers No. 38 to ensure easy withdrawal of inner container from outer container.
Column 5	Dispose of defective containers.
Column 6	Navy Order 169 of 1955.

(The foregoing is the text of A.F.O. 3322/1954 altered to meet R.A.N. conditions.)

(4443/7/9)

170.

INTRODUCTION OF STORE REFERENCES FOR NAVAL ARMAMENT STORES - REPRINTING OF PART II (AMMUNITION) OF THE VOCABULARY OF NAVAL ARMAMENT STORES (C.U. 5365B).

Part II (Ammunition) of the Vocabulary of Naval Armament Stores is being reprinted in a revised form as B.R.1837(7) and (8).

2. Prices will not be shown in the new vocabulary.

3. Parts 7 and 8 of the Vocabulary will be arranged in Divisions as follows :-

Part 7.	Division J.	Gun and Small Arms Ammunition and associated stores.
	Division K.	Naval Aircraft Explosives and associated stores.
	Division L.	Pyrotechnics and miscellaneous magazine stores.

Part 8. Division M. Ammunition components and Bulk Propellants.
Division N. Naval Aircraft items not issued to the Fleet.
Division O. Miscellaneous magazine stores not issued to the Fleet.
Division P. Packages and their components.

Divisions H and Q remain unallocated for the present.

4. Part 8 will not be issued to the Fleet, but Part 7 is being issued on a selective basis according to the armament of ships. After notification of distribution has been promulgated Explosive Accounting Officers are to ensure that they have received those sections of Divisions J, K and L relating to their ship's armament.

5. When a change in ship's armament is made any Vocabulary Sections held which are no longer applicable to the armament mounted are to be returned to the (Superintending) Naval and Air Store Officer, Sydney, and sections appropriate to the new armament demanded in lieu.

6. The sections of each division are as follows :-

Division J

Section JA. Cartridges, B.L.
JB. Cartridges, Q.F. (S.L.)
JC. Shell, Projectiles and Shot, B.L.
JD. Shell, Projectiles and Shot, Q.F. (S.L.)
JF. Cartridges, Q.F. (F.A.), 4.5 in. Guns
JG. Cartridges, Q.F. (F.A.), 4-in., Mark 19 Guns
JH. Cartridges, Q.F. (F.A.), 4-in., Mark 16* and 21 Guns
JJ. Cartridges, Q.F. (F.A.), 4-in., Mark 5-5C Guns
JK. Cartridges, Q.F. (F.A.), 4-in., Marks 12, 12* and 22 Gun
JL. Cartridges, Q.F. (F.A.), 4-in., Mark 23 Guns
JP. Cartridges, Q.F. (F.A.), 3-in. Guns
JQ. Cartridges, Q.F. (F.A.), 6-pdr. Guns
JR. Cartridges, Q.F. (F.A.), 3-pdr. Guns
JS. Cartridges, Q.F. (F.A.), 40 mm. Guns
JT. Cartridges, Q.F. (F.A.), 2-pdr. Guns
JW. Cartridges, 30 mm., Aden Gun
JX. Small Arms Ammunition
JY. Fuzes and Tubes
JZ. Blank Ammunition

Division K

Section KA. Aircraft Bombs, H.E. and Practice
KB. Aircraft Bomb Components
KC. Implements and Tools for Aircraft Bombs
KF. Aircraft Pyrotechnics

Division K (Cont'd.)

Section KG. Aircraft Pyrotechnic Components
KJ. Cartridges, Engine Starter, Power Cartridges and Miscellaneous Aircraft Explosives
KK. R.A.T.O.G., 5-in. and Components
KL. Aircraft Rocket Ammunition, 3-in.
KM. Components of 3-in. Motors and Heads
KS. Tools for Aircraft Rocket Ammunition
KW. Smoke Screening Stores and their Components
KX. Smoke Curtain Installations Gear
KZ. Drill and Instructional stores (other than those in Section LX)

Division L

Section LA. M.L. Mortar, 3-in. Ammunition
LB. M.L. Mortar, 2-in. Ammunition
LC. Rocket Ammunition, 3.5 in.
LD. Rocket Ammunition, 2-in.
LG. Submarine Signalling Stores
LH. Ships' Pyrotechnics
LL. Grenades and Bombs
LM. Lachrymatory Stores
LP. Smoke Stores
LT. Line Throwing Gear
LW. Paints, Compositions, etc.
LX. Drill and Instructional Stores.
LY. Implements Ammunition, Tools and Package Keys
LZ. Cox Gun Equipment

7. A supply description, which includes a Store Reference, has been devised for every distinctive item or group of items that may need to be supplied to meet a particular requirement.

8. The Store Reference is in the form of two letters followed by three digits and a condensed description of the store, e.g. -

"J.H. 147 Cartridges 4" H.E."

meaning Cartridges, Q.F. (F.A.), 4-inch Marks 16* and 21 guns, H.E. Shell, filled M.N.P./S or N.F./S, Marks 7B, 9B or 22B fuzed No. 211.

9. The Store Reference Number comprises the two letters and three digits only.

10. After the issue of a section of the Vocabulary, the full supply description of the items contained therein is to be used in R.A.N. Armament Depot Ledgers, folios being arranged in Vocabulary Order.

11. The existing generic headings will continue to be used in Naval Proportion Books, Ships' Warrants and Gunners' Ledgers. This will retain simplicity in ships' accounting, and obviate bulkiness in the documents themselves. In entering receipts and issues in their ledgers, however, Gunners are to note in manuscript the Store Reference Number appropriate to the stores concerned in each entry, to facilitate their general supply work.

12. Divisions J and K have already been distributed. Store Reference Numbers for items in Division J have been in use since 1st April, 1954; those for Division K will be used as from 1st January, 1955. The Store Reference Number will be used in all vouchers and other accounting documents, and also in official correspondence, unless for particular reasons it is necessary to use the full Supply Description. The dates on which the Store Reference will be used for other Divisions will be promulgated later.

13. Amendments to the Vocabulary will be notified in the "P" series of A.F.Os.; a separate A.F.O. "P" being issued for each section of each division. Each reprinted page in the Vocabulary is endorsed with the month and year of issue, while a State of Report showing the current pages is issued for each Division whenever complete pages are reprinted. In order to facilitate checking of manuscript amendments, a Summary of Amendments showing the latest amendment and corresponding A.F.O. "P" number for each section is printed on the reverse of the State of Report.

14. The Store Reference Number alone will in due course be used in all signals between Navy Office, Naval Armament Depots and H.M.A. Ships as may be found expedient. This procedure will not be introduced until all Vocabulary Divisions J to L inclusive have been issued and will not apply to Underwater Weapons ammunition, the code for which has been issued separately. The Store Reference Number is not to be used alone for any other purpose.

15. The extent to which Store References will be marked on Naval Armament Stores and their packages is under consideration. For the time being existing markings will be unaltered.

16. Navy Orders 95 and 794 of 1954 are hereby cancelled.

(The foregoing is the text of A.F.O. 2904/1954 altered to meet R.A.N. conditions.)

(4433/1/669)

171.

AMMUNITION - VOCABULARY OF NAVAL ARMAMENT STORES - B.R.1837, PARTS 7 AND 8.

Division L of B.R.1837, Part 7, (Vocabulary of Naval Armament Stores), has now been distributed and the Store References for items therein are to be used as from 1st June, 1955.

2. Paragraph 12 of Navy Order 170 of 1955 is relevant.

(4433/1/746)

172.

FLUORESCENT FITTINGS - SIEMENS TYPE STARTER BALLAST UNITS - RECLASSIFICATION.

The Siemens Type Starter Ballast Units for Fluorescent Fittings are to be dealt with in future as Permanent Naval Stores.

2. Spare units held should be transferred to permanent ledger charge in accordance with Article 109 of B.R.4, Naval Storekeeping Manual.

(4518/22/238)

173.

NAVAL STORES (AIR) - PORTABLE DEADWEIGHT TESTER REF. 6C/1130.

The undermentioned permanent store is hereby introduced -

Description	Stores Reference Number
Portable deadweight tester, combined low and high pressure model, Type 2110 - Range 1 to 8000 P.S.I.	6C/1130

2. One tester, Ref. 6C/1130, will be allowed to each Aircraft Carrier and Air Station.

3. The tester replaces the calibrator, pressure gauge, Ref. 6C/656. This instrument is modified to the range 1 to 8000 P.S.I. by the embodiment of modification Inst. A/202, and is then re-referenced as 6C/1130. Arrangements will be made for the modification to be embodied on a pool basis, and Services already supplied with Calibrator, Ref. 6C/656, will have this instrument replaced by Ref. 6C/1130 by the R.A.N. Air Store Depot, Randwick, when stocks of the latter item become available.

4. The Instrument Manual (A.P.1275A) and Air Stores Establishments (A.P.(N) 377 and 378) will be amended.

(The foregoing is the text of A.F.O. 2971/1954 altered to meet R.A.N. conditions.)

(4403/15/387)

174.

NAVAL STORES (AIR) - SUCTION TEST TUBE, REF. 6C/1015 - INTRODUCTION.

The undermentioned permanent item is hereby introduced -

Description	Stores Reference Number
Suction test tube	6C/1015.

2. The suction test tube, Ref. 6C/1015, is required to enable demand oxygen regulators to be tested in situ in aircraft without the aid of a demand oxygen mask.

3. Allowances are as follows :-

Carriers			Air Stations	
Ground Equipment	1/25	26/50	Ground Equipment	Class 'A' Stock
4	10	15	4	20

Individual issue is to be made to all personnel responsible for servicing demand oxygen regulators.

4. Services concerned should demand from the R.A.N. Air Store Depot, Randwick. Supplies are not expected to be available before June, 1955.

5. Instrument Manual (A.P.1275T) and Air Stores Establishments (A.P.(N) 377 and 378) will be amended.

(The foregoing is the text of A.F.O. 2349/1954 altered to meet R.A.N. conditions.)

(4403/15/384)

175.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - NON-SKID EXTERIOR PAINT - INTRODUCTION.

Future purchases of abrasive non-skid deck paint will be made to specification S.A.A. Int. 230. The new item will be known as "Non-Skid Exterior Paint". It will be supplied in one colour, Dark Admiralty Grey, Colour 632 of British Standard 381C, and will be accounted for as "like pattern 4158" under Class E, Group 7.

2. The undermentioned items have been superseded in the Royal Australian Navy by the introduction of the new paint. Stocks of superseded items are to be used up before the new item is issued.

Pattern	Description
N.12319	Paint, non-slip, deck
4157	Paint, non-slip, deck, olive green
4158	Paint, non-slip, deck, dark battleship grey
4159	Paint, non-slip, deck, dark blue grey
	Paint, deck, hard-setting, non-slip, fire-retardant to specification D.O.T.N.5258 Addendum 6/1950 Type (a) - abrasive.

3. The new paint is similar in appearance and application properties to those at present in use.

(4512/71/81)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

176.

FORM A.S.224Z - PERSONNEL CARD.

Navy Order 867 of 1954 is to be amended by the deletion of Appendix 'B'.

(3526/16/127)

SECTION 7 - CANCELLED LIST

177.

CANCELLATION OF NAVY ORDER.

Navy Order 13 of 1952, having been sufficiently promulgated, is hereby cancelled.

(3526/12/1305)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954)

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
31/55	153/55	-
46	156	-
336	111	-
510	-	119
900/54	231/54	-
931	-	244/54
932	-	245
933	223	-
935	-	248
936	244	-
937	-	292
938	249	-
940	-	331
942	296	-
947	-	436
948	357	-
950	-	221
974	206	-
978	-	233
984	-	360
985	-	344
994	-	269
999	-	240
1001	-	371
1004	-	242
1005	-	243
1007	-	247
1008	441	-
1009	303	-
1010	-	304
1011	-	C.C.N.O. 36
1019	253	-
1042	295	-
1046	-	311
1055	-	343
1056	-	361
1060	-	816
1071	-	700
1072	-	375
1074	222	-
1076	-	309
1080	-	353
1083	-	254
1084	442	-
1085	-	459
1116	-	342
1128	-	397
1130	-	134/55
1132	-	275/54
1134	-	252
1136	278	-
1137	255	-
1139	-	432
1148	336	-
1158	-	339
1181	302	-
1182	393	-

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1184	288	-
1187	-	351
1189	-	579
1190	684	-
1193	-	437
1198	-	560
1216	-	260
1241	-	359
1251	-	419
1255	-	325
1256	-	290
1259	291	-
1262	-	377
1263	-	709
1269	-	379
1270	-	435
1275	-	440
1276	-	335
1299	-	321
1310	-	518
1317	546	-
1323	-	589
1324	-	363
1340	-	469
1343	-	349
1344	-	350
1345	-	326
1346	-	327
1348	-	686
1349	305	-
1352	-	356
1353	-	334
1355	-	358
1357	-	452
1369	-	480
1370	-	630
1405	-	550
1406	-	420
1408	324	-
1409	-	372
1411	378	-
1413	-	822
1418	-	599
1419	-	54/55
1441	-	399/54
1444	401	-
1475	-	471
1477	499	-
1480	-	621
1482	-	478
1527	369	-
1531	-	472
1532	-	373
1533	-	453
1538	-	763
1539	-	495
1547	-	140/55
1548	460	-
1549	559	-
1595	-	479/54
1614	-	461

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.O.N.O. 1954 OR 1955
1615	-	83/55
1616	-	500/54
1617	392	-
1619	150/55	-
1622	-	581
1623	-	598
1624	-	380
1646	384/54	-
1653	-	466
1660	-	449
1661	-	450
1664	-	421
1665	425	-
1666	457	-
1670	-	497
1672	434	-
1673	475	-
1674	-	557
1675	-	474
1676	438	-
1677	433	-
1678	145/55	-
1680	370/54	-
1700	-	464
1727	-	645
1729	473	-
1730	-	426
1734	558	-
1744	-	522
1759	-	561
1772	-	602
1791	-	491
1793	533	-
1795	-	48/55
1800	-	597/54
1822	-	604
1835	525	-
1849	-	618
1853	536	-
1859	498	-
1860	-	570
1864	521	-
1892	507	-
1900	526	-
1912	-	516
1914	-	568
1916	-	11/55
1917	-	620/54
1918	-	538
1920	651	-
1925	-	571
1952	-	619
1966	-	672
1970	539	-
1973	623	-
2010	506	-
2029	-	534
2031	555	-
2075	-	578
2085	-	682
2086	551	-

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.O.N.O. 1954 OR 1955
2089	-	674
2090	-	673
2092	-	592
2094	554	-
2095	-	615
2100	-	642
2112	626	-
2113	-	583
2124	824	-
2145	562	-
2147	-	591
2148	-	614
2196	-	613
2205	624	-
2206	-	569
2250	-	696
2256	-	4/55
2257	-	751/54
2260	-	775
2262	-	677
2265	683	-
2272	-	139/55
2298	-	764/54
2306	-	729
2311	-	791
2327	-	698
2338	-	699
2339	-	676
2340	647	-
2341	-	648
2342	-	45/55
2345	-	636/54
2346	637	-
2348	711	-
2353	-	725
2354	-	760
2403	-	122/55
2412	670	-
2413	-	135
2418	85/55	-
2452	-	768/54
2470	-	671
2471	675/54	-
2472	-	8/55
2473	-	736/54
2476	-	759
2478	-	685
2480	707	-
2484	724	-
2498	-	728
2516	-	15/55
2526	5/55	-
2527	752/54	-
2530	-	720/54
2531	-	702
2534	-	762
2535	-	780
2537	-	114/55
2551	-	98
2577	-	41
2590	774	-

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2593	717	-
2594	-	858/54
2595	-	719
2596	-	776
2597	-	754
2598	721	-
2603	-	805
2604	738	-
2660	-	792
2661	-	75/55
2662	-	46
2663	-	777/54
2666	-	779
2688	-	807
2696	-	786
2704	-	65/55
2705	-	40
2706	-	66
2724	803	-
2728	-	823/54
2730	82/55	-
2753	-	39/55
2755	-	785/54
2758	-	100/55
2765	-	834/54
2768	806/54	-
2777	-	87/55
2779	-	796/54
2780	-	44/55
2781	-	796/54
2783	-	846
2785	-	821
2791	-	53/55
2823	852	-
2828	-	64
2836	788	-
2845	-	839/54
2847	-	842
2852	843	-
2861	-	144/55
2862	-	860/54
2873	84/55	-
2890	-	855
2902	-	841
2903	-	76/55
2905	-	43
2906	-	797/54
2908	-	50/55
2914	-	9
2915	863/54	-
2917	80/55	-
2941	-	814/54
2948	-	104/55
2961	857/54	-
2964	-	802/54
2965	47/55	-
2966	-	49/55
2967	-	52
2969	-	861/54
2978	142	-
2979	-	137/55

A.F.O's (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
3027	-	68
3045	-	859/54
3046	-	77/55
3048	817/54	-
3049	-	6
3051	844	-
3060	-	862/54
3097	103/55	-
3107	129	-
3108	-	107/55
3110	42	-
3114	51	-
3119	-	89
3154	-	123
3182	138	-
3194	-	146
3250	131	-
3253	73	-
3257	-	108
3262	79	-
3270	141	-
3320	154	-
3338	136	-
3340	143	-
3364	157	-
3388	151	-
3389	152	-
3403	-	130
3405	155	-

NOTE:- A.F.O's subsequent to 900/1954, which are not listed above, can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206 of 1954 to 157 of 1955, dated 1st June, 1954, to 22nd February, 1955.)

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C.N.O. 178/55

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
8th March, 1955.

The following 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, and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

TABLE OF CONTENTS

178.

SAFE CUSTODY OF SMALL ARMS AND SMALL ARM AMMUNITION.

References

INTRODUCTION

The following instructions consolidating the various instructions and regulations are designed to furnish a basis for the safe custody of small arms and small arm ammunition.

2. Included in the references are orders which, having been sufficiently promulgated, have been cancelled.

3. It must be realised that the frustration of a determined thief can only be accomplished by continual vigilance.

A.F.O.1248/1953
A.F.O.2791/1953

4. ALL SMALL ARMS, THEIR MAJOR COMPONENTS AND AMMUNITION ARE TO BE REGARDED AS IMPORTANT STORES AND THEIR LOSS IS TO BE REPORTED IMMEDIATELY -

(A) TO THE APPROPRIATE POLICE AUTHORITIES

(B) TO THE NAVAL BOARD THROUGH THE ADMINISTRATIVE AUTHORITY.

Q.R. & A.I.
Article 4842

5. THE REPORT AT 4(B) IS TO BE SUPPLEMENTED BY THE REPORT IN ACCORDANCE WITH Q.R. & A.I., ARTICLE 4842, WHERE THE LOSS IS BY THEFT OR SUSPECTED THEFT. IN NEARLY ALL CASES IT WILL SAVE TIME AND ENHANCE THE POSSIBILITY OF RECOVERY IF A FORMAL ENQUIRY IS BEGUN AT ONCE EVEN THOUGH IT MAY HAVE TO BE ADJOURNED FOR FURTHER INFORMATION. THE VITAL FACTOR IS THE MAXIMUM INFORMATION IN THE MINIMUM TIME.

6. For convenience of reference the instructions have been grouped in four sections, viz. -

Section I - H.M.A. Ships.
Section II - H.M.A. "White Ensign" Establishments.
Section III - R.A.N. Armament Depots and Armament Store Issuing Ships.
Section IV - Supply and Transport.

7. In the case where instructions are common to both H.M.A. Ships and "White Ensign" Establishments, a reference to this effect is included in the text of Section II.

8. Navy Order 88 of 1954 is hereby cancelled.

(5146/30/11)

SECTION I - INSTRUCTIONS FOR H.M.A. SHIPS

REGISTERED NUMBER OF SMALL ARMS - RECORDING

The registered numbers of all small arms, including signal and Schermuly pistols and 12 bore shot guns, are to be entered on the appropriate page of the Naval Armament Store Ledger.

2. On all occasions when these weapons are mustered or cleaned they are to be checked by register number. All "mated" components are to be checked at the same time.

3. The keys of all Small Arms racks, cupboards and stores containing Small Arms are IMPORTANT KEYS and the names of persons authorised to draw them are to be listed in the IMPORTANT KEY BOOK.

4. Issues and returns are to be recorded in the Important Key Book as they occur and are to be initialled by the person drawing the key and by the sentry or officer in charge of the keys when returned.

Q.R. & A.I.
Article 3331
N.M. & E.R.
Appendix II
Article 83C12

5. The keys of these stowages and the pistol cupboard are NOT to be kept on the Important Key Board but on the Magazine Key Board in a position marked:- SMALL ARMS - IMPORTANT KEYS. The keys are to have a metal tally approximately 3 inches x ½ inch with the necessary information stamped thereon.

RIFLES AND RIFLE RACKS

6. Sufficient racks are supplied to H.M.A. Ships for the stowage of the authorised allowance and rifles are normally to be stowed in these racks with bolts shipped and closed with safety catches "ON".

7. All racks are to be fitted with a wire lanyard or chain which can pass through the trigger guards. The lanyard or chain is to be securely fastened to the rack at one end and fitted for locking by padlock of high security to the rack at the other. If chain is used the links should be welded or so constructed that they cannot be opened. In some cases a metal rod may be found to be more suitable than a wire lanyard or chain.

8. Rifle racks are to be securely fixed to the ship's structure preferably by welding.

9. Under certain circumstances the Commanding Officer may deem it expedient to remove bolts from rifles, e.g., when a ship is open to visitors. In such cases the bolts are to be stowed in a securely locked stowage in the Gunner's Store.

10. Particular care is to be taken when replacing bolts that each rifle is fitted with its "MATED BOLT". Failure to do this will affect the accuracy of the rifle and may be the cause of a serious accident during firing.

PISTOLS, REVOLVER AND PISTOL CUPBOARDS

A.F.O.648/1947
A.F.O.2749/1948
Q.R. & A.I.
Article 3331

11. Properly fitted cupboards for the authorised allowance of pistols are supplied to all ships and are to be sited in a position where their contents can be supervised by the sentry. Where no sentry is employed the cupboard is to be sited in the Wardroom in such a position that the pistols are easily seen.

12. Cupboards are to be fitted with an electric light to each shelf and the door is to be fitted with a stout wire mesh panel and not glazed.

Navy Office Drawing 0/2610

13. Heretofore cupboard doors have been secured with a lever lock but this type of lock has been found vulnerable as the doors can be sprung. Lever locks are to be replaced by a hasp and staple rivetted to top and bottom of the cupboard and locked by padlock of high security.

Navy Office Drawing 0/2610

14. Hinge pins are to be rivetted at both ends.

15. A locked solid metal bar is to be fitted to each shelf for passing through the trigger guard. The lock is to be of high security and the locking arrangements ARE TO BE WHOLLY WITHIN THE CUPBOARD.

Navy Office Drawing 0/2610

16. Cupboards are to be attached to the ship's structure in such a manner that they cannot be removed without the door being first unlocked.

A.F.O.872/1952

17. A special book, the PISTOL REGISTER, is to be kept INSIDE the pistol cupboard. In the front of the book all pistol registered numbers are to be tabulated according to rack stowage. All issues and returns are to be recorded in the register and a legible signature obtained for each pistol issued. The Naval Armament Storekeeping Officer or his deputy is to COUNTERSIGN all ISSUES and RETURNS. In H.M.A. Ships and Establishments the Register will take the place of the Certificate referred to in Q.R. & A.I., Article 3331, paragraph 6. It is to be impressed on officers and men that it is their personal responsibility that pistols issued to them are not lost or stolen.

A.F.O.872/1952
Q.R. & A.I.
Articles 4606, 4841, 4842 and 4843.

18. FOR EACH PISTOL HELD OR ISSUED THERE MUST BE AN INDIVIDUAL RESPONSIBLE FOR ITS CUSTODY. IN CASE OF LOSS THAT RESPONSIBILITY IS TO BE BROUGHT HOME. The regulations concerning loss or theft of Small Arms are to followed carefully.

19. Where it is necessary to issue pistols to sentries or quartermasters the pistol is always to be worn in the appropriate equipment.

20. Where pistols are turned over from sentry to sentry or quartermaster to quartermaster the turnover is to be governed by written orders signed by the Executive Officer and the turnover is to be recorded and initialled in the deck log by both men concerned.

21. Pistols so issued are to be sighted by the officer doing the Main First Watch Rounds and recorded in the Night Rounds Book.

A.F.O.2749/1948

22. In ships where a sentry supervises the pistol cupboard the Master-at-Arms is responsible that the sentry reports to the officer doing the Main First Watch Rounds that all keys have been returned, the contents of the pistol cupboard and the number of pistols absent from the cupboard.

A.F.O.2749/1948

23. In ships where no sentry is available for supervising the pistol cupboard the officer doing the Main First Watch Rounds is to satisfy himself personally that the cupboard and contents are correct. He is to note in the Night Rounds Book the number of pistols sighted.

24. In order that the state of the cupboard may be immediately appreciated plywood shapes representing pistols are to be placed in vacant positions as follows :-

(a) In each space for which no pistol is held a shape painted white is to be inserted.

(b) In each space vacated by a pistol whether issued for use or maintenance a shape painted red is to be inserted.

25. All shapes are to be secured in position by the rod in common with the remaining pistols.

SUB-MACHINE GUNS

26. Sub-machine guns are to be stowed in the racks provided and are to be secured in the same way as rifles. Sub-machine guns are never to be stowed in racks with magazines shipped.

MACHINE GUNS

27. Machine guns supplied for the landing organisation are to be stowed in their chests in the approved stowage in the Gunner's Store. Spare barrels are to be kept in the chest with the parent gun. Chests are to be kept locked.

28. Machine guns, which form part of the armament of small vessels, when not mounted are to be stowed in their chests in the vicinity of the mounting. Spare barrels are to be stowed in the parent gun chest and chests are to be kept locked.

SIGNAL PISTOLS

29. At sea, signal pistols when not placed in position for use are to be kept in the Night Signal Box which should be kept locked. The key is to be retained by the senior signal rating on watch.

30. In harbour, signal pistols should normally be returned to a locked stowage in the Gunner's Store. If one is required to be ready for emergencies in harbour it is to be placed in the charge of the Duty Signalman, Quartermaster or Sentry and kept in the Night Signal Box or the pistol cupboard.

31. If kept under the Sentry's charge it is to be dealt with in accordance with paragraphs 21 and 22 of this Order.

32. Signal pistols are to be sighted by the Naval Armament Store Accounting Officer -

(a) When preparing for sea.

(b) 1600 daily at sea (and in harbour if stowed in the Night Signal Box).

(c) On return to harbour.

(d) Weekly in harbour if stowed in the Gunner's Store.

SCHERMULY PISTOLS AND SHOT GUNS

33. Schermuly pistols and shot guns are to be stowed in a locked stowage in the Gunner's Store.

SMALL ARM AMMUNITION

34. Issues of small arm ammunition are to be inserted on Form S.301 as they occur. Where boxes with unbroken seals are issued the contents as stated on the label are to be accepted but where boxes with broken seals are issued both the Accounting Officer and the recipient are to satisfy themselves as to the quantity of cartridges therein.

35. During practices, particularly where 12 bore, .38 in. and .22 in. cartridges are being used, the Officer-in-Charge is to take particular care to prevent theft.

36. After any practice the Officer-in-Charge is to certify on Form S.301 the number of cartridges expended.

37. The Accounting Officer is then to satisfy himself that the unexpended balance is correct before entering any expenditure in his Expense Book. All fired cases are to be checked as required by the accounting instructions for these stores.

STOCKTAKING AND TEST STOCKTAKING

A.F.O.3153/1953 38. Stocktaking is to be carried out on change of Accounting Officers. On these occasions small arms are to be mustered by register numbers. Subject to the exigencies of the Service the time allowed for the changeover will be in accordance with A.F.O. 3153/1953.

39. A stocktaking of all valuable and important stores should be made more frequently and in small ships also on change of Gunner's Yeoman.

A.F.O.3153/1953 40. In order that an accurate account may be maintained the Accounting Officer is to make tests of stock from "time to time". These tests are to be governed in their frequency by the relative attractiveness of the arm or ammunition to the potential thief and the degree of security afforded by preventive measures.

41. Tests of stock should be made to establish both quantity and condition.

42. Unless otherwise stated in these instructions small arms are to be subject to test stocktaking once per week or more frequently should the conditions existing at the time render this desirable.

43. Test stocktaking of small arm ammunition is to be made on all occasions when Demands are prepared. The "quantity remaining on board" is to be established by actual count.

44. As small arm ammunition is attractive to the potential thief whether he be a souvenir hunter, disposer or user, the seals of all unopened boxes and the contents of opened boxes are to be checked once a month.

ARMS LANDED

45. Where arms are landed for service outside the ship they are to be mustered by register number before landing and immediately on return.

46. The Officer-in-Charge of the party is to furnish a receipt for the arms landed and on return is to obtain a quittance when the Accounting Officer is satisfied that the arms in question have been checked and are correct.

47. The instructions in paragraph 46 will not apply to parties landed for drill where such drill is carried out in the immediate vicinity of the ship and is of short duration.

SECTION II - H.M.A. "WHITE ENSIGN" ESTABLISHMENTS

REGISTER NUMBERS OF SMALL ARMS - RECORDING

The instructions in Section I, paragraphs 1 and 2, concerning the recording of register numbers of small arms and the use of these numbers for mustering purposes, apply to "White Ensign" Establishments.

KEYS OF RIFLE RACKS, SUB-MACHINE GUN RACKS, PISTOL CUPBOARDS AND ARMOURY

2. The instructions in Section I, paragraphs 3 and 4, are to be extended to include the Armoury or Gunner's Store where this room is used to store small arms.

ARMOURY - SECURITY

3. Any building selected as an Armoury - or Gunner's Store where the latter will house small arms - is to be of stout construction preferably of brick or concrete. Where it is of timber or similar light construction it is to be lined.

4. All windows giving access are to be protected by iron bars or stout grills.

5. The door locks are to be of high security, and fitted in such a manner that the lock or locks can only be operated by the proper key. Yale and similar locks can be operated by a knife or steel rule and, where such locks are fitted, a steel guard is to be fitted to prevent the entry of such an instrument between the door and the jamb.

RIFLES AND RIFLE RACKS

6. Rifles, other than "DRILL ONLY", are to be stowed in racks in the Armoury. The instructions contained in Section I, paragraphs 6, 7 and 9, are to apply to "White Ensign" Establishments.

7. Rifle racks are to be securely fixed to the walls and/or floor of the Armoury.

"DRILL ONLY" RIFLES

8. Where "DRILL ONLY" rifles are stowed in racks in an open drill hall they are to be secured in the same way as other rifles except that their bolts are to be kept in a locked stowage in the Gunner's Store and issued when required.

PISTOLS AND PISTOL CUPBOARDS

9. Properly fitted cupboards for the authorised allowance of pistols are to be used. They are to be sited in a position where their contents can be supervised by the sentry. Where no sentry is employed the cupboard is to be sited in the Armoury in such a position that the pistols are easily seen.

10. The instructions contained in Section I, paragraphs 12 to 25, are to apply to "White Ensign" Establishments.

SUB-MACHINE GUNS

11. Sub-machine guns are to be stowed in racks in the Armoury. The instructions contained in Section I, paragraph 26, are to apply in "White Ensign" Establishments.

MACHINE GUNS

12. Machine guns are to be stowed in their chests, together with spare barrels, in the Armoury. Chests are to be kept locked.

SIGNAL PISTOLS, SCHERMULY PISTOLS AND SHOT GUNS

13. Signal pistols, Schermuly pistols and Shot Guns when not in use for instructional purposes are to be placed in a locked stowage in the Armoury.

B.R.932 Paragraphs 702 and 703

14. Now that Red Distress Signals are supplied there should normally be no necessity for signal pistols to be kept in the boats of an Establishment, but where they are issued for special signalling purposes care is to be taken that they are adequately safeguarded and are accounted for when returned from this special service.

SMALL ARM AMMUNITION

15. The instructions contained in Section I, paragraphs 34 to 37, are to apply in "White Ensign" Establishments.

STOCKTAKING

16. The instructions contained in Section I, paragraphs 38 to 44, are to apply in "White Ensign" Establishments.

ARMS LANDED

17. The instructions contained in Section I, paragraphs 45, 46 and 47, are to apply in "White Ensign" Establishments.

SECTION III - R.A.N. ARMAMENT DEPOTS AND A.S.I. SHIPS

Rifles, pistols, sub-machine guns and ammunition for these weapons are to be stored in strong, securely locked stowages.

2. Pistols should be threaded on a strong metal bar fastened by a padlock.

3. Cylinders of pistols, magazines of sub-machine guns, and bolts of rifles are to be removed and stored separately. These parts are to be tallied with the appropriate number of the weapon of which they are component for easy identification when issuing.

4. If weapons are stored in bulk, the cases are to be packed under supervision of a responsible officer, and banded and sealed with suitable banding tape or wire. A list of contents and register numbers is to be signed by the packer and checker and included in the package. A duplicate is to be retained for record.

5. The safety of weapons and security of packages containing weapons are to be verified daily by the storekeeper and at frequent intervals by a responsible officer.

612/207/3761 6. Stocktaking of the following items is to be carried out half-yearly :-

Pistols
Shot Guns
Shot Gun Cartridges
Cartridges .22".

Navy Office letter 012330 5/12/1952 5146/30/6 7. Paragraphs 2 and 3 of this Section are not applicable at R.A.N. Armament Depot, Spectacle Island, Sydney, where separate security arrangements have been approved.

SECTION IV - SUPPLY AND TRANSPORT

When weapons are packed for transport, packing is to be witnessed by a responsible officer. A packing note bearing full details of contents, including register numbers, is to be prepared in triplicate and signed by the packer and witnessing officer, viz. -

One copy for enclosure in package
One copy for despatch to consignee
One copy for retention.

2. Whenever possible complete weapons should not be packed in one package, but the component pistol cylinders, sub-machine gun magazines, or rifle bolts should be forwarded in separate packages. All packages are to be securely packed and banded in strong well made cases. Care on the part of consignees is necessary to ensure that, on receipt, the component pistol cylinders, sub-machine gun magazines, or rifle bolts are assembled to the correct parent weapons.

3. No indication should appear on packages containing non-explosives that they contain small arms. Any such markings on chests are to be overpainted if they are to be transported by other means than depot transport or H.M.A. Ships.

4. Small arms should, wherever possible, be transported by service sea freight. When so transported the cases should be placed in the charge of the Commanding Officer (or an officer deputed by him), who is to assume responsibility for their safe custody and is to see that the cases are intact and in good order when handed over to the consignee.

A.F.O.291/1953 5. All consignments, other than those delivered by hand or by depot transport, are to be despatched by one of the following methods, viz. -

Registered parcels post, passenger train, or cabin freight (for pistols)
Lock-up stowage (for other small arms)

and a receipt for the packages is to be obtained at the time of handing over.

6. The consignee is invariably to be advised of despatch at once, stating the mode of conveyance and package numbers.

7. A receipt, specifying register numbers of weapons, is to be obtained at the time of delivery when weapons are despatched by hand or by depot transport.

8. Whenever small arms or small arm ammunition are transhipped, issued or received, special attention is to be paid to the condition of the packages. If any appear to have been tampered with or are found to be damaged or with broken seals the contents are to be verified at once, unless the soldered lining, where fitted, is seen to be intact. All concerned with the handling and transhipment of these stores are to be impressed with this instruction. As soon as a broken package is noticed it is to be set apart and after verification of the contents is to be kept under lock and key and if the package cannot be repaired at once it is to be handed over personally to the next authority taking charge.

9. On receipt by consignees, all packages, excepting sealed ammunition packages, are to be immediately unpacked (if possible in the presence of a witness) and mustered. In order that investigation of losses can be pursued without delay, it is essential that there must be no loss of time in checking stores on receipt.

10. Vouchers are invariably to quote the register numbers of weapons and any damage found to a package is to be noted on the voucher together with the action taken.

11. Losses or suspected losses are to be dealt with immediately in accordance with "Introduction", paragraphs 4 and 5.

12. The attention of all concerned is drawn to the provisions of Article 417 of Consolidated Orders and Regulations.

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CLASSIFIED			
NAVY OFFICE MELBOURNE			
DRG No D/2810			
DATE NOV. 1955			
TRACING No 1		COPY No 4	
DRAWN	F.C.	PASSED	PNA
TRACED	D.N.	APPROVED	DEN
CHECKED	G.C.L.		
REVISION No 1.		20th DEC 1954	
DRAWN	G.C.	PASSED	PNA
		APPROVED	
CHECKED	G.C.L.		DEN
SOLID LINK KEEP CHAIN REPLACED BY SOLID METAL BAR			

PISTOL CUPBOARD.

TO TAKE FIVE PISTOLS.

SCALE:- 3 INCHES = 1 FOOT.

SPECIFICATION

CUPBOARD TO BE CONSTRUCTED OF 22 G. ZINCANNEAL FORMED AS SHOWN AND FITTED WITH HINGED DOOR AT FRONT. DOOR TO HAVE PANEL OF STOUT WIRE MESH BENT ON WIRE FRAME ATTACHED BY CLIPS NOT MORE THAN 4" APART RIVETED TO DOOR. STOWAGE RACK TO BE CONSTRUCTED OF 20G ZINCANNEAL TO TAKE FIVE PISTOLS AS SHOWN.

A LOCKED SOLID METAL BAR IS TO BE FITTED PASSING THROUGH THE TRIGGER GUARDS OF THE PISTOLS. THE LOCK IS TO BE OF HIGH SECURITY & THE LOCKING ARMS ARE TO BE BRAZED WITHIN THE CUPBOARD. PINS OF HINGES AND HASP TO BE RIVETED OVER TO PREVENT REMOVAL. CUPBOARD TO BE LOCKED BY MEANS OF DOUBLE HINGED HASP AS SHOWN. STAPLE AND HIGH SECURITY PADLOCK.

CUPBOARD TO BE FITTED WITH INTERNAL LIGHTING ARRANGEMENT. CUPBOARD TO BE SITED SO AS TO GIVE VISIBILITY OF CONTENTS OVER THE WIDEST ARC.

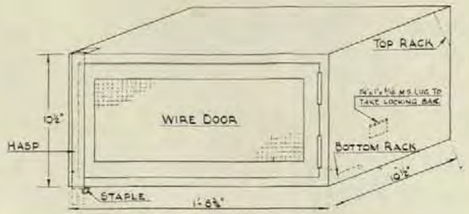
METHOD OF CONNECTION TO ADJACENT STRUCTURE

IN WAY OF MILD STEEL SCREWED STUDS ARE TO BE WELDED TO THE STRUCTURE TO LINE UP WITH HOLES IN PADS ON BACK OF CUPBOARD AND NUT FITTED ON INSIDE OF CUPBOARD.

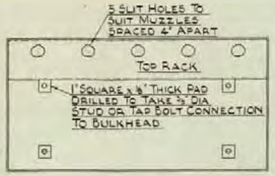
IN WAY OF ALUMINIUM, PADS ARE TO BE FITTED TO THE STRUCTURE WITH TAPPED HOLES TO TAKE TAP BOLTS INSERTED FROM INSIDE OF CUPBOARD.

FINISH

INSIDE TO BE FINISHED IN WHITE.
OUTSIDE TO BE FINISHED IN COLOUR TO SUIT COMPARTMENT.
ALL FITTINGS TO BE CHROMIUM PLATED.

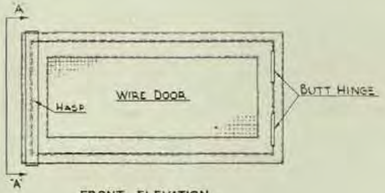


DIAGRAMMATIC ARRANGEMENT.

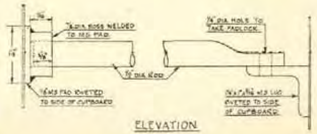


BACK ELEVATION.

PLAN AT TOP.



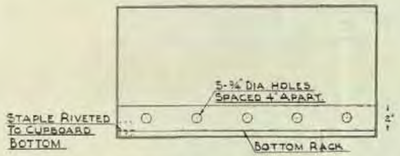
FRONT ELEVATION.



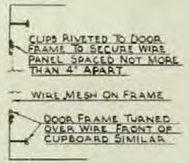
ELEVATION

PLAN.

DETAIL OF LOCKING BAR
FULL SIZE.
TO BE POSITIONED SO THAT BAR PASSES THRO' PISTOL TRIGGER GUARDS.



PLAN AT BOTTOM.



TYPICAL SECTION THRO' DOOR.
SIDES OF DOOR SIMILAR.
SCALE - HALF FULL SIZE

VIEW LOOKING ON 'AA'.

C.N.Os. 179-196/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
15th March, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0062

TABLE OF CONTENTS

SECTION 1 - ADMINISTRATIVE AND GENERAL

179.

CLASSIFICATION OF H.M.A. SHIPS.

With reference to Admiralty Fleet Order 2105/1947 and Navy Order 233 of 1954, the following classification of H.M.A. Ships is to be used :-

Daring Class.

Destroyers.

Destroyer	(Battle Class)
Destroyer	(Modernised Tribal Class)
Destroyer	(Tribal Class)
Destroyer	(Q Class)

Frigates.

A.S. Frigate	(Modified River)
A.S. Frigate	(Converted Fleet)
A.S. Frigate	(Sloop)
A.S. Frigate	(Modified River)

Minesweepers.

Ocean Minesweeper	(Comprehensive)
Ocean Minesweeper	(Limited)
Ocean Minesweeper	(Survey).

2. Navy Order 656 and 853 of 1954 is hereby cancelled.

(4276/4/315)

180.

NAVAL BOARD - APPOINTMENT.

Rear-Admiral R.R. Dowling, C.B.E., D.S.O., assumed duty as First Naval Member and Chief of the Naval Staff, on 24th February, 1955, in succession to Vice-Admiral Sir John Collins, K.B.E., C.B.

(3406/114/18)

SECTION 2 - PERSONNEL

181.

EDUCATIONAL TESTS - INSTRUCTION FOR THE HIGHER EDUCATIONAL TEST.

The correct civil equivalent for papers VI, Mechanics, and VII, Magnetism and Electricity, of the H.E.T. examination is "The corresponding sections of the Leaving Certificate of Victoria examination in Physics."

2. Paragraph 8 of Navy Order 660 of 1954 is to be amended accordingly.

(4017/7/157)

182.

INSTRUCTIONAL FILMS AND FILM STRIPS - MN7306A AND B - HELICOPTER ORIENTATION (PARTS 1 AND 2) - DISTRIBUTION.

A copy of the American Training Film MN7306A and B, "Helicopter Orientation", (Parts 1 and 2), is being obtained and will be supplied to R.A.N. Air Station, Nowra, without demand by (Superintending) Naval Store Officer, Sydney.

2. Details of the film are as follows :-

MN7306A - Helicopter Orientation - Introduction to Rotary Wing Flight

This part gives a brief history of the helicopter and shows some of its present-day uses. The principles of flight are explained in animated diagram, followed by a sequence in live action showing how a helicopter is controlled in flight. Running time 27 minutes. One spool.

MN7306B - Helicopter Orientation - Operation of the Single Main Rotor Helicopter

Shows the basic procedures for piloting a single main rotor helicopter, pre-flight inspection, starting, vertical and horizontal flight, landings (including power-off landings) and post-flight checks. Running time 19 minutes. One spool.

3. The film is considered to be of general interest to all aircrews and maintenance personnel.

4. The classification is "Restricted".

(4518/61/457)

183.

OFFICERS - RESPONSIBILITIES FOR MAINTENANCE OF T.A.S. EQUIPMENT - T.A.S., ELECTRICAL AND ORDNANCE ENGINEER OFFICERS.

Attention to certain new provisions regarding the maintenance of T.A.S. equipment (other than aircraft equipment), which will be included in the reprints of chapters 33, 40 and 41 of Q.R. and A.I., being issued shortly. Paragraph 2 of A.F.O. 2136/54 (*Weapons - Responsibility for Weapons and Associated Equipment, including those in which Guidance Techniques and/or Atomic Energy are Employed*) refers. The main object of this Order is to assemble in summary form certain of the relevant provisions, and to indicate in rather more detail where it is considered the line of demarcation for maintenance should lie. In case of doubt as to the precise interpretation of those provisions, the regulations themselves should be consulted.

2. While the T.A.S. Officer, or the Officer detailed to carry out his duties, is responsible to the Captain for the overall operational efficiency of all T.A.S. equipment, the Electrical Officer has a parallel responsibility for meeting the requirements for the electrical efficiency of this equipment. Similarly in destroyers and frigates the Engineer Officer, if appointed also for Ordnance Engineering duties, is responsible for meeting the requirements for the mechanical efficiency of T.A.S. equipment. In other ships the Ordnance Engineer Officer or senior Ordnance Rating is responsible to the T.A.S. Officer for the mechanical efficiency of this equipment.

3. The T.A.S. Officer is responsible that the T.A.S. equipment is at the required notice for service, and is to co-ordinate the work of the Electrical and Ordnance Engineer Officers with operational and training requirements and with the regulations for the safety of explosives.

4. In order to lighten the load on the technical branches concerned, the T.A.S. Officer is to arrange with the technical officers referred to above for routines and functional tests, which can be conducted without skilled technical knowledge, to be done by appropriate T.A.S. ratings. It is not, however, intended that this work should involve more than the following degree of knowledge, and the technical content of T.A.S. Instructional syllabuses will be adjusted accordingly :-

(a) The ability to switch on, and adjust settings and, where no technical knowledge of the working of the units concerned is involved, to tune and carry out functional tests.

(b) The ability to appreciate overall performance, both where monitors are fitted and are not fitted, within the limitations imposed by (a) above.

(c) The ability to operate and close down the equipment.

(d) The ability to prepare weapons and mountings for use, by bringing them to the ready state from the stand-by or harbour state.

5. In addition the T.A.S. Officer should arrange with the Executive Officer to provide T.A.S. ratings to assist the Electrical and Ordnance Engineer staffs in periodical inspections, overhauls and skilled repair work.

6. It is stressed that maintenance consists of all work aimed at preventing a breakdown or loss of efficiency in equipment, and, if either occurs, the restoration of that equipment to correct performance without delay. Good maintenance can only be achieved if those responsible for the electrical, mechanical and overall efficiency of equipment work as a team.

7. It is realized that full technical information specifying maintenance requirements and correct performance is not at present available in the Fleet for some T.A.S. equipment, and urgent action is being taken to compile and issue comprehensive instructions.

(The foregoing is the text of A.F.O. 3242/1954 altered to meet R.A.N. conditions.)

(3031/13/219)

184.

OFFICERS SHORT COURSES - JANUARY TO JUNE, 1955.

Navy Order 664 of 1954 is to be amended as follows :-

(d) T.A.S.

Reserve (a/s) Officers

delete "Part 2 13th June."

(4007/12/78)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

185.

AMMUNITION - PROPELLANT - LANDING - DESTRUCTION - REPORTS.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots are to be returned to the nearest Naval Armament 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 the Naval Board for instructions.

Propellant Lot or Sub-Lot No.	Propellant Nature and Size.	Nature of Gun, Ammunition, etc., which may be involved.
RNC 231	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F.4.5-in.; Q.F. 4-in. (F.A.); Q.F. 18-pdr. 12 cwt.
RNC 248	SC 048	Q.F. 4.7-in. (S.L.); Q.F. 4-in; Q.F. 3-pdr.
RNC 251	SC 122	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4.7-in. (S.L.).
RNC 303XA) RNC 2075XR)	SC 061	(B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.); Q.F. 12-pdr. 12 cwt.
RNC 2079XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNC 2080XR	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.) Q.F. 12-pdr. 12-cwt.
RNC 3053XB) RNP 1087XH)	NF 052	(Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 12-pdr.
WA 13603	NA 042	Q.F. 4-in.
WA 13615	NA 052	Q.F. 4.7-in. (S.L.); Q.F. 4-in (F.A.); Q.F. 12-pdr. 12-cwt.
WA 13786XA	NA 029	Q.F. 4-in.
WA 13807XA	NA 042	Q.F. 4-in.
WA 13920XA	NA 029	Q.F. 4-in.
D016777	Superim Mark 10	Cartridges A.S.

2. Attention is drawn to 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.

(The foregoing is the text of A.F.O. 36/1955 altered to meet R.A.N. conditions.)

(4433/51/212)

186.

GUNS - BARREL EXCHANGE GEAR - MEDIUM CALIBRE GUNS - POLICY.

With the advent of higher rates of fire in medium calibre A.A. and dual purpose guns, it has become desirable to review the existing arrangements for changing worn barrels and to clarify the position as regards the carriage of barrel changing equipment in H.M.A. Ships.

2. It would be ideal if all ships could change their barrels at sea or in harbour, with their own resources and carry the requisite equipment and spare barrels.

3. This, however, is manifestly impracticable owing to space and weight considerations and in fact the work involved can only be undertaken at sea, under exceptionally calm conditions, in the larger ships.

4. The Ordnance Staffs of Cruisers, Daring Class, Battle Class Destroyers and new construction Type 12 Frigates, in full commission should be capable of exchanging barrels when provided with the relevant equipment. To ensure that Ordnance maintenance staffs obtain the necessary practice, and to test the equipment, barrel exchange exercises are to be carried out in these ships at least once every twelve months.

5. With the exception of Cruisers, barrel exchange gear will not be carried in ships (Navy Order 191 of 1954) and this gear is to be drawn as required from the nearest Gunnery Equipment Store.

6. The procedure governing exchange of barrels is laid down in B.R.292.

(The foregoing is the text of C.A.F.O. 102/1954 altered to meet R.A.N. conditions.)

(4428/101/202)

187.

GUN FIRING ARCS.

This Order describes the factors involved and the principles and rules to be observed in establishing the gun firing arcs of H.M.A. ships.

FACTORS INVOLVED IN DETERMINING ARCS OF FIRE

OBSTRUCTIONS

2. These may be considered as follows :-

(a) Physical obstructions in the line of fire.

(b) Blast limitations to the line of fire.

(a) *Physical Obstructions.*

3. These include exposed personnel; fixed structures; other guns and mountings; whip aerials and wire aerials, and aircraft when these are parked on deck.

4. In all cases it will be necessary to establish some minimum *CLEARANCE DISTANCE* by which the projectile must clear the obstruction. At present a clearance distance of 1½ calibres is allowed in 3-in. and larger guns, except for whip aerials for which it is 3-ft. For smaller guns the clearance distance is included in the overall allowances laid down in B.R. 1031, paragraph 16, and for S.T.A.A.Gs. in Admiralty Fleet Orders.

(b) *Blast Limitations.*

5. A further restriction of the arc of fire may be necessary to prevent blast damage. The blast-proof pressures of various structures and the blast curves of 3-in. and larger guns are given in B.R. 1031, and are used to give the approximate restrictions required, the exact arcs being confirmed if necessary by Blast Trials.

6. A much greater restriction of the arc of fire may be necessary to prevent blast damage to exposed personnel necessarily closed up adjacent to the line of fire. In this case the limiting blast pressure is taken to be 2½ lbs./sq. in., the blast curves of B.R. 1031 and Blast Trials being used to establish the exact arcs for 3-in. and larger guns. For smaller guns the restrictions imposed by blast are included in the overall allowances (vide paragraph 4 above).

METHODS OF RESTRICTION

7. These are as follows :-

(a) Limit stops.

(b) Safety firing gear.

(a) *Limit Stops.*

8. These physically limit the training and/or elevation or depression of the gun and include some means of cutting off or reducing the gun driving torques as the gun comes up against a buffer or stop. In relatively unobstructed mountings, limit stops provide the simplest and safest method of restricting the firing arc. In some mountings it may be necessary to provide a removable training limit stop so that the mounting can be moved to some other position, e.g., for maintenance or when securing.

(b) *Safety Firing Gear.*

9. This is arranged to stop the gun firing over the restricted arc by means of a combination of elevation and training cams, which are suitably cut to allow for the various obstructions.

10. The fitting of safety firing gear implies that the gun can continue to move into the restricted arc. Some allowance must therefore be made for the delays inherent in the action of the gear and of the gun-firing mechanism before the gun is truly safe. Depending on the length of the delays and the maximum tracking speed of the gun so the safety-firing gear must start to operate by a certain CUT-OFF ANGLE before the restricted arc is reached. Where the mounting has a higher slewing speed for Target Acquisition, this is not considered in the calculation of Cut-off Angle.

11. At present this cut-off angle is only allowed for in the safety rules for rammer-fired guns and in the training velocity compensation gear of the S.T.A.A.G., Mark 3.

PRINCIPLES TO BE OBSERVED

12. The following guiding principles are to be observed. The method of applying these principles will depend on the primary function of the ship and the equipments concerned.

Physical Obstructions

13. (a) *Personnel.* - Allowance is only to be made for exposed personnel necessarily closed up at A.A. or Surface Action Stations or at Flying Stations. Thus allowance is not normally made for A/S crews and control parties.

(b) *Material.* - Allowance is only to be made for structure and equipment carried in war, and then in its Action condition.

(c) *Aircraft Carriers.* - Allowance is to be made for structure and equipment when in the condition for operating aircraft. Special arrangements are to be made to permit guns to fire across the flight deck when clear of aircraft.

(d) *Gunmountings.* - Allowance is to be made for the gunhouse or shield of other mountings under all conditions. Allowance is to be made for the swept arcs of the barrels of other mountings except that -

(i) Two or more mountings primarily controlled by the same director may fire through each other's swept arcs;

(ii) A.A. or Dual Purpose mountings may fire through the swept arcs of Surface only mountings;

(iii) A battery of locally controlled and closely sited Close Range mountings may fire through each other's swept arcs.

(e) *Whip and Wire Aerials.* - Allowance is normally to be made for these, except for emergency rigs.

(f) *Replenishment at Sea Gear.* - Allowance is to be made for this gear in its stowed position, except for roller fairleads and such items which are not readily portable.

(g) *Guardrails.*

(i) Allowance is to be made for guardrails in their Action position. (Folding or collapsible stanchions are normally fitted to permit the maximum gun arcs possible to be attained.)

(ii) Jack and ensign staff tripods are to be struck down.

Blast Limitations.

14. (a) *Personnel.* - Allowance is only to be made for exposed personnel necessarily closed up at A.A. or Surface Action Stations or at Flying Stations. Thus allowance is not normally made for A/S crews and control parties.

(b) *Material.* - Allowance is only to be made for structure and equipment carried in war, and then in its Action condition.

Method of Restriction.

15. (a) *Limit Stops.*

(i) Where the firing arc of a mounting is restricted by limit stops these should be fitted so that with the buffer fully compressed the axis of the bore of the nearest gun clears the obstruction by 3-in. or 1½ calibres, whichever is the greater.

(b) *Safety Firing Gear.*

(i) Where safety firing gear is fitted this is to be arranged to stop the gun firing by a certain *CLEARANCE DISTANCE* from an obstruction. The clearance distance will depend on whether a physical obstruction or blast limitation is involved. A Table of Clearance Distances is given in Appendix I.

(ii) Where the gun can continue to move into the restricted arc and a physical obstruction is involved which if hit would cause casualties to personnel or materially affect the fighting efficiency of the ship a *CUT-OFF* ANGLE is to be applied by which the firing gear of the mounting is interrupted before the CLEARANCE DISTANCE from the obstruction is reached. A Table of Cut-off Angles is given in Appendix II.

Alternative Arcs of Fire.

16. It may sometimes be necessary to provide alternative arcs of fire to allow for different A.A. and Surface Action conditions; or in aircraft carriers to allow for aircraft on the flight deck or other fittings such as safety nets.

In all such cases the arc to be used is to be ordered by the Command.

Special Peacetime Restrictions.

17. Where the full war arcs have to be restricted by additional equipment carried only in peacetime, the reduced firing arcs are to be determined, guided by the above principles, and enforced by drill.

Responsibility for Establishment of Gun Firing Arcs.

18. The gun firing arcs of all new construction and re-armed ships will be planned during the design stage by the Director of Construction (Naval) in co-operation with the Director of Ordnance and Underwater Weapons. The exact arrangement will be confirmed in the "first of class" ship by inspection and Blast Trials carried out by the Commodore Superintendent of Training, Flinders Naval Depot, on behalf of the Director of Ordnance and Underwater Weapons.

ACTION TO BE TAKEN

19. All ships are to check their gun firing arcs in accordance with this Order at the next opportunity. A defect item is to be raised to cover any adjustments found necessary. Typical examples are given in Appendix III. In cases where difficulty is found the assistance of the Commodore Superintendent of Training, Flinders Naval Depot, should be sought.

20. Meanwhile arrangements should be made to ensure that the principles laid down in this Order are adhered to as far as practicable during practice firings.

21. The sense of this Order will be included in B.R. 292 in due course.

(The foregoing is the text of A.F.O. 2529/1954 altered to meet R.A.N. conditions.)

(4276/2/37)

APPENDIX I

TABLE OF CLEARANCE DISTANCES

The axis of the bore of the gun nearest to the obstruction should clear it by the following clearance distance :-

(a) *Physical Obstruction.*

(i) *Exposed personnel.* - By 1-ft.

(ii) *Structure other than whip aerial.* - By 3-in. or $1\frac{1}{2}$ calibres, whichever is the greater.

(iii) *Whip aerial.* - By 3-ft. Where possible whip aerials should be sited at least 3-ft. outside the maximum firing areas of any gun. It should be noted that the firing arcs are frequently less than the full arcs clear of superstructure due to the blast limitations.

(iv) *Over flight deck.* - By $17\frac{1}{2}$-ft.

(b) *Blast Limitation.*

(i) *3-in. and above.* - By the appropriate distance obtained by reference to B.R. 1031.

(ii) *40-mm. and below.* - By the appropriate distance obtained as follows :-

	Single or Twin Mounting	*Multiple Mounting*
Exposed personnel within 20-ft.	4-ft.	12-ft.
Exposed personnel within 20-50-ft.	2-ft.	6-ft.
Structure.	Not applicable	Not applicable.

APPENDIX II

TABLE OF CUT-OFF ANGLES

To be applied where a hit on the obstruction would cause casualties to personnel or materially affect the fighting efficiency of the ship.

	Cut-off Angles	
	In Training	*In Depression*
Long and medium range	$1\frac{1}{2}^{\circ}$	$1\frac{1}{2}^{\circ}$
2-pdr., all Marks	5°	5°
40-mm., all Marks (see Note)	12°	5°
20-mm., Mark 5	8°	6°

NOTE:- When the modification (now under Trial), to S.T.A.A.G. Mountings to interrupt the firing circuits when training above maximum tracking speed is introduced the training cut-off angle for S.T.A.A.G. mountings is to be reduced to 8°.

APPENDIX III

EXAMPLES OF THE ESTABLISHMENT OF GUN FIRING ARCS

Long Range Mounting.

(a) To establish the arc of fire of a 4.5-in., Mark 6 mounting relative to the forecastle -

(i) Strike down jackstaff tripod and guardrails (paragraph 13(g));

(ii) Axis of bore of nearest gun must clear any obstruction by $1\frac{1}{2}$ calibres (paragraph 15(b)(i) and Appendix I (a)(ii));

(iii) Since a hit on the forecastle would materially affect fighting efficiency the firing gear must be interrupted before the above clearance distance is reached and a $1\frac{1}{2}^{\circ}$ cut-off angle applied (paragraph 15(b)(ii) and Appendix II).

(b) To establish the arc of fire of a 4.5-in., Mark 6 mounting relative to the Bridge -

(i) From B.R. 1031 establish the training and elevation at which the guns should stop firing so that exposed personnel on the Bridge are on or outside the $2\frac{1}{2}$ lbs./sq. in. blast curve (paragraph 15(b)(i) and Appendix I(b)(i).) (This would be confirmed by Blast Trials in "first of class.")

Close Range Mounting.

(c) To establish the arc of fire of a Mark 5 (twin) Bofors relative to a whip aerial -

(i) Axis of bore of nearest gun must clear whip aerial by 3-ft. (paragraph 13(e) and Appendix I (a)(iii));

(ii) If a hit on the whip aerial would cause casualties to personnel, the firing gear must be interrupted before the above clearance distance is reached and a 12° cut-off angle applied (paragraph 15(b)(ii) and Appendix II).

(d) To establish the arc of fire of a Mark 6 (six barrelled) Bofors relative to its controlling C.R.B.F.D. which is within 20-ft. -

(i) From the point of view of physical obstruction the axis of the bore of the nearest gun must clear exposed personnel in the C.R.B.F.D. by 1-ft. and the firing gear must be interrupted 12° before this (paragraph 15(b) and Appendices I (a)(i) and II);

(ii) From the point of view of blast limitation the axis of the bore of the nearest gun must clear exposed personnel in the C.R.B.F.D. by 12-ft. (paragraph 15(b)(i) and Appendix I (b)(ii));

(iii) Establish whichever of the above arcs gives the greater clearance distance; in this case the latter.

188.

COMPASSES - MAGNETIC - SAFE DISTANCES.

C.D. Pamphlets Nos. 11C(1954) and 11D(1954), Rules for the Arrangement of Structures and Fittings in the Vicinity of Magnetic Compasses and Chronometers, are on order from Admiralty and on receipt first supply will be issued, without demand.

The additions to be made to the "Safe Distances" given in C.D. Pamphlet No. 11D(1954), vide Admiralty Fleet Order 2723/1954, will be effected by the (Superintending) Naval Store Officer, Sydney, prior to distribution.

(The foregoing is the text of A.F.O. 2491/1954 altered to meet R.A.N. conditions.)

(4139/40/273)

189.

NAVAL STORES (AIR) - REF. 8B/3177 REFLECTORS.

Reference 8B/3177, Reflectors for Gyro Gun Sights, referred to in AP.1275E, Volume 2, Part 1, Leaflet H22, should be demanded from Naval Store Officer, (Air), Bundock Street, Randwick, on the following scale:-

R.A.N. Squadrons	-	One per A.E. Aircraft fitted with G.G.S. As Squadron Mobile Equipment.
Carriers Air Stations	-	25% of total S.M.E. allowance.

(4403/19/115)

190.

NAVAL STORES (GENERAL) (CLASS B, GROUP 8B) - STEEL GLAND NUT, PATTERN 5859, FOR BOILER WATER-GAUGE COCKS - INTRODUCTION.

Steel gland nut, Pattern 5859, has been introduced as an item of consumable Naval stores under Class B, Group 8, Part B, for use with sleeve-packed cocks, Patterns 209, 209A, 210 and 210A. It should also be used in lieu of brass gland nuts, Pattern 420, now obsolescent, for asbestos packed cocks, Patterns 211, 211A, 212 and 212A, when yard stocks of the brass nuts have been expended.

2. The emergency stock of steel gland nuts, Pattern 5859, to be maintained by H.M.A. ships for engineering purposes is to be calculated on the basis of "one-eighth of the total number fitted".

3. Requirements of both steel and brass gland nuts, Patterns 5859 and 420 respectively, for new construction ships are to be assessed by storing yards accordingly.

4. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 3269/1954 altered to meet R.A.N. conditions.)

(4505/80/141)

191.

PAINTS AND COMPOSITIONS - BLACK BOOT TOPPING - EXTENDED USE.

The use of black boot topping was restricted during the 1939-1945 war to Ocean Minesweepers and above as an economy measure. The supply position has since improved and black boot topping may now be used on all craft, with the exception of ships' boats, if required.

(The foregoing is the text of A.F.O. 3062/1954 altered to meet R.A.N. conditions.)

(4512/71/84)

192.

TRANSPORT BOXES FOR OFFICERS' BAGGAGE.

With reference to Navy Order 365 of 1952, supply of boxes for the transport of Officers' baggage has been approved for the following class of ship :-

A.S. Frigates, Type 12 - 3 sets per ship.

(4512/40/169)

193.

SANITARY ARRANGEMENTS - ABLUTION CABINETS AND PROPHYLACTIC CABINETS.

It has been decided that the future policy with regard to fitting abultion and prophylactic cabinets in H.M.A. ships shall be -

(a) The ablution cabinet fitted adjacent to the sick bay for the treatment of venereal disease is to be dispensed with unless the sick bay has no separate sanitary facilities and the abultion cabinet can be used for this purpose.

(b) The prophylactic cabinet fitted adjacent to the heads for the prevention of venereal disease is to be dispensed with.

2. Any work necessary to implement the above policy should be carried out by ships' staffs where possible. Where Dockyard assistance is required a report, giving details, should be forwarded to Navy Office.

3. Separate action is being taken for ships under construction.

(The foregoing is the text of A.F.O. 2981/1954 altered to meet R.A.N. conditions.)

(4276/2/40)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

194.

BOOK - AIR PUBLICATIONS - SEA OTTER AIRCRAFT AND MERCURY ENGINES - DISPOSAL.

The undermentioned Air Publications relevant to Sea Otter Aircraft and Mercury Engines are declared obsolete. Copies held should be returned to the Naval Store Officer (Air), R.A.N. Air Store Depot, Bundock Street, Randwick, for disposal.

A.P. No.	Title.
2209 Volume 2 Part 3.	Instructions for Repair.
2209 AB.	Pilots Notes.
2209 AB Volume 2 Part 2.	Inspection Schedule.
2205 AB Volume 3 Part 1.	Schedule of Spare Parts.
2209 B Volume 1.	Handbook or Manual.
2209 B Volume 2 Part 1.	General Orders & Modifications.
2209 B Volume 2 Part 2.	Time Basis Inspection Schedule.
2209 B Volume 2 Part 2 (Supplement).	Inspection Schedule.
2209 B Volume 2 Part 3.	Inspection Schedule.
2209 B Volume 3 Part 3 (Supplement).	Appendix A - 1647.
2209 B Volume 5 Part 2.	Servicing Schedule.
2209 B Volume 5 Part 3.	Servicing Schedule.
1491 Volume 1.	Mercury Handbook.
1491D Volume 1.	Mercury Handbook.
1491D Volume 2 Part 1.	General Orders and Modifications.
1491D Volume 2 Part 2.	Schedule of Fits & Clearances.
1491D Volume 2 Part 3.	Instructions for Repair.
1491D Volume 3 Part 1.	Schedule of Spares.
6063	Ground Handling Notes.
A.P. (N) 380 (SO)	Standard Airframe Transfer List.
A.P. (N) 377/378 (SO)	A.S.E. Sea Otter for Stations and Carriers.

(4139/41/727)

195.

METEOROLOGICAL PUBLICATIONS AND CHARTS - SUPPLY AND ACCOUNTING ARRANGEMENTS.

Admiralty publication W.1. "Meteorological Supplies Handbook, Mark 1953", as amended, has been adopted for use in the Royal Australian Navy in reference to the supply of meteorological publications and charts subject to the following modifications.

Distribution of Publications.

2. Meteorological publications and charts for the Royal Australian Navy will be stocked and supplied by the Senior Officer, Hydrographic Service, Garden Island, Sydney. All references in W.1. to the Hydrographic Supplies Establishment, Taunton, England, are therefore to be interpreted as references to S.O.H.S. for the purposes of the Royal Australian Navy.

3. Meteorological publication W.7. "Radio Weather Messages", and amendments thereto, will also be supplied by S.O.H.S. and not as stated in paragraph 11 of the Instructions in the Handbook, W.1.

Scale of Supply.

4. Meteorological publications will be supplied to H.M.A. Ships in accordance with the scale shown in Appendix I of W.1. Ships in which a qualified meteorological officer, appointed for meteorological duties, is borne will be allowed the complete set of meteorological publications. Surveying ships, and ships in which meteorological work is undertaken by a qualified (N) or (ND) officer, will be allowed the abridged set.

5. Shore establishments (other than naval air stations) in which a qualified meteorological officer, appointed for meteorological duties, is borne will also be supplied with the complete set of publications on the scale shown in Appendix I of W.1. subject to minor modifications to meet local requirements.

6. Ships which carry a meteorological observation rating, but not a qualified meteorological officer, may obtain the following items on demand additional to the abridged set of meteorological publications :-

Item No.	Quantity.	Remarks.
306	1 No.	To ships holding appropriate chart folios (see W.1.).
335	1 No.	
B6627	1 No.	
167	1 No.	
167a	1 No.	
168	20 No.	
123a	1 No.	
123b	1 No.	
175	1 No.	
220	1 No.	
276	1 No.	

7. R.A.N. Air Stations at which a meteorological organisation is functioning will be supplied on the scale laid down in Appendix II of W.1. for Naval Air Stations in Australia. Items approved in W.1. for Naval Air Stations "on Far East Station only" may be obtained additionally on demand if required. The R.A.N. School of Meteorology will be supplied with additional publication as approved by the Naval Board.

8. Requirements for meteorological publications in excess of the approved scales are in all cases to be submitted through Administrative Authorities to the Naval Board for approval before demands on S.O.H.S. are rendered.

9. Meteorological publications at present held in excess of the foregoing scales are to be returned forthwith to S.O.H.S. or a request for permission to retain them is to be submitted through Administrative Authorities for the consideration of the Naval Board.

Meteorological Working Charts.

10. Initial supply of meteorological working charts to H.M.A. Ships will be on the scale laid down in W.1., Appendix III, Table A, with the addition of the following items to ships in which a meteorological observation rating, but not a qualified meteorological officer, is borne :-

Chart No.	Quantity.
B75	25 No.
B128	25 No.
B142	25 No.

11. Further supplies of meteorological working charts are to be demanded from S.O.H.S. on Form H.38 as requisite. Economy in the use of working charts is essential and stocks held on board should not exceed six months' estimated requirements except in the case of H.M.A. Ships which are about to leave Australian waters, when stocks may be brought up to twelve months' requirements.

12. A limited range of meteorological working charts published by the Commonwealth Meteorological Branch is available on demand in addition to the charts listed in W.1.

Custody of Publications.

13. The meteorological officer or, if no meteorological officer is borne, the officer undertaking meteorological duties will be personally responsible for the custody of meteorological publications. He is to acknowledge to S.O.H.S. the receipt of all such publications and is to be responsible for the insertion of amendments which will be distributed by S.O.H.S.

14. Meteorological publications are to be mustered annually and a list of publications held, referred to by Item Numbers as given in W.1. without quoting descriptive titles, is to be prepared by the officer responsible for the custody of the publications. This list is to be forwarded by the Captain to S.O.H.S. under cover of a letter certifying that the muster has been properly carried out.

15. On transfer of custody of meteorological publications from one officer to another for any reason, the publications are to be mustered and a transfer and receipt certificate is to be prepared on N.W.S. Form 1 in triplicate. The original is to be forwarded to S.O.H.S., the duplicate being retained by the officer transferring and the triplicate by the transferee.

Disposal of Publications.

16. When a ship pays off, or when meteorological publications are no longer required for any other reason, all such publications, together with stocks of unused meteorological working charts, are to be returned to the Senior Officer, Hydrographic Service, Garden Island, accompanied by a transfer and receipt certificate on N.W.S. Form 1 in duplicate. The duplicate of this form will be signed by S.O.H.S. and returned to the officer concerned.

17. Meteorological logs, W.8. (formerly H.243), when no longer required on board, are to be forwarded to the Senior Meteorological Officer, R.A.N. Air Station, Nowra, N.S.W., for scrutiny and the extraction of data, and for onward transmission to the Director of Naval Weather Service, Navy Office, Melbourne. Meteorological logs are ultimately passed to the Commonwealth Meteorological Branch to assist in the compilation of climatological statistics.

(4140/67/11)

SECTION 6 - SHORE ESTABLISHMENTS

196.

NAVAL STORES (MOTOR TRANSPORT) - REFUELLERS AND REFUELLING TRAILERS - FITTING OF BONDING REELS.

All refuellers (including refuelling trailers) in use in the Royal Australian Navy which are employed to transport aircraft fuels and M/T gasoline are to be fitted with a bonding reel and cable. During refuelling and defuelling operations the cable is to be extended from the reel and secured to the aircraft, bulk fuel container, etc., so that both the refueller and the aircraft or container are at the same potential.

2. The bonding reel, complete with 50 feet of cable and crocodile clip, is to be dealt with under Class EE, Group 2A, part number TBB/AU252-30E. Arrangements have been made for the purchase of these items and supply will be made without demand when received.

3. The bonding reel is to be fitted on the underside of the pumping compartment of the refueller or refuelling trailer in a convenient position for easy operation. The earthing wire is fitted directly to the reel and in order to ensure the maximum electrical contact right through to the pumping gear, it is essential that the surfaces of brackets or securing panels are perfectly clean.

(The foregoing is the text of A.F.O. 3362/1954 altered to meet R.A.N. conditions.)

(4737/7/35)

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C.N.Os. 197-216/55

RESTRICTED
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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
22nd March, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0072

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197.

NAVAL HOSPITAL, MANUS ISLAND.

From the date of opening of the new hospital buildings on Manus Island, the title "Naval Hospital, Manus Island" (Short title "N.H.M.I".) is to be used in official correspondence and documents to designate the new facilities for treatment of sick personnel.

(3169/2/195)

198.

VISIT TO WEAPONS RESEARCH ESTABLISHMENTS IN SOUTH AUSTRALIA - PROCEDURE.

The Weapons Research Establishments in South Australia, situated at Salisbury and Woomera, have been proclaimed as prohibited areas. The following procedure has therefore been laid down regarding visits to these Establishments :-

(a) Application, in writing, for permission to visit Weapons Research Establishments from personnel, other than those in possession of a Weapons Research Establishments all-areas pass, should be submitted through the Secretary, Navy Office, so as to reach the Department of Supply seven days before the proposed visit.

(b) No person whose visit has not been approved by the Department of Supply will be admitted to a Weapons Research Establishment.

(c) The approval will relate to a particular visit and will cover the date or dates on which the visit has been approved.

(d) The Director of Naval Intelligence, Navy Office, Melbourne, will be responsible for the security vetting of Naval personnel, and will provide the Department of Supply with the necessary clearances.

(e) Visitors will be required to sign the necessary security forms, and visitors' books, as required by the Controller or Superintendent of the Establishment visited.

(f) Visitors will be accompanied by an authorized officer from time of entry into an Establishment until time of exit.

2. Applications by letter should therefore be forwarded to the Secretary, Navy Office, at least fourteen days before the proposed visit so that the necessary papers can be forwarded to the Department of Supply, who will make arrangements for the visit. The Naval Staff Officer, Department of Supply, should be informed as early as practicable of any visit as soon as it is contemplated, in order to expedite arrangements.

3. Forms, in triplicate, as per Appendices A and B hereto, are to accompany the formal application.

Air Travel - Salisbury to Woomera.

4. Courier aircraft fly direct between Edinburgh Field (near Salisbury, S.A.) and Woomera as follows :-

(a) Monday to Friday inclusive -

Leave Edinburgh Field - 1345; Arrive Woomera - 1535.

Leave Woomera - 1645; Arrive Edinburgh Field - 1840.

(b) Weapons Research Establishment. Buses leave Stores and Transport Depot, 61 Currie Street, Adelaide, at 1200 to connect with the outgoing courier at Edinburgh Field. For visitors proceeding to Woomera from Salisbury, a bus leaves the canteen at 1255, and the main gate at 1300. A bus meets the incoming courier at Edinburgh Field to transport passengers to 61 Currie Street.

(c) Guineas Airways provide a service between Salisbury and Woomera on Mondays only as follows :-

Leave Parafield - 0630; Arrive Woomera - 0815.

Leave Woomera - 0830; Arrive Parafield - 1015.

Rail Travel - Adelaide to Woomera West.

5. Rail cars operate between Adelaide and Woomera West as follows :-

(a) Leave Adelaide - 0750, Wednesdays and Fridays - Arrive Woomera West - 1720 same day.

Leave Woomera West - 0430, Thursdays and 0315, Saturdays - Arrive Adelaide - 1400, Thursdays and 1245, Saturdays.

(b) Leave Adelaide - 1800, Sundays - Arrive Woomera West 0330, Mondays.

Leave Woomera West - 0430, Mondays - Arrive Adelaide - 1400 same day.

(c) Buses meet the rail car at Woomera West.

6. Times quoted are local South Australian times (zone - minus 9½).

7. Rig. The rig for Service personnel at Weapons Research Establishments is as follows :-

(a) Salisbury - Uniform or plain clothes.

(b) Woomera - Uniform by day, plain clothes at night.

(c) Generally, at Woomera, tropical rig is worn by day during November to April inclusive.

8. The Naval Staff Officer to the Department of Supply, 339 Swanston Street, Melbourne, is responsible for making transport arrangements between Adelaide and Woomera for Naval and civil personnel of this Department, except in the cases of such personnel who are stationed in Adelaide, whose arrangements will be made by R.N.O., South Australia.

9. Before a visitor can enter any Weapons Research Establishment area, he must be in possession of an authorisation covering the visit. This will only be issued for approved visits and will be a movement identity form.

10. This form will be exchanged for a visitor's pass on arrival at Salisbury or Woomera.

Identification Movement Forms will be issued by the following :-

Department of Supply,
339 Swanston Street,
MELBOURNE. C.1.

State Controller,
Department of Supply,
Dymocks Building,
424 George Street,
SYDNEY. N.S.W.

State Controller,
Department of Supply,
1st Floor,
Bank of New South Wales Building,
Corner King William Street and
North Terrace,
ADELAIDE. S.A.

Weapons Research Establishment,
SALISBURY. S.A.

11. Navy Orders 84 of 1948 and 46 of 1951 are hereby cancelled.

(5043/71/11)

APPENDIX A

DEPARTMENT OF THE NAVY.

Application to Visit Weapons Research Establishments
Particulars required

Surname ..... Christian Names .....

Address .....

Date and Place of Birth .....

Next of Kin .....

Relationship and address .....

.....

Parents' nationality .....

Business or Occupation .....

Department or Service sponsoring application .....

.....

I hereby declare that, to the best of my knowledge, the above particulars are correct in every detail.

Date ..... Signature .....

APPENDIX B

APPLICATION TO VISIT WEAPONS RESEARCH ESTABLISHMENTS

From: The Secretary, Department of .....

To: The Secretary, Department of Supply.

Permission is desired for the visit of the undermentioned:

Surname	First Names	Rank or Designation

Area(s) to be visited Salisbury / Woomera } Strike out where not applicable

Reason for visit:

	Date and time of arrival	Date and time of departure
Salisbury Woomera		

Transport requested

	Date and Time	From	To
Motor Transport			
Air Transport			

Accommodation requested
(Nights of dates indicated)

Adelaide	Salisbury Hostel	Woomera

The above person has been security checked (Yes or No) .....
If "No" completed Personal Security Form is attached.
(Fighting Services should advise security check direct)

W.R.E. Undertaking of Secrecy has been signed (Yes or NO)....

Other Details:

.....
Secretary
Department of .....
Date .....

SECTION 2 - PERSONNEL

199.

ENTRY OF CADET MIDSHIPMEN INTO THE ROYAL AUSTRALIAN NAVAL COLLEGE.

I - Cadet Midshipmen (13 Year-old Entry).

The entry of Cadet Midshipmen (13 Year-old Entry) into the Royal Australian Naval College has been discontinued.

II - Cadet Midshipmen (Normal Entry).

2. The usual educational examination for the entry of Cadet Midshipmen (Normal Entry) will be held at the end of August, 1955. The age range for this entry has been changed, and applications for the 1955 examination will be accepted from boys who attain the age of 15 years during the period 1st July, 1954, to 30th June, 1955, (i.e., boys born on or between 1st July, 1939, and 30th June, 1940,).

3. Those who qualify at the examination will be medically examined between October and December. The selected candidates will enter the Naval College about the end of January, 1956.

4. Applications on the required form should reach the Secretary, Department of the Navy, Navy Office, Melbourne, S.C.1., Victoria, not later than 15th June, 1955.

5. Application forms and full details of this entry may be obtained from -

The Secretary, Department of the Navy, Navy Office, Melbourne, S.C.1., Victoria.

The Commanding Officer, H.M.A.S. RUSHCUTTER, Beach Road, Edgecliff, N.S.W.

The Naval Recruiting Officer, 127 Eagle Street, Brisbane, Q'ld.

The Resident Naval Officer, Naval Staff Office, Fletcher Road, Birkenhead, S.A.

The Resident Naval Officer, Naval Staff Office, Police Building, Franklin Wharf, Hobart, Tas.

The Naval Officer-in-Charge, Naval Staff Office, Cliff Street, Fremantle, W.A.

III - Cadet Midshipmen (Matriculation Entry).

6. An entry of young men of up to 19 years of age is being introduced. Applications for the January, 1956, entry will probably close in October, 1955, and will be invited from young men born on or after 1st January, 1937. The educational qualification required will be Matriculation Certificate. (For the Executive, Engineering and Electrical Branches certain English, Mathematics and Science subjects will be essential.). Full details will be obtainable about August, 1955, from the authorities listed in paragraph 5 hereof.

7. Navy Orders 184 of 1953 and 144 of 1954 are hereby cancelled.

(4005/2/232)

(This Order will be reprinted for posting on notice boards.)

200.

INSTRUCTIONAL FILMS AND FILM STRIPS - E699 - "POWERED FLIGHT, THE STORY OF THE CENTURY" - DISTRIBUTION.

A copy of the new commercially produced educational film E.699, "Powered Flight, The Story of the Century", is being obtained and will be supplied to the R.A.N. Air Station, Nowra, without demand by the (Superintending) Naval Store Officer, Sydney.

2. This film, which is compiled from contemporary newsreels and similar sources, traces the history of powered flight from the Wright Brothers' flight of 1903 to the Comet of 1953. It is interesting and has general educational value. Running time 54 minutes. 3 Spools.

(4518/61/459)

201.

MEDICAL - ARTIFICIAL RESPIRATION - MANUAL METHOD.

The following methods of manual artificial respiration, described in A.F.O. 3387/1954, replace those outlined in R.A.N. Medical Technical Instruction No. 41 dated 19th June, 1952, letter No. 67010, titled "Holger Nielson Method". It will be noted that a third method, the Hip-roll Back-Pressure Method has been introduced.

2. The qualities to be looked for in any method are -

(a) it should be applicable to cases of asphyxia or apnoea from any cause except total respiratory obstruction;

(b) it should be possible to start it quickly with a minimum of preparation of the patient;

(c) it should give sufficient pulmonary ventilation to ensure normal arterial oxygen saturation in a relaxed apnoeic subject;

(d) it should be easy to teach;

(e) it should be possible to continue for long periods without the operator becoming unduly fatigued.

3. For many years Schaefer's method has been taught in all the Services and in the St. John Ambulance and Red Cross organisations. This method has the merits of simplicity and ease of performance. It has long been recognised, however, that the pulmonary ventilation induced is dangerously low. It was for this reason that the Navy introduced Eve's method, despite the manifest disadvantages of a non-manual procedure requiring a prepared apparatus. It has now been established that there are several manual methods which can produce a pulmonary ventilation two or three times as great as can Schaefer's method. A tidal volume of over 1 litre can be achieved by methods in which both inspiration and expiration

are actively controlled by the operator. With Schaefer's method inspiration takes place passively through the elastic recoil of the chest, and the tidal volume rarely exceeds 400 c.c. Such a tidal volume is barely sufficient to clear the dead space.

4. The arm-lift back-pressure method is thought to meet the requirements listed in paragraph 2 above better than any other. Trials have shown that it is one of the easiest methods to teach. It consistently produces a tidal volume of about 1 litre, in the absence of respiratory obstruction, and it is no more fatiguing than Schaefer's method. Nevertheless it is not quite universally applicable. It is contra-indicated if there is serious injury to the arms or shoulder girdle. It may prove impracticable if the patient is confined in a narrow space. First Aid parties should therefore be familiar with some of the alternative efficient methods. The two best alternatives are the hip-lift back-pressure method and the hip-roll back-pressure method. The former probably gives slightly greater ventilation than any other manual method, but it is very exhausting to the operator and not too easy to learn. The latter gives about the same ventilation as the arm-lift back-pressure method and is less fatiguing than the hip-lift, but is much the most difficult to do well. The hip-lift and hip-roll methods are, of course, contra-indicated where there is injury to the lower part of the body. Full instructions for the performance of all the methods discussed here are given in the Appendix.

5. The study of artificial respiration has received a considerable impetus from the discovery that it can be a life-saving adjunct to other treatment in cases of nerve gas poisoning. In these cases some degree of bronchial constriction is to be expected, and artificial respiration will be difficult. However, if a patient is seriously anoxic it is vitally necessary to get some air into the lungs quickly, and the arm-lift back-pressure method seems to offer the best hope. Probably there will be some cases that can be saved only by a positive-pressure mechanical resuscitator, but it should be made clear to all personnel under instruction that it would be quite wrong to delay artificial respiration while a resuscitator is sought.

6. "First Aid in the Royal Navy" will be amended in due course.

(The foregoing is the text of A.F.O. 3387/1954 altered to meet R.A.N. conditions.)

(4018/5/95)

Appendix

Arm-lift Back-Pressure Method

1. Loosen tight clothing around the neck and waistband.
2. Lay the patient face downwards, his head turned to one side and resting on his hands. *If necessary, quickly sweep a finger through his mouth to clear away* froth and foreign matter and to bring his tongue forwards.
3. Kneel at the patient's head on one or both knees and grasp his arms just above the elbows (Fig. 1).
4. Rock gently backwards, keeping your arms straight. This draws the patient's arms upwards, inwards, and towards you (Fig. 2). Apply enough lift to feel strong tension in the patient's chest muscles, but not so much as to pull him along the deck or to pull his hands from under his head.
5. Rock forward, replacing the patient's elbows in the starting position.
6. Slide your hands along the patient's back until they are just below his shoulder blades, the fingers spread out along his lower ribs and the thumbs an inch or so from his spine (Fig. 3). Rock forward, keeping your arms straight, and exert slow, steady, even pressure downwards. Bring your body well forward, so as to press down almost vertically (Fig. 4).
7. Release the pressure quickly. Do not give any extra push on release. Rock backwards, grasp the patient's arms again, and repeat the cycle.
8. Repeat the cycle eight to ten times a minute in a steady rhythm of Lift–Release–Press–Release. Each of these four phases should last 1½–2 seconds.

Hip-lift Back-pressure Method

1. } As in the arm-lift back-pressure method.
2. }
3. Kneel on one knee astride the patient at the level of his hips.
4. Slide your fingers beneath the patient's hip bones where they touch the deck (Fig. 5). This will be some inches below his waist. *NEVER* grasp the patient's waist.
5. Lift the patient's hips some four to six inches from the deck. Keep your arms straight, so as to lift with your back and shoulders (Fig. 6). The hip lift allows the patient's abdomen to sag down, and this sucks air into his chest. If you have taken hold of his waist, his abdomen cannot fall and your effort is wasted.
6. Gently *lower* the patient's hips onto the deck. Do not drop him.
7. Place your hands on the patient's back just below his shoulder blades. The thumbs should reach to within an inch or two of his spine and the fingers should be spread out along his lower ribs (Fig. 7).
8. Lean forward, keeping your arms straight, and exert steady, even pressure vertically downwards on the patient's lower ribs (Fig. 8). This procedure is virtually the same as the active phase of Schaefer's method.
9. Release the pressure quickly. Do not give an extra push on release.
10. Rock backwards and resume the starting position. The whole cycle should be repeated eight to ten times a minute.

FIG 1

FIG 2

FIG 3

ARM-LIFT BACK-PRESSURE METHOD FIG 4

FIG 5

FIG 6

FIG 7

HIP-LIFT BACK-PRESSURE METHOD FIG 8

Hip-roll Back-pressure Method

1.
2.
3.
4. } As in the hip-lift back-pressure method.

5. Keeping your arms straight, lean towards the side on which you are kneeling. Roll the patient's hips up on to your knee or the lowest part of your thigh (Figs. 9 and 10 show side and front views of the hip roll). The roll must be taken far enough to ensure that *both* the patient's hips are raised from the deck. If this is not done, his abdomen will not be able to sag enough to suck in a useful amount of air.

6.
7.
8.
9.
10. } As in the hip-lift back-pressure method.

FIG 9

FIG 10

HIP-ROLL BACK-PRESSURE METHOD

(B.R. 25—First Aid in the Royal Navy.)

202.

RATINGS - WEARING OF PLAIN CLOTHES - CHIEF PETTY OFFICERS.

The Naval Board have decided that Chief Petty Officers (and those of equivalent rating) may be allowed to wear plain clothes when proceeding on liberty from ships.

2. The Naval Board in reaching this decision, felt confident that Chief Petty Officers exercising the privilege would see that their appearance was appropriate to their standing.

3. Commanding Officers are to be authorized to withdraw the privilege for a period up to 180 days from any Chief Petty Officer who abuses it.

(The foregoing is the text of A.F.O. 3314/1954 altered to meet R.A.N. conditions.)

(4716/1/197)

203.

RATINGS - WEARING OF PLAIN CLOTHES.

The Naval Board have decided that the privilege of wearing plain clothes when proceeding out of and returning to Naval Shore Establishments is to be extended to junior ratings and ranks over the age of 17½ years other than men undergoing disciplinary and technical training on first entry, and including National Service Trainees.

2. The following conditions are to apply :-

(a) The privilege may be exercised without any request action.

(b) The privilege is to be withdrawn -

(i) from ratings in second class for leave or conduct; and may be withdrawn for a period of up to 180 days.

(ii) from ratings who contravene the plain clothes instructions issued by Commanders-in-Chief, Flag Officers and Commanding Officers; or

(iii) from ratings whose uniform kit is persistently incomplete or below standard; or

(iv) for serious misconduct ashore.

The privilege is not to be withdrawn for any other reason.

(c) The Commanding Officer or his representative has full authority to control the standard of dress and appearance of men entering and leaving establishments in plain clothes.

(d) Men in plain clothes must carry their Identity Cards.

(e) The Service accepts no liability whatsoever for loss of or damage to plain clothes (Q.R. and A.I., Article 4709(1)(c));

(f) No additional stowage can be provided from Service sources and such plain clothes as are required must be kept in the existing stowage, together with the standard uniform kit which is to be retained in the establishment. There is no objection to establishments providing private lockers from non-public funds.

3. The following general rules are to apply :-

(a) Jackets and ties are to be worn by men when entering or leaving establishments.

(b) No visible items of Service uniform other than raincoat, scarves, shoes, socks, white shirts, collars and ties, may be worn in plain clothes.

(c) The wearing of headgear is to be optional.

Flag Officers, Commodores, Naval Officers-in-Charge, and Resident Naval Officers, have discretion to vary these rules to meet special local conditions and the requirements of sporting activities.

4. It is the intention that, generally, ratings should not change into plain clothes until immediately before proceeding on liberty and should change out of them immediately on return from liberty.

5. The proper method of according marks of respect by libertymen in plain clothes is to raise the hat or when not wearing headgear to give an "eyes right" or "eyes lift".

6. Naval ratings wearing plain clothes in accordance with this Order remain subject to Naval Discipline.

7. Ratings travelling as part of an organised leave party when travelling on long leave are to continue to wear uniform.

8. Q.R. and A.I., Article 1108(5), will be amended.

(The foregoing is the text of A.F.O. 3313/1954 altered to meet R.A.N. conditions.)

(4716/1/197)

204.

W.R.A.N.S. - WEARING OF PLAIN CLOTHES.

With reference to Navy Orders 202 and 203 of 1955, the privileges contained therein are applicable to Junior Ratings of the W.R.A.N.S. under similar conditions.

2. No visible items of Service uniform other than raincoats, trousers serge, jerseys blue, black and white court shoes, may be worn with plain clothes.

(4716/1/223)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

205.

DEMAND, SUPPLY AND RETURN PROCEDURE FOR REPLACE TECHNICAL EQUIPMENT AND SPARE GEAR (ENGINEER'S AND ELECTRICAL) - AMENDMENTS.

The following amendments are to be made to Navy Order 207 of 1952 :-

Paragraph 29, Note (d) - Delete and substitute -

Items will be classified either 'Consumable' or 'Returnable' and will be denoted by the letter 'C' and 'R' respectively in the List of Portable Fittings, etc.

'CONSUMABLE' - If an item in this category is defective and cannot be repaired for service in the duty for which it was designed, a replacement may be demanded.

The defective item is to be brought to "arisings" forthwith (paragraph 40).

'RETURNABLE' - If an item in this category is defective and cannot be repaired within the Fleet's resources, a replacement may be demanded and the defective item returned to R.A.N. Central Machinery and Spares Depot.

Before raising a demand, due regard is to be given to the local Fleet facilities for the repair of a defective item. It must 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 with the assistance of Base Repair Staffs, etc.

Paragraph 29, Note (e) - Delete and substitute -

The classifications 'C' and 'R' are applicable to items additional to establishment (paragraph 10(a)(iii)) except that items not shown in the List of Portable Fittings, etc., are to be classified as 'R'.

Paragraph 32 - Delete "Note. Major ---- vouchers"

Paragraph 33 (b) and 33 (c) - Delete and substitute -

33 (b) Ledger pages, when raised, are to be numbered to accord with the page and line numbers in the List of Portable Fittings, etc., and guarded in sequence in the cover (Form A.S. 155).

A separate ledger page is to be raised for each item, and all subsequent transactions in respect of the item are to be recorded on the ledger page.

Continuation ledger pages for any item are to be numbered similarly and suffixed 'a', 'b', 'c', etc. Ledger pages raised to support transactions in items not included in the List of Portable Fittings, etc., are to be numbered consecutively and guarded in a separate cover, as an 'occasional' ledger.

It may be convenient to maintain more than one ledger for spare gear.

Existing ledger/s should not be altered pending the examination of the account/s by an Inspecting Officer who will reconstruct the ledger/s as requisite.

33 (c) A notation is to be made in the List of Portable Fittings, etc., of the creation of each ledger page, and the quantity actually on board at the time of the initial transaction is to be entered on Line 1 of the Ledger page (First charge or Brought forward). Where items are not shown in the List of Portable Fittings, etc., the word 'Nil' is to be entered in the appropriate place on the ledger page.

(3756/1/13)

206.

ANTI-SUBMARINE - ASDIC TYPE 149 - INTRODUCTION OF TUBE, SUPPORTING, PATTERN A.1653B AND TUBE, EXTENSION, PATTERN A.4248.

In ships fitted with Asdic Type 149, the removal of the dome, Pattern 7024C, by divers, requires the use of a support tube for each training shaft so that they are secured in the housed position.

2. Experience has shown that Pattern A.1653, Tube, Supporting, originally supplied for this purpose is too short and Pattern A.1653B, Tube, Supporting, which is longer has therefore been introduced to replace it. In order to avoid wastage of material Pattern A.1653, Tube, Supporting, can be made effective by the addition of Pattern A.4248, Tube, Extension.

3. Future issues of Asdic Type 149 will include Pattern A.1653B, Tube, Supporting, but in ships where Pattern A.1653, Tube, Supporting, is held, Pattern 4248, Tube, Extension, should be demanded from the nearest (Superintending) Naval Store Officer.

(The foregoing is the text of A.F.O. 3172/1954 altered to meet R.A.N. conditions.)

(4518/11/222)

207.

ALTERATION AND ADDITION ITEMS - BATTLE CLASS DESTROYERS.

The following alteration and addition item is approved in principle for Battle Class Destroyers

Class List Item No. 78 Classification "A"

Item: "To remove voice pipe communication facilities in P.R.4. Torpedo Tube mountings".

Compensating Weight: The completion of this alteration and addition item provides a surrender weight of 34 lbs. at F'castle Deck level or 82 lbs. at Upper Deck Level available for future A's and A's.

References: (a) Captain D's letter of 22nd October, 1954.

(b) F.O.C.A.F's letter A.F.1918/1900/12 of 3rd November, 1954.

(4280/10/154)

208.

NAVAL STORES (AIR) - BONDING TESTER (KELVIN BRIDGE) REF. NO. G6C/3535 - INTRODUCTION.

The high standard of bonding requirements of R.A.N. aircraft, due to the increasing complexity of aircraft radio installations, has necessitated the introduction of the Ref. G6C/3535 Bonding Tester (Kelvin Bridge). This instrument which is graduated from 0.001 ohms to 0.50 ohms is to be used instead of Patt. No. FIC/19744 Tester when testing the bonding systems of all aircraft.

The maximum permissible resistance values are detailed in R.A.N.A.M.O./General/L.8.

2. The allowances of Ref. G6C/3535 are as follows :-

Service.	Quantity.
Aircraft Carriers	1 No.
Air Stations	1 No.

3. Allowances of Class F, Group 1C, Pattern No. 19744 Tester as shown in A.P.(N) 376, A.P.(N) 377 and A.P.(N) 378 will remain unaltered.

4. Initial supply will be effected, without demand by the Naval Store Officer (Air), Bundock Street, Randwick.

5. Relevant Establishment Lists should be noted accordingly quoting this Order as authority.

(4421/1/65)

209.

NAVAL STORES (AIR) - OXYGEN TEST CHAMBER, MARK 2, REF. 6C/1042 AND FLOWMETER 8-100 LITRE/MINUTES. REF. 6C/1166 - INTRODUCTION.

The undermentioned permanent items are hereby introduced :-

Description.	Stores Ref. No.
Oxygen test chamber, Mark 2	6C/1042
Flowmeter, 8-100 litre/minutes	6C/1166.

2. The oxygen test chamber will be the standard equipment for the testing of oxygen demand type regulators: the flowmeter is required for the periodical calibration of the chamber.

3. One chamber and one flowmeter will be allowed to H.M.A.S. MELBOURNE and R.A.N. Air Station, Nowra. Services should demand from the R.A.N. Air Store Depot, Randwick. Supplies are not expected to be available before September, 1955.

4. The Instrument Manual A.P.1275T and Air Stores Establishments A.P.(N) 377 and 378 will be amended.

(The foregoing is the text of A.F.O. 2532/1954 altered to meet R.A.N. conditions.)

(4403/15/385)

210.

NAVAL STORES (GENERAL) (CLASS B, GROUP 6) - CONDENSER RETUBING - TUBE PLUGS - REVISED DESCRIPTIONS.

The descriptions of condenser tube fittings, Patterns 12193, 12194 and 12195, referred to in Navy Order 761 of 1954 *(Naval Stores (General) (Class B, Group 6) - Condenser Retubing - Tube Plug - Introduction and Reserves)* have been amended as follows :-

Pattern No.	Description
12193	Cap Ferrule, Tube Plate, Square Type for ¾-in. condenser tubes.
12194	Cap Ferrule, Tube Plate, Square Type for ⅝-in. condenser tubes.
12195	Tube Plug, Square Type, Wilkie, for ⅝-in. condenser tubes.

2. The Rate Book will be amended.

(The foregoing is the text of A.F.O. 114/1955 altered to meet R.A.N. conditions.)

(4505/60/52)

211.

NAVAL STORES (GENERAL) (CLASS B, GROUP 11, PART F) - TYPE A.9, TOOL KIT FOR SAFETY EQUIPMENT RATINGS - ADDITIONAL SPANNERS.

Aircraft Carriers, R.A.N. Air Stations.

To enable the couple nut on the Mark "M" operating head of the CO_2 inflation bottle attached to the lifesaving waistcoat to be tightened to prevent easing off and loss of CO_2, the safety equipment ratings' tool kit, Type A.9, will in future include the following two spanners :-

Pattern 2471, Spanner, D.E., ½-in. x 3/16-in. .. .. 1 No.
Pattern 2477, Spanner, D.E., ¼-in. x 5/16-in. .. .. 1 No.

2. Demands to complete to the new allowance should be forwarded to the appropriate storing yard.

3. The Naval Storekeeping Manual (B.R.4) will be amended.

(The foregoing is the text of A.F.O. 48/1955 altered to meet R.A.N. conditions.)

(4506/12/266)

212.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - ACID, SULPHURIC, PATTERN 3 - CHANGE OF DENSITY.

Future supplies of Portable Secondary Batteries (Lead-Acid Type) from the United Kingdom, with few exceptions, will require filling with Sulphuric Acid of Specific Gravity 1.270 corrected to 60°F.

2. In order to obviate the necessity for breaking down quantities of acid S.G.1.840 on board ships, it has been decided to change the density of Pattern 3 Sulphuric Acid from S.G.1.250 to S.G.1.270.

3. Future purchases of Pattern 3 Sulphuric Acid will be of S.G.1.270.

4. Batteries such as commercial types and some of local manufacture which require first filling acid other than of S.G.1.270 will still be in service and it is essential that acid density be checked before commencing to fill any battery, as use of acid of the wrong density will seriously affect the life and performance of the battery.

5. B.R.810 (Rate Book and Authorised List of Naval Stores) will be amended.

(The foregoing is the text of A.F.O. 2670/1954 altered to meet R.A.N. conditions.)

(4512/70/228)

213.

BOOM DEFENCE EQUIPMENT - PRESERVATION.

It has been decided to introduce new materials for the maintenance and preservation of Boom Defence Equipment. The materials to be used, and the surface preparation to be employed, are detailed in the Appendix to this Order.

2. The paints to S.A.A. Specifications quoted in the Appendix are not yet in general use in the Royal Australian Navy. The Orders detailing the introduction of these new products give instructions that stocks of paint at present held in store depots are to be used before the new paints to S.A.A. Specifications are issued. In general the new paints will not come into use for some months. This Order is thus to be implemented using the paints at present held by the Store Depots in the first instance. Stocks of Proprietary materials at present held by Boom Depots and which will now not be required, are to be returned to the nearest Naval Store Depot.

3. Specifications and drawings will be amended as necessary.

(4451/11/3)

APPENDIX

UNITS	SURFACE TREATMENT		PRIMING COATS	FINISHING COATS.		REMARKS
	During Manufacture	During Service		Specifications	Colour	
1. Flotation Units - (a) Exterior Surfaces.	(a) Pickled in Sulphuric acid. (b) Fresh water washed. (c) Treated with Phosphoric acid solution. (d) Fresh water washed, and air dried. After welding, joints are to be again treated with Phosphoric acid solution.	(a) Surface to be sand blasted or (b) Surface to be cleaned by flame cleaning followed by Power wire brushing. Bare metal is then to be treated with Phosphoric acid solution to provide an etched surface to give a good "key" for the subsequent painting. After acid treatment, surface is to be washed with fresh water, and air dried.	Two coats of Red-Oxide/ Zinc-Chromate Primer to Specification S.A.A. Interim 5A (like Pattern 3568). First coat to be applied as soon as possible after surface treatment.	Two coats of Enamel Marine Exterior Finishing to S.A.A. Int. 227.	Aluminium.	Finishing coats to be applied by Spray when possible.
		N.B. For units which have not been pickled, care should be taken that all mill scale present is removed before painting.				
(b) Interior Surfaces.	Pickled and Phosphated as in 1(a).	Maintenance is not normally necessary. Where corrosion is evident, clean by appropriate method.	Two coats of Red-Oxide/ Zinc-Chromate Primer to Specification S.A.A. Int. 5A (like Pattern 3568). To be sprayed or brushed where possible; otherwise flush coated.	Nil.		
(c) Rubbers.	(a) Surface Cleaned to remove dirt, grease, etc. (b) Treated with Copper Napthenate (20% solution) to Specification S.A.A. Int. 89.	Rubbers to be removed from unit, and old paint removed by burning off.	One coat oil base wood primer to Specification S.A.A. Int. 10A (non-lead) (like Pattern 518) All surfaces, including bolt holes, etc., to be coated.	(a) One coat of Undercoat for Enamel to S.A.A. Int. 226. (b) One coat Enamel Marine Exterior Finishing to S.A.A. Int. 227.	French Grey (like Pattern 5342) Colour in harmony with surrounding surfaces.	Complete paint system to be applied to all surfaces before rubber is attached to unit.

UNITS	SURFACE TREATMENT		PRIMING COATS	FINISHING COATS		REMARKS
	During Manufacture	During Service		Specification	Colour	
when colour identification is required for immersion, flotation units are to be painted with the appropriate colour of Enamel Marine Exterior Finishing, to Specification S.A.A. I t. 227.						
2. Chain Cable Concrete Mooring Clumps. Anchors. Flexible wire Rope. Small Parts, Shackles.	No preservative required.					
3. Stretcher Weights.	No preservative required.					
4. Boom Nets.	Preservation by coating impracticable: separate instructions will be issued.					

NOTES:- (a) Instructions on the use of sandblasting machines have been forwarded to Boom Depots.

(b) After flame cleaning, power wire brushing is to be used, as experience has shown that hand brushing will not clean the surface thoroughly.

(c) Paints are to be applied by spray whenever possible.

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

214.

FORM A.S. 1243z - TRUE EXTRACT OF CERTIFICATE OF SERVICE - PRESERVATION.

Extracts of Service Certificates on Form A.S. 1243z made for reference purposes in ships not carrying Service Certificates are not to be destroyed when the ratings are drafted from such ships.

2. As ratings are often drafted again to ships in which extracts of Service Certificates are required to be held, an extract when once made is to accompany the rating's Service Documents and so save paper and labour in future when an extract is required.

(3422/2/18)

215.

REPORTS OF STOCKTAKING - CERTIFICATION.

Treasury approval has been given to the following revised stocktaking certificate to be given on the summary and certificate sheet of reports of stocktaking for all classes of stores :-

"I certify with regard to the stock sheets and/or stocktaking reports subsidiary to this return that -

(a) the ledger balances shown thereon agreed with the balances in the stock ledgers;

(b) the stocks on hand shown thereon agreed with the quantities actually held;

(c) the calculations, extensions and castings are correct; and

(d) the discrepancies shown thereon and included on this return, both in quantity and value, are correct."

2. Pending reprint, stocktaking report summaries should be amended by the addition of the certificate, on the reverse side of the form, if necessary, by rubber stamp.

3. Navy Order 452 of 1952 is hereby cancelled.

(3526/14/101)

SECTION 6 - SHORE ESTABLISHMENTS

216.

PAPER TOWEL DISPENSERS - ALLOWANCE OF PAPER ROLLS.

The scale of allowance of paper rolls for use with paper towel dispensers in H.M.A. Naval Establishments has been reviewed in the light of experience since their introduction, and future demands should not exceed the basis of 8 rolls per month per 100 of complement borne.

(4514/1/87)

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RESTRICTED
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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
29th March, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

TABLE OF CONTENTS

217.

BOOKS - DISTRIBUTION OF NON-ACCOUNTABLE PUBLICATIONS AND AMENDMENTS DURING JANUARY, 1955.

The undermentioned non-accountable publications to A.P's, B.R's, etc., have been distributed to ships and services during January, 1955. Navy Order 110 of 1954 is relevant.

(4139/3/102)

BOOKS - DISTRIBUTION OF NON-ACCOUNTABLE PUBLICATIONS AND AMENDMENTS DURING JANUARY, 1955.

TITLE	DATE
Flight	15th October, 1954.
Flight	22nd October, 1954.
Flight	29th October, 1954.
Flight	5th November, 1954.
Flight	12th November, 1954.
Flight	19th November, 1954.
Flight - Index to Vol. LXV	January-June, 1955.
Aeroplane	15th October, 1954.
Aeroplane	22nd October, 1954.
Aeroplane	29th October, 1954
Aeroplane	5th November, 1954.
Aeroplane	12th November, 1954.
Aeroplane	19th November, 1954.
United Nations Review Vol. 1 No. 5	November, 1954.
United Nations Review Vol. 1 No. 6	December, 1954.
N.A.M.A.N. N1366-N1376	31st December, 1954.
Fibres Vol. XV No. 11	November, 1954.
Fibres Vol. XV No. 12	December, 1954.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. NO.	A.L. OR LEAFLET
113	A.L. 96 and 97.
830 Vol. 2 (2nd Edition)	A.L.21.
970 Vol. 2	A.L.23 with corrigendum.
1086 Book 2 (2nd Edition)	A.L.43.
1086 Book 3 Pt. 1 (2nd Edition)	A.L.28.
1086 Book 6 (2nd Edition)	A.L.36.
1086 Book 7 (2nd Edition)	A.L.35.
1086 Book 9 (2nd Edition)	A.L.55.
1086 Book 11 (2nd Edition)	A.L.59, 60 and 61.
1086 Book 12 (2nd Edition)	A.L.39, 40, 41, 42, 43, 44, 45, 46 and 54.
1086 Book 13 (2nd Edition)	A.L.52 and 53.
1086 Book 15 (2nd Edition)	A.L.45, 46, 47, 59 and 60.
1182A Vol. 1	A.L.103 and 104.
1182C Vol. 6	A.L.17.
1182D Vol. 1 and 6	A.L.57.
1275A Vol. 1	A.L.433, 434 and 435.
1275T Vol. 1	A.L.7.
1455	A.L.221.
1492A Vol. 1	A.L.68 and 69.
1538A Vol. 1 and 6, Pt. 1	A.L.12.
1538D Vol. 1 and 6, Pt. 1 (2nd Edition)	A.L.50 and 51.
1538L Vol. 6 Pts. 2 and 4	A.L.19.
1641P Vol. 2 Pts. 1 and 3	A.L.53.
1661C Vol. 1 (2nd Edition)	A.L.48.
1661D Vol. 1	A.L.85.
1668B Vol. 1 Pt. 1	A.L.7.
1803A Vol. 1	A.L.37, 38 and 39.
1803B Vol. 1	A.L.124, 125 and 126.
1803C Vol. 1	A.L.38, 39 and 40.
1803D Vol. 1 Book 1	A.L.13.
1803D Vol. 1 Book 3	A.L.29, 30 and 31.
1803D Vol. 1 Book 4	A.L.17 and 18.
1803D Vol. 2 Pt. 2	A.L.121, 122, 123 and 124.

A.P. NO.	A.L. OR LEAFLET
1803D Vol. 2 Pt. 3	A.L.152, 153, 154, 155, 156, 157, 158, 159, 160 and 161.
1803E Vol. 1	A.L.65.
1803E Vol. 2 Pt. 2	A.L.42.
1803E Vol. 2 Pt. 3	A.L.53, 54 and 55.
1803F Vol. 2 Pt. 2	A.L.32.
1803J Vol. 1	A.L.27.
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N.A.M.O. General	Leaflet A.61 (4/11/54) Leaflet I.62 (30/10/54) Leaflet L.61 (2 leaves, 30/10/54) Leaflet L.63 (6/11/54) Leaflet X.59 Issue 2 (2 Leaves) (6/11/54) Leaflet STI/Elect./72B (2 Leaves) 3/11/54

A.P. NO.	A.L. OR LEAFLET
N.A.M.O. General	Leaflet STI/Misc./216 (5/11/54) Leaflet STI/Misc./216 Diagram Leaflet STI/RAA/51 (6/11/54) Leaflet SI/Elect./14 (4/11/54) Leaflet SI/Flying Clothing/2A (4/11/54) Leaflet SI/Misc./58 (5/11/54)
N.A.M.O. Miscellaneous	Leaflet STI/Meteor/ 101A (5/11/54) Leaflet STI/Meteor/101A Figs. 1 & 2 (5/11/54) Leaflet STI/Meteor/101A Fig. 3 Leaflet SI/Meteor/57 (4/11/54) Leaflet SI/Vampire Trainer/ RAN.2 (Dec. 1954)
N.A.M.O. Sea Fury	Leaflet SI/RAN.16 December, 1954.
Air Pictorial	October, 1954.
D.C.A. Air Navigation Orders Pt. 20:16	A.L.16.
De Havilland Goblin Spare Parts List	A.L.14.
I.C.A.O. Monthly Bulletin	September, 1954.
Mark Applicability and Interchangeability Chart for Fairey Firefly Aircraft Spares Vocabulary Section 26BZ.	A.L.15.
A.A.P. No. 2 Group H Section 128F Vol. 5 2nd Edition	Sub A.L.10 (A.L.6561).
A.A.P. 741:00 Vol. 2 Pt. 2	A.L.5, Modification No. 23/2.
R.A.A.F. Aircraft Safety Equipment Orders	Order No. 12 Pt. 2 Section C.
R.A.A.F. Merlin Power Plant Instructions	Instruction No. 5.
R.A.A.F. M/T Maintenance Instructions	Instruction No. 12/1.
R.A.A.F. Radio Facility Charts Aust. & N.Z. Area "D" Military Aviation Notice Serial No. 50D dated 13/12/54	
R.A.A.F. Twin Wasp Orders	A.L.37.
R.A.A.F. Twin Wasp Instructions	A.L.37, Instruction No. 100 (Issue 2 superseding and cancelling Issue 1).
R.A.A.F. Wirraway Orders	A.L.84, Order No. 166.
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S.R.635/NB	
S.R.636/NB	
S.R.638/NB	
S.R.639/NB	

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A.C.P.135	Australian Correction No. 1
R.L.E.18	Errata No. 1
R.L.E.26	Errata No. 1

TITLE	DATE
Lloyds Shipping Index	31st January, 1955. 7th February, 1955. 14th February, 1955.

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.

5th April, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0058

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List of Admiralty Fleet Orders Repromulgated as Commonwealth Navy Orders (Navy Order 104 of 1954).

SECTION 1 - ADMINISTRATIVE AND GENERAL

218.

SIGNATURE OF NAVAL BOARD CORRESPONDENCE.

Approval has been given for correspondence, except on important matters, from Branches at Navy Office to be signed, on behalf of the Secretary, by a senior officer of the Branch.

(3325/3/292)

219.

AUTHORITY TO SIGN PURCHASE ORDERS.

With reference to paragraph 5 of Navy Order 742 of 1954, officers to whom authority has been delegated to incur expenditure should advise the Chief Accounting Officer concerned, in writing, of any appointments made by them of other officers to sign purchase orders on their behalf. Specimen signatures should be furnished where necessary.

2. Suitable notation should be made against Navy Order 742 of 1954.

(3031/81/77)

SECTION 2 - PERSONNEL

220.

BRANCH LIST OFFICERS (FORM A.3. 206) - REPORTS.

The regulations governing reports on Senior Commissioned and Commissioned Officers are contained in Q.R. & A.I., Article 1024(d). In the Royal Australian Navy, however, reports are required as follows :-

(a) R.A.N. Officers. In original only, to reach Navy Office by 15th February and 15th August.

(b) R.N. Officers. In triplicate, to reach Navy Office by 15th December and 15th June.

2. Navy Order 346 of 1946 is hereby cancelled.

(3325/3/288)

221.

INSTRUCTIONAL FILMS AND FILM STRIPS - A490-"NAVAL AIRCRAFT HYDRAULICS - THE DOWTY LIVE LINE SYSTEM" - DISTRIBUTION.

A copy of the new film A490, "Naval Aircraft Hydraulics - The Dowty Live Line System", (parts 1-5), is being obtained and will be supplied without demand by the (Superintending) Naval Store Officer, Sydney, to the R.A.N. Air Station, Nowra, for the School of Aircraft Maintenance (Engineering).

2. The film, composed mainly of animated diagrams, demonstrates the operation and function of the components of the Dowty Live Line Hydraulics System by circuits.

Details of the five parts are as follows :-

Sub-title	Running time	No. of spools
Part 1 - The Power Circuit	14 minutes	1
Part 2 - The Undercarriage Circuit	9 minutes	1
Part 3 - The Flap Circuit	6 minutes	1
Part 4 - The Emergency Operation of the Undercarriage and Flaps	7 minutes	1
Part 5 - The Wingfold Circuit	14 minutes	1

(4518/61/464)

222.

INSTRUCTIONAL FILMS AND FILM STRIPS - E676 - "FIELD ATHLETICS" - DISTRIBUTION.

A copy of the new commercially produced film, E676, "Field Athletics" is being obtained and will be supplied to Flinders Naval Depot, (for the R.A.N. College), without demand by the (Superintending) Naval Store Officer, Sydney.

2. The film consists of ten parts, details of which are as follows :-

Sub-title	Running time	No. of spools
Part 1 - Broad Jump	11 minutes	1
Part 2 - Discus	11 minutes	1
Part 3 - Distances	11 minutes	1
Part 4 - High Jump	11 minutes	1
Part 5 - Hurdles	11 minutes	1
Part 6 - Javelin	11 minutes	1
Part 7 - Middle Distances	11 minutes	1
Part 8 - Pole Vault	11 minutes	1
Part 9 - Relays	11 minutes	1
Part 10 - Shot Put	11 minutes	1

These films have been produced in collaboration with the United States Olympic Committee and are intended primarily for advanced training.

(The foregoing is the text of A.F.O. 3239/1954 altered to meet R.A.N. conditions.)

(4518/61/436)

223.

INSTRUCTIONAL FILMS AND FILM STRIPS - MN119L - "AEROLOGY" - DISTRIBUTION.

Copies of the new American Training film MN119L, "Aerology - Weather and Radar" are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments	No. of Copies
H.M.A.S. WATSON.	1
R.A.N. Air Station, Nowra.	1
R.A.N. Film Library, Sydney.	1

2. Details of the film are as follows :-

Main Title - "Aerology"
Sub-title - "Weather and Radar".

The film illustrates typical P.P.I. echoes for Warm Front, Cold Front, Thunderstorm and Typhoon. It shows that by estimating the range, speed and direction of movement of the disturbance, the information can be of tactical use. Running time 16 minutes. One spool.

(The foregoing is the text of A.F.O. 3309/1954 altered to meet R.A.N. conditions.)

(4518/61/455)

224.

WOMEN'S ROYAL AUSTRALIAN NAVAL SERVICE - MADE-TO-MEASURE UNIFORM FOR OFFICERS - MELBOURNE - 1954/1955.

Made-to-measure uniform and greatcoats for Officers of the Women's Royal Australian Naval Service may be obtained from Messrs. Ince Bros., 166 Swanston Street, Melbourne. The prices operative during the financial year 1954/55 are -

Uniforms, superfine	£22.16. 9
Uniforms, barathea	£20.12. 3

Additional prices for braiding to rank -

Chief Officer	£1. 6. 4
1st Officer	£1. 6. 0
2nd Officer	£1. 0. 4
3rd Officer	18. 1
Greatcoats (including braiding)	£24. 4.11.

(4533/81/243)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

225.

GUN MOUNTINGS - R.P.41 R.P.C. EQUIPMENTS - AMPLIFIERS, MARK 15H (E.M.V.28) AND MARK 2J (E.M.V.51) - MODIFICATIONS - REPORTS.

Mark 15H (E.M.V.28) amplifiers are to have the following modifications carried out on the dither circuit :-

The capacitors marked C1 and C2, 1.0 mfd., A.P.50831 are each to be replaced by two capacitors (C1, C54) and (C2, C55), 0.5 mfd., Pattern Z.111377, 1,000 volt D.C. working each to be fixed by two clips, Pattern Z.110001. A wire link is to be provided so that either 0.5 mfd. or 1.0 mfd. may be selected. These capacitors are connected between terminal A2 of the dither transformers T3 and T8 and the plug P.17 and P.1 respectively. Reference should be made to Metropolitan Vickers Drawing No. A.2004496/13. Schematic Diagram of Amplifier Type E.M.V.28 R.P. 10.

2. Mark 2J (E.M.V.51) Amplifiers are to have the following modifications carried out :-

The capacitors marked C17 and C19, 1.0 mfd., A.P.50831 are each to be replaced by two capacitors (C17, C21) and (C19, C22), 0.5 mfd., Pattern Z.111377, 1,000 volt D.C. working, each to be fixed by two clips Pattern Z.110001. A wire link is to be provided so that either 0.5 mfd. or 1.0 mfd. may be selected. These capacitors are connected between terminal A1 of transformers DU1 and DU2 and wires Nos. 56 and 37 respectively. Reference should be made to Metropolitan Vickers Drawing No. A.2004794/6 - Schematic Diagram Amplifier Type E.M.V.51.

3. The work is to be carried out by ship's staff on all amplifiers in the abovenamed category and a record of the modification included in the amplifier data card.

4. A Report is to be rendered to the Secretary, Navy Office, stating that the modification has been carried out, together with the serial numbers of all amplifiers affected.

(The foregoing is the text of A.F.O. 3282/1954 altered to meet R.A.N. conditions.)

(4430/4/70)

226.

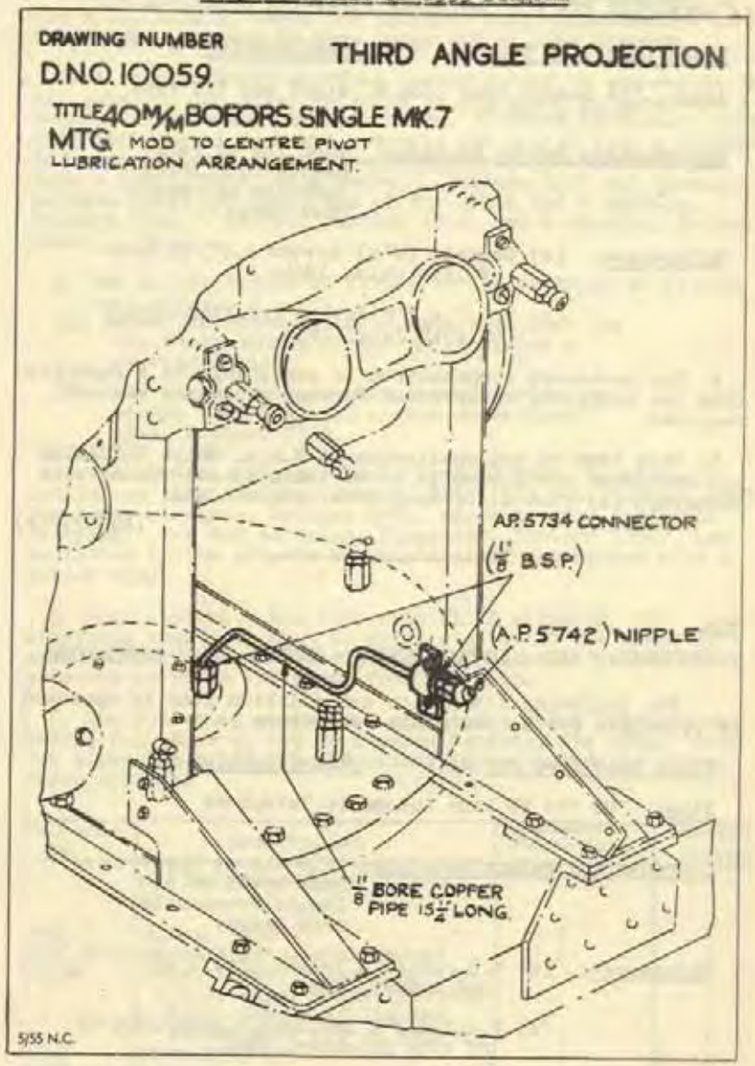
GUN MOUNTINGS - 40-MM., SINGLE BOFORS, MARK 7 MOUNTINGS - CENTRE PIVOT LUBRICATION ARRANGEMENT - MODIFICATION NO. 54.

(a) *Ships, Establishments and Authorities concerned.*	All ships, Fleet shore establishments, and Gunnery Equipment Stores and Depots holding stocks of these mountings.
(b) *Types and Marks of Equipment*	40-mm. Single Bofors, Mark 7 Mountings.
(c) *Part of Mounting affected*	Centre Pivot.
(d) *Purpose of modification*	To facilitate easy access to the lubricating nipple attached to the centre pivot. At present the nipple is inaccessible and may be "screened" by the electrical cables nearby.
(e) *Nature of modification*	To remove the existing nipple (A.P.5742) and re-position it on the left hand side frame, connection with the original lubricating point being effected by inserting a length of ⅛-in. bore copper pipe, 63 W.D.G. thick, Pattern 860, with A.P.5734 connectors.
(f) *Drawing or Navy Order Diagram*	Navy Order 226 of 1955 Diagram.
(g) *By whom to be done*	Ship's staff, Fleet shore establishments, and gunnery equipment stores and depots.
(h) *When to be done*	As soon as an opportunity permits, the A.P.5734 connectors required should be obtained from the nearest (Superintending) Naval Store Officer.
(i) *How to be treated*	As a defect.

(The foregoing is the text of A.F.O. 276/1955 altered to meet R.A.N. conditions.)

(4429/142/111)

Navy Order 226 of 1955 Diagram



227.

ALTERATION AND ADDITION ITEMS - A.A. FRIGATES (MODIFIED RIVER).

The following alteration and addition item is approved in principle for A.A. Frigates (Modified River) :-

Class List Item No. 524 Classification 'A'

Item: "To remove type 168E.M. sight and fit type T240 sight."

Compensating Weight Required: 1060 lbs at Forecastle Deck Level 3450 lbs at Upper Deck Level.

References: (a) Captain (F's) letter E.77/25/3600 of 12th July, 1954.

(b) F.O.C.A.F's letter A.F.1312/1550/7 of 27th July, 1954.

2. The necessary compensation is acceptable as a reduction from the stability reserve and further proposals are not required.

3. This item is not applicable to H.M.A. Ships CONDAMINE and MURCHISON and action is to be taken in accordance with paragraph (d) part II of Navy Order 424 of 1953.

(4430/6/38)

228.

ALTERATION AND ADDITION ITEMS - BATTLE CLASS DESTROYERS.

The following alteration and addition item is approved in principle for Battle Class Destroyers :-

Class List Item No. 83 Classification 'B'

Item: "To fit 25 line Automatic Telephone Exchange."

Compensating Weight Required: 1210 lbs at Upper Deck Level or 510 lbs at Forecastle Deck Level.

References: (a) C.O. ANZAC's letter 23/1/6 of 3rd August, 1952.

(b) F.O.C.A.F's letter A.F.1554/1005/28 of 19th November, 1952.

2. Proposals to meet compensating weight required are to be forwarded.

(5172/1/52)

229.

MINE COUNTERMEASURES - MAGNETIC SWEEPS (LOOP) - METHOD OF MARKING THE AFTER CATENARY OF SWEEP M.L., MARK 4, FOR BATHURST CLASS MINESWEEPERS.

The following method of marking the after catenary of the M.L., Mark 4, Sweep for Bathurst Class Minesweepers is introduced as shown in Navy Order 229 of 1955 Diagram.

2. A Pattern 20555 or 26946 canvas gaiter is secured to the mid point of the after catenary as described in paragraph 3 below. A 10-fathom length of 1-in. float rope, Pattern 8745E, with soft eye at each end connects the gaiter with a Pattern 8824 twin float. At the lower end of the 10-fathom float rope a spring hook (with swivel), Pattern 9200 and shackle, Pattern 5342, are used, and at the upper end a shackle, Pattern 5342, a swivel, Pattern 8740, and a shackle, Pattern 5442.

3. The gaiter should be fitted to the catenary as follows :-

(a) Serve the catenary cable with spun yarn for the whole length of the gaiter using a serving mallet.

(b) Lace on the gaiters over the spun yarn and secure each end with a worm drive hose clip, Pattern 3783.

4. The centre plate of Float, Pattern 8824, is already drilled to take Adaptor, Pattern 8857, and Pad, Pattern 8867, for Lamp, electric, Pattern 8854, which is used for night sweeping. For day sweeping, Flagstaff, Pattern 20507, may be fitted in the adaptor by ship's staff and marked with a yellow flag.

5. When streaming the loop with float attached, the diverters should be kept at short stay until the float is seen to be running correctly and the mid point of the after catenary is about 100 yards from the ship.

6. The following stores are required; ships fitted with Sweep, M.L. Mark 4, are to forward demands, for those items not already carried, to the nearest (Superintending) Naval Store Officer.

Pattern No.	Description	Components	Onboard spares
	Permanent Naval Stores		
	B5b		
8824	Float, twin	1	-
9200 B.10	Hook, spring, with swivel	1	1
8745E	Rope, float, consisting of - F.S.W. Rope, 1-in., Pattern 9088, length 10 fathoms, fitted soft eye at each end	1	1
8740	Swivel, ⅜-in.	1	1
8857 F.2A	Adaptor	1	1
	Consumable Naval Stores		
8867 E.2C	Pad, I.R.	1	2
	B.9		
3783	Hose clip, worm drive, for hoses of O. diam.: 2-in. to 2¾-in.	2	2

Pattern No.	Description	Components	Onboard spares
	B.10		
5342	Shackle, bow, screw, size ½-in.	2	2
5442	Shackle, straight, screw, size ½-in.	1	1
	F.2.0		
20555 or 26946	Gaiter, canvas	1	1

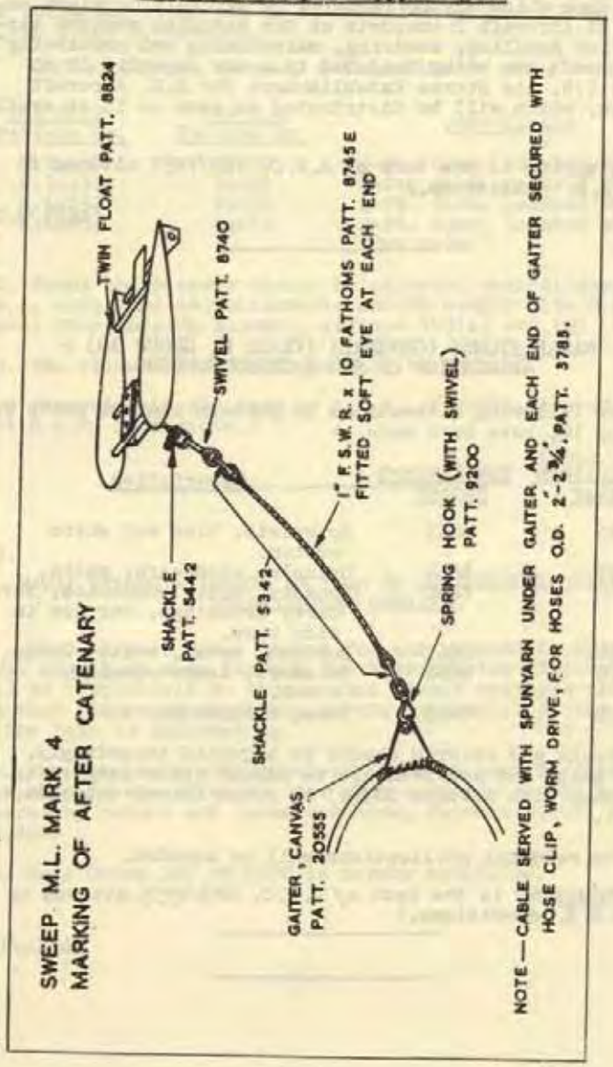
7. In order to compensate for the additional weight of the items listed in paragraph 6, one Kite Otter, Pattern 8711, is to be landed. The introduction of a class alteration and addition to provide permanent stowage for the twin float is under consideration. In the meantime, temporary stowage arrangements should be made.

8. Ships which have been issued with Floats, Pattern 8761, for marking the after catenary, should now return them.

(The foregoing is the text of A.F.O. 3325/1954 altered to meet R.A.N. conditions.)

(4518/31/43)

Navy Order 229 of 1955 Diagram



230.

NAVAL STORES (AIR) - STORES REQUIRED BY AIRCRAFT CARRIERS EMPLOYED AS AIRCRAFT TRANSPORTS OR FOR CARRYING RESERVE AIRCRAFT.

Stores which may be required by Aircraft Carriers employed as Aircraft Transports or for carrying reserve aircraft, for handling, securing, maintaining and preserving the Aircraft are being included in a new Appendix IV to A.P.(N) 378, Air Stores Establishment for H.M. Aircraft Carriers, which will be distributed as soon as it is available.

(The foregoing is the text of A.F.O. 163/1955 altered to meet R.A.N. conditions.)

(4401/2/27)

231.

NAVAL STORES (GENERAL) (CLASS E, GROUP 10) - ALLOCATION OF NEW PATTERN NUMBERS.

The following alterations to pattern numbers under Class E, Group 10, have been made :-

Old Pattern Number	New Pattern Number	Description
25	8663	Coverlets, blue and white cotton.
29	8664	Urinals, stoneware, white.
100	8660	Buckets, W.I., enamelled, for dirty dressings, for use in sick bays.
100	8661	Buttons, metal, white, large.
101	8662	Scissors, lamp-trimming, steel.
1023	8665	Pins, needlewomen's.

2. Stocks and records should be adjusted accordingly. H.M.A. ships and services are to adjust their ledgers in accordance with Article 109(g) of B.R.4 (Naval Storekeeping Manual).

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 283/1955 altered to meet R.A.N. conditions.)

(4514/1/92)

232.

NAVAL STORES (GENERAL) (CLASS E, GROUP 12) - BALLS, SIGNAL, CANVAS - TRANSFER TO CLASS D, GROUP 4.

It has been decided that, as from the date of this Order, the following items are to be transferred from Class E, Group 12, to Class D, Group 4.

Balls, Signal, Canvas, collapsible on metal hoops

Old E.12 Pattern No.	New D.4 Pattern No.	Description
N.14150	14150	4-ft. diam. painted black.
N.14151	14151	3-ft. diam. painted black.
N.14152	14152	2-ft. diam. painted black.
N.14153	14153	2-ft. diam. painted green, for helm.

2. Stock and records should be adjusted accordingly. H.M.A. ships and establishments should comply with B.R.4 (Naval Storekeeping Manual), Article 109(a) and (g).

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 162/1955 altered to meet R.A.N. conditions.)

(4514/21/223)

233.

NAVAL STORES - ISSUES ON LOAN TO BE ARRANGED THROUGH STOREKEEPING OFFICER.

When loan of Naval Stores for any purpose is approved, issue should be made through the Storekeeping Officer who will be responsible to ensure that proper receipts are given and that return of the items on the expiration of the period of the loan is followed up.

2. Any temporary withdrawal of items on loan to departments of a ship or establishment for such purposes should be covered by return and issue vouchers, Forms A.S.1091 and A.S.156.

3. Navy Order 326 of 1950 is hereby cancelled.

(4501/32/188)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

234.

NAVAL AVIATION - PROVISION OF EXTRA MEALS FOR AIRCREW AND ATTENDANT PERSONNEL.

The following allowances for the provision of extra meals for Aircrew and Attendant Personnel have been approved :-

Aircrews- An extra payment of one-third of the current victualling allowance per officer per day may be made to officers' messes for those officers who are required to stand by for, or undertake night flights or carry out other flights such as late evening or early morning flights which necessitate the provision of extra meals. Under operational conditions in aircraft carriers, a further similar extra payment may be authorised by the Commanding Officer when the provision of a second additional main meal is necessary. Extra meals for rating aircrews under the same conditions may be provided from the general mess.

Non-Aircrew Attendant Personnel- An extra payment of one-third of the current victualling allowance per officer per day may be made to the officers' mess for non-aircrew officers when engaged in night duty between the hours of 2000 and 0600 in connection with flying operations or exercises which necessitate the provision of extra meals when such duty immediately precedes or follows a day duty. Extra meals for non-aircrew ratings under the same conditions may be provided from the general mess.

Additional amounts paid to officers' messes are to be supported by a manuscript certificate attached to Form A.S.72Y giving names of officers concerned and dates involved. Details of additional meals supplied from the general mess are to be recorded in the remarks column of Form A.S.72Z.

(3818/101/9)

235.

VICTUALLING STORES - PROVISIONS - BREAD - STORAGE AT COLD TEMPERATURES.

In order to maintain supplies of fresh bread it may sometimes be possible for ships to take advantage of temporarily available cold room space to store new loaves at cold temperatures. The following information is therefore promulgated for guidance :-

(a) Bread should be fresh and at normal atmospheric temperature when placed in the cold room.

(b) Cold room storage only should be used (i.e., a temperature below 18° F. is required) and a steady temperature should be maintained. The lower the temperature the longer the bread may be expected to preserve its freshness.

(c) Under these conditions bread should keep in a reasonably palatable condition for up to 30 days.

(d) The bread should be thawed out as slowly as possible but for not longer than 24 hours; preferably air should have free circulation around the loaves.

(e) Bread removed from the cold room should be eaten as soon as possible, and in any case within 24 hours of thawing.

(The foregoing is the text of A.F.O. 50/1955 altered to meet R.A.N. conditions.)

(4528/16/32)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

236.

BOOKS - AIR PUBLICATIONS - AIRCRAFT DISMANTLING AND RE-ERECTION SCHEDULES, VOLUME 4, PART 16 (NAVAL) - NO FURTHER REQUIREMENT.

There is no further requirement for Aircraft Dismantling and Re-erection Schedules, Volume 4, Part 16 (Naval). Schedules will not therefore be produced for future aircraft types.

2. Existing Aircraft Dismantling and Re-erection Schedules, Volume 4, Part 16 (Naval) are now obsolete and are to be returned to the Naval Store Officer (Air), Randwick.

(The foregoing is the text of A.F.O. 3425/1954 altered to meet R.A.N. conditions.)

(4139/41/739)

SECTION 7 - CANCELLED LIST

237.

CANCELLATION OF NAVY ORDERS.

Navy Order 420 of 1953 is hereby cancelled.

(3760/1/65)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954)

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
31/55	153/55	-
36	-	185/55
46	156	-
48	-	211
114	-	210
336	111	-
510	-	119
900/54	231/54	-
931	-	244/54
932	-	245
933	223	-
935	-	248
936	244	-
937	-	292
938	249	-
940	-	331
942	296	-
947	-	436
948	357	-
950	-	221
974	206	-
978	-	233
984	-	360
985	-	344
994	-	269
999	-	240
1001	-	371
1004	-	242
1005	-	243
1007	-	247
1008	441	-
1009	303	-
1010	-	304
1011	-	C.C.N.O. 36
1019	253	-
1042	295	-
1046	-	311
1055	-	343
1056	-	361
1060	-	816
1071	-	700
1072	-	375
1074	222	-
1076	-	309
1080	-	353
1083	-	254
1084	442	-
1085	-	459
1116	-	342
1128	-	397
1130	-	134/55
1132	-	275/54
1134	-	252
1136	278	-
1137	255	-
1139	-	432

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1148	336	-
1158	-	339
1181	302	-
1182	393	-
1184	288	-
1187	-	351
1189	-	579
1190	684	-
1193	-	437
1198	-	560
1216	-	260
1241	-	359
1251	-	419
1255	-	325
1256	-	290
1259	291	-
1262	-	377
1263	-	709
1269	-	379
1270	-	435
1275	-	440
1276	-	335
1299	-	321
1310	-	518
1317	546	-
1323	-	589
1324	-	363
1340	-	469
1343	-	349
1344	-	350
1345	-	326
1346	-	327
1348	-	686
1349	305	-
1352	-	356
1353	-	334
1355	-	358
1357	-	452
1369	-	480
1370	-	630
1405	-	550
1406	-	420
1408	324	-
1409	-	372
1411	378	-
1413	-	822
1418	-	599
1419	-	54/55
1441	-	399/54
1444	401	-
1475	-	471
1477	499	-
1480	-	621
1482	-	478
1527	369	-
1531	-	472
1532	-	373
1533	-	453
1538	-	763
1539	-	495

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1547	-	140/55
1548	460	-
1549	559	-
1595	-	479/54
1614	-	461
1615	-	83/55
1616	-	500/54
1617	392	-
1619	150/55	-
1622	-	581
1623	-	598
1624	-	380
1646	384/54	-
1653	-	466
1660	-	449
1661	-	450
1664	-	421
1665	425	-
1666	457	-
1670	-	497
1672	434	-
1673	475	-
1674	-	557
1675	-	474
1676	438	-
1677	433	-
1678	145/55	-
1680	370/54	-
1700	-	464
1727	-	645
1729	473	-
1730	-	426
1734	558	-
1744	-	522
1759	-	561
1772	-	602
1791	-	491
1793	533	-
1795	-	48/55
1800	-	597/54
1822	-	604
1835	525	-
1849	-	618
1853	536	-
1859	498	-
1860	-	570
1864	521	-
1892	507	-
1900	526	-
1912	-	516
1914	-	568
1916	-	11/55
1917	-	620/54
1918	-	538
1920	651	-
1925	-	571
1952	-	619
1966	-	672
1970	539	-

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1973	623	-
2010	506	-
2029	-	534
2031	555	-
2075	-	578
2085	-	682
2086	551	-
2089	-	674
2090	-	673
2092	-	592
2094	554	-
2095	-	615
2100	-	642
2112	826	-
2113	-	583
2124	824	-
2145	562	-
2147	-	591
2148	-	614
2196	-	613
2205	624	-
2206	-	569
2242	-	160/55
2250	-	696/54
2256	-	4/55
2257	-	751/54
2260	-	775
2262	-	677
2265	683	-
2272	-	139/55
2298	-	764/54
2306	-	729
2311	-	791
2327	-	698
2338	-	699
2339	-	676
2340	647	-
2341	-	648
2342	-	45/55
2345	-	636/54
2346	637	-
2348	711	-
2349	-	174/55
2353	-	725/54
2354	-	760
2403	-	122/55
2412	670	-
2413	-	135
2418	85/55	-
2452	-	768/54
2470	-	671
2471	675/54	-
2472	-	8/55
2473	-	736/54
2476	-	759
2478	-	685
2480	707	-
2484	724	-
2491	-	188/55
2498	-	728/54

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2516	-	13/55
2526	5/55	-
2527	752/54	-
2529	-	1187
2530	-	720/54
2531	-	702
2532	-	209/55
2534	-	762/54
2535	-	780
2537	-	114/55
2551	-	98
2577	-	41
2590	774	-
2593	717	-
2594	-	858/54
2595	-	719
2596	-	776
2597	-	754
2598	721	-
2603	-	805
2604	738	-
2660	-	792
2661	-	75/55
2662	-	46
2663	-	777/54
2666	-	779
2670	-	212/55
2688	-	807/54
2696	-	786
2704	-	65/55
2705	-	40
2706	-	66
2724	803	-
2728	-	823/54
2730	82/55	-
2753	-	39/55
2755	-	785/54
2758	-	100/55
2765	-	834/54
2768	806/54	-
2777	-	87/55
2779	-	796/54
2780	-	44/55
2781	-	796/54
2783	-	846
2785	-	821
2791	-	53/55
2823	852	-
2828	-	64
2836	788	-
2845	-	839/54
2847	-	842
2852	843	-
2861	-	144/55
2862	-	860/54
2873	84/55	-
2890	-	855
2901	-	166/55
2902	-	841/54
2903	-	76/55

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2904	-	171
2905	-	43
2906	-	797/54
2908	-	50/55
2914	-	9
2915	863/54	-
2917	80/55	-
2941	-	814/54
2948	-	104/55
2961	857/54	-
2964	-	802/54
2965	47/55	-
2966	-	49/55
2967	-	52
2969	-	861/54
2971	-	173/55
2978	142	-
2979	-	137
2981	-	193
3027	-	68
3040	-	167
3045	-	893/54
3046	-	77/55
3048	817/54	-
3049	-	6
3051	844	-
3060	-	862/54
3062	-	191/55
3097	103/55	-
3107	129	-
3108	-	107
3110	42	-
3114	51	-
3119	-	89
3154	-	123
3168	-	168
3172	-	206
3182	138	-
3194	-	146
3242	-	183
3250	131	-
3253	73	-
3257	-	108
3262	79	-
3269	-	190
3270	141	-
3313	-	203
3314	-	202
3320	154	-
3322	-	169
3338	136	-
3340	143	-
3362	-	196
3364	157	-
3387	-	201
3388	151	-
3389	152	-
3403	-	130
3405	155	-

NOTE:- A.F.O.'s subsequent to 900/1954, which are not listed above, can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206 of 1954 to 217 of 1955, dated 1st June, 1954, to 29th March, 1955.)

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C.N.Os. 238-247/55

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
12th April, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0069

TABLE OF CONTENTS

238.

ADMINISTRATION, ACCOUNTING AND EQUIPPING OF NAVAL AIRCRAFT, POWER PLANTS AND AERO-ENGINES.

Navy Order 22 of 1953 is to be amended as follows :-

Page 4: CONTENTS - CHAPTER VIII

Add new heading (4) to read -

(4) Reduction to Spares and Produce.

Page 8: CHAPTER III

Paragraph (2)(e) - delete after A.D.W. and add -

"On instructions from the Air Equipment Authority."

Page 9: CHAPTER III

Paragraph (2) Notes - delete Note (ii)(b).

Page 10: CHAPTER IV

Categories H.Z. and Z.Z. - after "forwarded" in brackets, add "as instructed by the A.E.A."

Page 12: CHAPTER V

Paragraph (2)(v), Part I(B) - delete all after "followed by" and substitute -

"serial numbers of any F.A.E. aircraft concerned in the movement."

Paragraph (2)(v), Part I(C) - add "serial" before "numbers".

Page 22: CHAPTER VIII

Delete Chapter heading "ADMINISTRATIVE RESPONSIBILITIES" and substitute new heading "ACCOUNTING PROCEDURE".

Existing paragraph (1)(c) to be numbered "(1)(c)(i)", and the following additional sub-paragraphs to be inserted :-

(ii) Ledger pages in each binder are to be serially numbered and a record kept in the front of the binder showing the page number, date of insertion, item being accounted for, date on which closed page forwarded to Air Equipment Authority, and A.A.9 and A.A.11 reference.

(iii) All closed ledger pages, together with supporting vouchers (see paragraph 2 of this Chapter), are to be forwarded to the Air Equipment Authority as soon as all transactions have been cleared. Complete ledgers are to be forwarded when a Unit disbands or is paid off.

Page 23: CHAPTER VIII

Paragraphs 1(e) and 1(f) - delete and substitute -

(e) On change of custodians the equipment on charge is to be verified by stocktaking by naval officers. Any deviation from the standards laid down in A.P.(N) 380 or C.B.4485A should be properly recorded on Forms A.701 and AA.11 as appropriate. Charge is to be transferred by Certificate B - Form AD.796.

NOTE:- This Form is normally used for transfer of charge of List of Portable Fittings and Spare Gear. The Form is to be locally amended to read "Equipment on Custodian's Charge" in lieu of "List of Portable Fittings", etc.

The result of the stocktaking is to be reported by forwarding signed Forms AD.796 in duplicate to the Air Equipment Authority.

(f) Aircraft, etc., are to be taken on charge by supply note (Form AA.11).

NOTE:- Aircraft, etc., will be downgraded to Instructional Class I, II or III by allotment signal (AENAL) on the authority of the Naval Board.

Paragraph 1(g)(ii) - delete "Naval Board" and add "Competent Authority". Delete sub-paragraph 1(g)(iii).

Paragraph (2)(a) - The description of Form AA.9 to be amended by deletion of all after "records".

Page 24: CHAPTER VIII

Paragraph (3)(a) - delete and substitute -

(a) Form AA.9 (application for aircraft, etc., to be removed from records) is to be raised by the custodian on instructions from the Air Equipment Authority to whom four copies are to be forwarded whenever an aircraft, etc., is -

(i) Lost or destroyed.

(ii) Seriously deteriorated or damaged to such an extent that repair is considered to be uneconomical.

(iii) Recommended for reduction to spares and produce.

Paragraph (3)(b) - delete the words "the reverse of".

Paragraph (3)(c) - delete and substitute new sub-paragraph (c) and additional sub-paragraph (d) as follows :-

(c) When an aircraft, etc., is totally lost or destroyed, the relevant Forms A.700 and A.701 are to be forwarded with the four copies of the Form AA.9 to the Air Equipment Authority, who will make appropriate endorsement and retain the forms.

(d) When an aircraft has been authorised for reduction to spares and produce, the relevant Forms A.700 and A.701 are to be closed by the custodian on the completion of reduction with a certificate as follows :-

Airframe / Power Plant / Aero-Engine — Reduced to spares and produce in accordance

with .....

H.M.A.S. .....

.....
Commanding Officer

Date .....

The forms are then to be forwarded to the Air Equipment Authority, together with the certificates required by paragraph (4)(c) below.

Pages 24 & 25: CHAPTER VIII

Paragraph (4) - delete and substitute the following new paragraph :-

(4) Reduction to Spares and Produce

(a) (i) When approval is given to reduce aircraft, power plants or aero-engines to spares and produce, they are to be broken down to recover all items of value which are economically returnable subject to specific instructions issued by the Naval Board from time to time.

Items not included in the specific instructions may be removed for instructional purposes.

(ii) Items of value (vide (i) above) are to be returned to store on Forms AS.1091.

Items required for instructional purposes are to be returned to store on Forms AS.1091 endorsed "for issue on permanent loan as instructional equipment".

The remainder is to be returned to store on Form AS.1091 as "Carcass". Form is to be endorsed "For disposal as metal old".

(b) For spares removed the returning Unit is to -

(i) Clean each item and if applicable render it safe, i.e., fuel and oil to be removed from tanks.

(ii) Attach to each item a label - Form AS.118A (Blue) amended to read "Unserviceable subject to inspection."
The label is to show the following particulars :-

Section and reference number.
Description.
Serial No. where applicable.
From whom returned.
The type, mark and number of the aircraft from which it was removed.

(iii) Where there is a D.E.S.S., this section is to accept the item and sign the Form AS.1091 in the space for acknowledging receipt (the recipient is to sign "For O.I.C. of D.E.S.S.") and is to endorse the original copy of the AS.1091 with the stamp "FOR SURVEY" and pass it to the main Store.
Further action by the D.E.S.S. is to be in accordance with the normal procedure as laid down in Navy Order 420 of 1949.

(c) Should it be necessary to reduce to spares and produce in Civilian Repair Organisations, each item will be surveyed by the Survey Committee and categorised as -

Serviceable;
Repairable; or
Unserviceable - not worth repair.

The items are to be dealt with in accordance with the procedure for accounting, etc., for Naval components, etc., requiring repair, and Naval Embodiment Loan Stocks for the Civilian Repair Organisation.

(d) On completion of the final breakdown the custodian is to render a certificate in duplicate to the Air Equipment Authority in the following form :-

H.M.A.S. .....

Date .....

Aircraft Type and
Engine Mark .....
Power Plant Serial No. .....

The above equipment has been reduced to spares, instructional equipment and produce in accordance with Navy Office letter

.....

All components other than those which are useless and of no value or which cannot economically be removed have been returned to store in accordance with A.E.N.A. Chapter VIII, paragraph (4). These items and the carcass are shown on the following Forms AS.1091 :-

.....

.....

.....
Signature of Custodian

Rank .....

(e) On receipt of the above certificate two completed copies of Form AA.9 will be forwarded to the custodian by the Air Equipment Authority authorising removal from records.

Page 26: CHAPTER VIII

Paragraph (5) - delete existing paragraph.

Page 26: CHAPTER IX.

Paragraph (1)(a) - Description of Class II is amended by deleting words in brackets after I.A.E. Class III is amended by deleting words after "repair".

Page 27: CHAPTER IX

Paragraph (1)(b) - Description of Class II is amended by deleting words in brackets after "allocated". Class III is amended by deleting words after "section".

Paragraph (1)(c) - delete existing paragraph.

Paragraph (3) - delete and substitute the following new paragraph :-

(3) Accounting.

(a) Aircraft, etc., will be downgraded to Instructional Class I, II or III by allotment signal (AENAL) on the authority of the Naval Board, and will be accounted for in the same way as non-instructional aircraft, etc.

(b) The instructional classification is to be clearly shown on all ledger pages, vouchers, etc.

(c) In the case of Class II and Class III Instructional aircraft -

(i) All equipment not required for instructional purposes is to be returned to the Supply Officer.

(ii) For Class II and III airframes, Form A.701 is to be endorsed "Converted to Ground Instructional use" quoting AENAL as authority.

(d) When a Class I, II or III instructional aircraft, etc., is no longer suitable for instructional purposes in any classification, or is surplus to requirements, the procedure for removal from records as set out in Chapter VIII, paragraphs 3 and 4 will apply.

Page 36: APPENDIX II, SECTION 2

A.E.S. Items 70, 71 and 72 -

Amend Channel L to read Frequency 118.1 Mc/s.
Amend Channel B to read Frequency 140.58 Mc/s.
Amend Channel D to read Frequency 121.5 Mc/s.

Page 41: APPENDIX II, SECTION 7

A.E.S. Items 96, 97 and 98 -

Amend Channel L to read Frequency 118.1 Mc/s.
Amend Channel B to read Frequency 140.58 Mc/s.
Amend Channel D to read Frequency 121.5 Mc/s.

(3053/3/113)

239.

SHORE PLOTTING - RESPONSIBILITIES OF THE NAVIGATION AND DIRECTION BRANCH.

The term shore plotting embraces all aspects of plotting in the Shore Headquarters Organisation (including Seaward Defence, Mine and Trade Plots).

2. The responsibilities of the N.D. Branch with regard to shore plotting are as follows :-

Director of Training and Staff Requirements is responsible for -

(a) advising the Naval Board on -

(i) The Training and Syllabi of all personnel employed on Naval Shore Plotting Duties.

(ii) The development and application of Shore Plotting techniques.

(iii) The operation of Shore Surface warning and Mine-watching radar.

(b) the preparation of Staff Requirements for -

(i) Shore Surface Warning and Mine-watching radar.

(ii) Shore Plotting equipment.

(c) maintaining close touch with Director of Plans and Staff Officer (Trade) in all matters relating to the efficient collation, dissemination and display of information within the Shore Headquarters Organisation.

H.M.A.S. WATSON is responsible for -

(a) training Officers of the N.D. Branch and R.P. ratings in Shore Plotting

(b) co-ordinating Reserve Training in Staff Plotting

(c) advising Shore Headquarters authorities on plotting techniques

(d) providing short courses of instruction for officers appointed to Shore Headquarters.

(e) investigating and reporting on new methods of Shore Plotting.

(The foregoing is the text of A.F.O. 3374/1954 altered to meet R.A.N. conditions.)

(3031/13/243)

SECTION 2 - PERSONNEL

240.

COUNTING OF PREVIOUS GOVERNMENT SERVICE FOR FURLOUGH OR EXTENDED LEAVE PURPOSES.

In accordance with the provisions of current furlough and extended leave conditions it is permissible, generally, subject to paragraph 2 hereof, for members to include, in addition to their current service, any previous period or periods of full time service or employment whether permanent or temporary in the service or employment of -

(a) the Commonwealth (e.g., Postmaster-General's Department, Royal Australian Air Force);

(b) an authority of the Commonwealth (e.g., Commonwealth Scientific and Industrial Research Organisation);

(c) a State (e.g., Victorian Railways);

(d) an authority of a State (e.g., State Electricity Commission of Victoria);

provided that -

(i) any period of absence does not exceed, or has not exceeded, twelve (12) months in a continuous period;

(ii) the periods of absence do not exceed in the aggregate one seventh (1/7) of the total period that has elapsed since the commencement of the first period of service or employment which may be included for furlough or extended leave purposes; and

(iii) the period of service was not terminated on account of unsatisfactory service.

2. It is not permissible to count a prior period of State employment in respect of which the member has received his full long service leave entitlement whether by way of a grant of leave or a payment in lieu thereof.

Where a member has received a long service leave entitlement in respect of a prior period of Commonwealth service, he may, provided he had not attained the prescribed age for retirement on termination of such employment, count such service as admissible for furlough purposes subject to an appropriate deduction being made from his furlough entitlement on final discharge.

3. Any serving members of the Naval Forces who consider they are eligible to count as admissible for furlough or extended leave purposes, any previous service of the above nature should submit applications, through their Commanding Officers, supported where possible by documentary evidence of the previous service which they wish to have noted in their records. It will not be necessary for application to be made in respect of previous service in the Naval Forces (e.g., mobilised service during wartime) as particulars thereof are already recorded in Navy Office.

4. The effect of rehabilitation courses under the Commonwealth Reconstruction Training Scheme on continuity of service for furlough or extended leave purposes was promulgated in Navy Order 130 of 1953.

5. Navy Order 141 of 1950 is hereby cancelled.

(4831/11/4)

(This Order will be reprinted for posting on Notice Boards.)

241.

INTOXICATING LIQUOR - PERSONNEL TRAVELLING IN TRAINS.

Naval personnel when travelling by rail on duty, or on leave with leave concession warrant, are forbidden to have intoxicating liquor in their possession and to consume intoxicating liquor in trains or upon railway stations except at places specially provided by the railways for the purpose. (The drinking of intoxicating liquor in or upon any vehicle or premises of the railways except at places specially provided for the purpose is prohibited by railway by-laws.)

2. The existence of this Order is to be brought to the attention of all officers and ratings whenever orders for movements by rail are issued and a warning given that infringement of the Order may result in disciplinary action.

3. Navy Order 219 of 1941 is hereby cancelled.

(4011/121/2)

(This Order will be reprinted for posting on Notice Boards.)

242.

PROMOTION FROM LOWER DECK TO PERMANENT COMMISSIONED RANK - ELECTRICAL BRANCH - ACTING SUB-LIEUTENANT (L) R.A.N. - PRELIMINARY ANNUAL EXAMINATION FOR UPPER YARDMEN (L) CANDIDATES - SYLLABUS.

With reference to Q.R. and A.I., Appendix I, Part 2, Section III, the syllabus of the Preliminary Annual Examination for Upper Yardmen (L) candidates is as follows :-

Electrical Engineering I

Electric circuits, units, Ohm's law, resistance, insulation and insulation resistance. Temperature coefficient. Heating effect of current. Chemical effect of current. Chemical effect of current. Power and energy.

Magnetism. Poles and pole strength. Effect of earth's magnetic field. Magnetic effects of current. Magnetic properties of materials. Relation between B. and H. hysteresis. Magnetic circuit. Electro-magnetic induction. Growth and decay of current. Time constant. Self and mutual inductance.

Electrostatics - charge on conductors, capacitors. Growth and decay of voltage. Time constant.

Force on conductor carrying a current. Principles of generators and motors. Power output and efficiency.

Alternating currents. Instantaneous, max. and R.M.S. values. Vector representation of A.C. quantities, phase angle, single phase A.C. circuits, series and parallel. Resonance, A.C. power, power factor.

Measuring instruments : moving coil, moving iron, hot wire and thermo couple.

Kirchoff's laws.

Electronics, diode and triode valves, principles and action characteristics and constants. Use of triode as amplifier, amplification factor with resistive load.

Electrical Engineering II

Either paper (a) or paper (b), referred to below, may be taken.

Paper (a) - Electrical Technology

D.C. generators and motors, construction, armature windings, armature reaction, commutation, characteristics curves. Starters and controllers. Parallel operation of generators.

A.C. polyphase systems, power and power measurement. Transformers, construction, theory, regulation, efficiency. Alternators, high and low frequency, construction, elementary theory, regulation, efficiency. Synchronising. General theory of A.C. motors, induction, synchronous and commutator types. Rotary convertors. Mercury arc rectifiers. Distribution systems.

NOTE:- Volume I of the Naval Electrical Manual, and Volume I of the Admiralty Handbook of W/T are recommended as text books for the above-mentioned subjects.

Paper (b) - Radio Technology

(A choice of questions will be allowed where the subject refers specifically to Radar, W/T or Air Radio.)

Capacitance - construction of fixed and variable capacitors.

Qualitative treatment of eddy current loss, including skin effect in conductors and of dielectric losses in capacitors.

Thermionic amplifiers, including multi-electrode valves. Gas-filled valves.

Aerials.-Principles of radiation, propagation and reflection of electro-magnetic waves and of the properties of transmitting and receiving aerials. Effective height and radiation resistance.

The generation of oscillations in valve circuits. Self-oscillatory crystals and master-controlled valve transmitters. Frequency doubling and/or trebling. Neutralizing.

Uses of test equipment, including wavemeters and signal generators.

Amplitude and pulse modulation of a valve transmitter. Sidebands.

Construction and action of devices for rectifying alternating current. Smoothing circuits, including filters and suppressors.

Attenuation, attenuators and the Decibel system.

General principles of echo-detection. Pulse repetition frequency. Pulse length. Frequency. Power output. Coverage diagrams. Beam widths.

Detection.-Straight and superhet (wide and narrow band) and super-regenerative receivers. Principles of automatic volume control and automatic frequency control.

Direction-finding apparatus.

Principles of navigation aid systems.

Aerial feeders, transmission lines and wave guides.

Pulse shaping circuits. Time bases. Calibration circuits.

Cavity oscillators.

Cathode ray tube principles and construction. Plan position indicator.

Fault-finding technique and general maintenance problems.

Mathematics

The Metric System : conversion of units.

Elementary algebra up to quadratic equations with practical applications : arithmetical and geometrical progressions : scalar and vector quantities : use of operator j in simple equations.

Graphs : plotting related quantities : determination of laws : gradient of curve.

Geometry : properties and construction of angles, triangles, circles, etc.

Trigonometry : ratio of angles of any magnitude : graphs of sine, cosine and tangent : simple identities and formulae : solution of triangles : easy 3-dimensional problems : circular measure : trigonometrical ratios of small angles.

*Calculus : meaning of dy/dx : easy cases of differentiation from first principles : general form of dy/dx when $y = ax^n$, a sin bx, a cos bx, a tan bx. Differentiation of products, quotients and function of function. Second differential coefficient. Applications of maxima and minima; elementary kinematical and electrical problems. Meaning of an integral : simple integration of ax^n, a sin bx with application to areas under curves and volumes of solids of revolution.

* Carries extra marks.

Physics

Mechanics	Elementary principles of statics and dynamics. Force : moment of a force. Conditions for equilibrium. Triangle and polygon of forces. Simple machines : mechanical advantage : velocity ration : efficiency. Linear and angular motion. Newton's laws. Momentum and energy : work and power. Angular motion. Centrifugal force. Torque : angular momentum and energy.
Heat	Nature of : expansion of solids, liquids and gases : Charles law. Absolute temperature. Specific heat. Latent heat. Transmission of heat. Mechanical equivalent of heat.
Sound	Nature of : production of sound by vibrating bodies. Harmonics : characteristic of sound (pitch, intensity, timbre). Propagation - in air and other media; velocity. Reflection.
Light	Nature of : laws of reflection. Plane and spherical mirrors. Laws of refraction. Formation of images by mirrors and lenses. Prisms. The Spectrum.

English

Candidates will be required to write an essay, for which at least half the total marks allotted to the paper will be awarded. The subjects will generally be of a practical nature, and there will be a choice of at least four. Candidates should try to make the subject-matter of their essays as interesting and accurate as possible, but errors of fact, unless betraying an avoidable ignorance, will not be heavily penalised since most of the marks will be awarded for good grammar, a pleasing style, and a clear arrangement of topics. Candidates should aim at a minimum length of 500 words for their essays.

In addition, candidates may be required to reduce a prose message to about one-third of its length, without omitting any of its essential meaning. In making such a precis, candidates may use the words of the original passage, when they are suitable for reproduction, but in general should use their own words. They may also be asked to enlarge a tersely expressed passage from some well-known author, or to paraphrase a difficult prose passage.

Candidates should also be prepared for one or more of the following tests: to explain the meaning of a common metaphor; to correct ungrammatical sentences; to differentiate between words of nearly similar meaning; to correct the punctuation of a given passage; to supply the correct words in a passage in which wrong ones are used; to explain the meanings of difficult words, and other similar exercises.

Subjects	*Maximum Marks*
Electrical Engineering I	200
Electrical Engineering II (Paper (a) or (b) may be taken)	200
Mathematics	100
Physics	100
English	100
TOTAL	700

In the examination, the time allowed for the paper in each of the above subjects will be 2½ hours.

(The foregoing is the text of A.F.O. 2835/1954 altered to meet R.A.N. conditions.)

(4007/30/79)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

243.

WIRELESS - MF/HF RECEIVER COMMON AERIAL WORKING - INTRODUCTION.

MF/HF Receiver Common Aerial Working (C.A.W.) will be introduced into the Service in mid-1955.

2. ***Brief Description.***

The provision of aerial inputs for all LF, MF, and HF, communication receivers will be obtained from a combination of whip aerials, three in aircraft carriers, two in other ships and one wire aerial with transformer. Facilities are provided, by a selector switch beneath each receiver, for the operator to link his receiver into one of two aerial circuits or a testing circuit. Special lightweight emergency whip aerials are provided which can be plugged into sockets already wired.

Separate aerials will be rigged for MF/DF sense finding, Loran, Decca and S.A.E.

The following outfits comprise the whole system :-

(a) ***Aerial Outfit (Whip) AWN.***

This is a light whip aerial 35-ft. long in four sections weighing 31½ lb. The aerial is fully supported by its base weighing 43 lb. (No additional bracket support is needed.)

(b) ***Common Aerial Outfit EAL.***

This provides the feeder system linking the aerials to the receivers. It includes a special filter enabling LF/MF and HF receivers to be fed from one aerial.

(c) ***Receiver Outfits CAY, CAZ.***

Receiver Outfit CAY consists of a Receiver B40 (A.P. 57140C or 57140D) specially modified for CAW and a selector switch A.P. 62148 for linking into the feeder system. Outfit CAZ consists of Receiver B41 (A.P. 57141B/C) unmodified with selector switch A.P. 62149.

3. ***Publications.***

(a) ***Establishment Lists***

E1101 Receiver Outfits CAY and CAZ.
E1104 Aerial Outfit AWN.
E1110 Common Aerial Outfit EAL.

(b) ***Installation Specifications***

B649/R1 Add. A Receiver Outfits CAY and CAZ.
B797 Aerial Outfit AWN.
B793 Common Aerial Outfit EAL.

(c) ***Handbook.***

A handbook is being written and it is anticipated that it will be available at the end of 1955.

4. ***Fitting Policy.***

The equipment will be allocated for first fitting as necessary. It is intended to fit the equipment in all new construction, modernisation and conversion ships with six or more Receivers B40 and B41, completing after July, 1956. It may later be fitted retrospectively in certain ships as an Alteration and Addition.

(The foregoing is the text of A.F.O. 3319/1954 altered to meet R.A.N. conditions.)

(4519/11/931)

244.

ADMIRALTY FLEET ORDER 616/1953 - SPARE GEAR - BASIS OF SUPPLY.

Reports received in accordance with Navy Order 76 of 1954 are being examined and decisions will be promulgated in due course.

2. Further reports are not required.
3. Navy Order 76 of 1954 is hereby cancelled.

(3756/1/14)

245.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - ENAMELS - INTRODUCTION.

It has been decided to introduce a new aluminium pigmented enamel for use in the Royal Australian Navy. This enamel, which will be additional to the range detailed in Navy Order 596 of 1954, will be provided for use in Boom Depots for the preservation of Boom Defence Equipment only. The preservation of all Boom Defence Equipment will be the subject of a separate Navy Order shortly to be issued.

2. Unless particular application is made, the issue of this material is to be confined to Boom Depots.

3. The enamel is to be accounted for under Class E Group 7 as a non-pattern item. It is not to be mixed with other colours to the specification S.A.A. Int. 227.

4. Appendix B of Navy Order 596 of 1954 is to be amended by addition of the following :-

Material		Use	To be used in lieu of
Description	Pattern No.		
Enamel, Marine Exterior Finishing, to Specification S.A.A. Int. 227 - Aluminium	-	Preservation of Boom Defence Equipment.	-

(4512/71/91)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

246.

FRYING OIL.

The use of Frying Oil in the Royal Australian Navy is now authorised and supplies are available on demand from H.M.A. Victualling Yards. The fixed issuing price of this oil is 24/- per gallon.

(4528/26/61)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

247.

BOOKS - REVISION OF SEA STORE ESTABLISHMENTS AND ASSOCIATED LISTS OF PARTICULARS.

(Aircraft Carriers, Cruisers, Repair and Depot Ships, Ships of "Daring" Class, Destroyers, Frigates (all classes), Surveying Vessels and Ocean Minesweepers.)

The Establishment of Sea Stores and associated Lists of Particulars applicable to the abovementioned ships have been revised to meet present requirements. The new editions for Aircraft Carriers, Cruisers and Repair and Depot Ships have been distributed and associated Lists of Particulars for Aircraft Carriers are in course of distribution. The availability of the new editions and associated Lists of Particulars for other classes will be announced by Navy Order in due course.

2. The main changes arising from revision of these establishments are as follows :-

(a) Permanent Stores

(i) Allowances for Electrical and T.A.S. Departments have been separated; those for the latter department will mainly comprise Naval Stores required in connection with diving and demolition and will not include allowances of Naval Stores for minesweeping, etc., purposes which will continue to be shown in separate publications.

(ii) With the exceptions mentioned below, electrical items allowed as Sea Stores, together with their accessories and maintenance spares, are embodied in the Electrical sections of the revised Sea Store Establishments. Inclusion therein, however, does not signify that the item is necessarily the responsibility of the Electrical Officer for custody. Where the responsibility for custody is divided (e.g., table fans, laundering irons) the total allowance is shown in the Electrical Section. Electrically operated portable apparatus in which the Electrical Department of a ship has only a minor interest so far as maintenance is concerned is, however, included in the section appropriate to the user department (e.g., boiler tube cleaning apparatus, vacuum cleaners, scaling machines).

(b) Consumable Stores - In addition to the quantities of certain essential consumable stores required to be maintained as "Emergency Stock", the revised Establishments will include in a separate column, quantities of certain items such as tools, ironmongery and signal flags which are considered to be necessary for the initial equipping of the various compartments of a ship immediately on first commissioning. These items although classified consumable are of a quasi-permanent nature and the quantities issued for the initial equipping of compartments are to be disregarded when preparing the first routine replenishment demands after commissioning.

(c) Marginal Notes - Items which have hitherto been annotated F are now classified as either F or F*, the definitions of which are as follows :-

F = those articles which are required by the Shipbuilder or Main Machinery Contractor for permanently fitting or stowing in place;

F* = those articles of which a limited number of each description may be required at an early date as patterns for marking off stowages during the building period of a ship, the balance being supplied by the Storing Yard six weeks before the completion date or as arranged between the Overseers, etc., and the Storing Yard or Depot.

3. The revised Sea Store Establishments have been numbered in the B.R. series as follows :-

B.R. No.	Part	Title	Remarks
321	1	Establishment of Sea Stores for Engineering purposes.	For Aircraft Carriers and Cruisers.
321	2	" " "	For repair and depot ships.
323	1	Establishment of Sea Stores for Gunnery purposes.	For Aircraft Carriers and Cruisers.
323	2	" " "	For repair and depot ships.
324	1	Establishment of Sea Stores for T.A.S. purposes.	For Aircraft Carriers and Cruisers.
324	2	" " "	For repair and depot ships.
358	1	Establishment of Sea Stores for Executive purposes.	For Aircraft Carriers and Cruisers.
358	2	" " "	For repair and depot ships.

B.R. No.	Part	Title	Remarks
359	1	Establishment of Sea Stores for Electrical purposes.	For Aircraft Carriers and Cruisers.
359	2	" " "	For repair and depot ships.
332	-	Establishment of Sea Stores for Ships of the "Daring" Class and Destroyers.	Supersedes B.R.332A
373	1	Establishment of Sea Stores for A.A. Frigates.	Supersede B.R.384, B.R.385 and B.R.181C and all previous editions of B.R.368 and B.R.373.
373	2	Establishment of Sea Stores for A.S. Frigates.	
368	-	Establishment of Sea Stores for Ocean Minesweepers.	
389	-	Establishment of Sea Stores for Surveying Vessels.	

The new B.R.373 (Part 2) will embody requirements of Sea Stores for ships which have been converted to A.S. Frigates or will complete in the near future, and for new construction Frigates so far as details of approved equipment were available at the time of forwarding the Establishments for printing.

4. The revised Lists of Particulars appropriate to the new Sea Store Establishments will be printed in triplicate as hitherto, but will be in loose-leaf style. Each of the three copies when distributed on completion to the ships and services concerned should be placed in the covers provided. The new Lists of Particulars and Covers have been numbered in the "D" Series of forms as follows :-

New Number	Title	Remarks
D.127	Cover for Lists of Particulars, Forms D.127 Series.	New form.
D.127(E)	List of Particulars in regard to Sea Stores allowed by scale for Engineering purposes (B.R.321).	Supersedes D.127(e)
D.127(G)	List of Particulars in regard to Sea Stores allowed by scale for Gunnery purposes (B.R.323).	Supersedes D.128(i)
D.127(L)	List of Particulars in regard to Sea Stores allowed by scale for Electrical purposes (B.R.359).	Supersedes D.128(d)

New Number	Title	Remarks
D.127(T)	List of Particulars in regard to Sea Stores allowed by scale for T.A.S. purposes (B.R.324)	Supersedes D.128(d)
D.127(X)	List of Particulars in regard to Sea Stores allowed by scale for Executive purposes (B.R.358)	Supersedes D.254(d)
D.128	Cover for Lists of Particulars, Forms D.128A and D.128B.	New form.
D.128A	Lists of Particulars in regard to Sea Stores allowed by scale to ships of "Daring" Class and Destroyers (B.R. 332).	Supersedes D.117(b)
D.129	Cover for List of Particulars, Forms D.129A, D.129B and D.129C.	New form.
D.129A	List of Particulars in regard to Sea Stores allowed by scale to Surveying Vessels (B.R.389)	Supersede previous editions of Form D.129.
D.129B	List of Particulars in regard to Sea Stores allowed to Ocean Minesweepers (B.R.368).	
D.129C	List of Particulars in regard to Sea Stores allowed by scale to Frigates (all classes).	Supersedes D.129

5. Action to be taken on receipt of the new Establishments and Lists of Particulars :-

(a) Ships concerned are to amend allowances of permanent stores, and the quantities of consumable stores to be maintained as emergency stocks shown in the Naval Store Account, to conform to the new quantities shown in the Establishments, and are to adjust stocks on board accordingly (see sub-paragraph (c)).

(b) If it is considered that an item withdrawn is essential to a ship, or conversely, that an allowance is too large or unnecessary, a report with recommendations should be forwarded to Navy Office through the usual channels.

(c) To enable the new allowances of permanent stores and emergency stock quantities dependent on the machinery, fittings or equipment in individual ships to be calculated, a blank copy of the appropriate List of Particulars will be forwarded to :-

(i) The Commanding Officer of each ship concerned in commission.

(ii) The Commanding Officer, Reserve Ships, for each ship in Reserve.

On receipt the List of Particulars is to be completed (in triplicate) and dealt with in accordance with the instructions contained in the Memorandum therein. (NOTE:- The instructions in the Memorandum relate to ships, building or undergoing modernisation, conversion or large refit necessitating full destoring. The procedure relating to completion and disposal of copies, however, should be adapted as necessary for ships in full commission and in reserve. In effect, the final distribution of the List will be one copy for the ship and two copies for the (Superintending) Naval Store Officer of the storing yard.)

6. Forms A.S.125, the Admiralty counterpart of which have been in use for some time, vide B.R.4, Article 4 (3), are also to be brought into use in H.M.A. Ships concerned after completion of the new Lists of Particulars. First supplies of Forms A.S.125 will be effected by (Superintending) Naval Store Officer, Sydney, without demand. The Royal Australian Navy forms should be prepared in triplicate and distributed as follows :-

ORIGINAL - To be forwarded to the (Superintending) Naval Store Officer of the Storing Yard, with the demand, A.S.134d or survey voucher, Form A.S.331.

DUPLICATE - Filed by ship's Supply/Storekeeping Officer.

TRIPLICATE - Retained by Departmental Officer.

(The foregoing is the text of A.F.O. 2795/1954 altered to meet R.A.N. conditions.)

(4476/2/28)

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C.N.Os. 248-255/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
19th April, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0070

TABLE OF CONTENTS

SECTION 1 - ADMINISTRATIVE AND GENERAL

248.

REPORTS OF PROCEEDINGS FROM H.M.A. SHIPS AND SHORE ESTABLISHMENTS.

All H.M.A. Ships in commission are to render monthly reports of proceedings.

2. When practicable reports of proceedings are to be forwarded not later than the fifth day of the following month to Administrative Authorities for forwarding to the Secretary, Department of the Navy, except where otherwise stated in paragraph 3.

3. Reports are to be forwarded as follows :-

(1) H.M.A. Fleet -

(a) The Flag Officer Commanding will forward to the Secretary, Department of the Navy, a general report of proceedings (in duplicate) covering the activities of the Fleet as a whole and including his important social engagements.

(b) Commanding Officers of ships, whether in company with the Flag Officer Commanding or not, are to forward reports of proceedings as follows :-

(i) Carriers - Three copies direct to Flag Officer Commanding.

(ii) Destroyers - Four copies to Captain (D), 10th Destroyer Squadron, who will forward three copies to the Flag Officer Commanding.

(iii) Frigates - Four copies to the Captain (F), 1st Frigate Squadron, who will forward three copies to the Flag Officer Commanding.

(2) Surveying Vessels - One copy direct to the Secretary, Department of the Navy; two copies to the Flag Officer-in-Charge, East Australian Area; one copy direct to the Senior Officer, Hydrographic Service.

(3) Training Ships - Training ships attached to Flinders Naval Depot are to forward reports in triplicate to the Commodore Superintendent of Training. Other training ships are to forward three copies to the Flag or Naval Officer-in-Charge of the area to which they are attached and one copy to the Flag Officer Commanding H.M.A. Fleet.

(4) Miscellaneous Ships - Not included above are to forward reports in triplicate to their Administrative Authority.

NOTE 1:- When ships of H.M.A. Fleet are temporarily transferred to the operational control of a Naval Officer-in-Charge of a northern area, Commanding Officers are to forward, in addition to the above, two copies to the Naval Officer-in-Charge concerned, who is to forward any comments to the Secretary, Department of the Navy, and the Flag Officer Commanding H.M.A. Fleet.

NOTE 2:- When H.M.A. Ships are detached for service overseas and come under the operational and/or administrative control of local authorities, reports are to be rendered in accordance with local instructions and, in addition, two copies are to be forwarded to the Secretary, Department of the Navy, and one copy to the Flag Officer Commanding H.M.A. Fleet.

4. Authorities receiving original copies of reports of proceedings should append such comments as are necessary before forwarding two copies to the Secretary, Department of the Navy.

5. The report should be in narrative form and should be supplementary to the deck log.

The following points should be included :-

(a) Dates and times of arrival at, and departure from all places visited.

NOTE:- Uneventful periods at sea or in harbour may be covered by single statements (e.g., inclusive dates can be given to cover docking, repairs, passages, etc.) and it is not necessary to report routine exercises or events.

Full details of major exercises reported elsewhere are not required in report of proceedings.

(b) Names of H.M.A. Ships in company or met at sea, and names of merchant ships of unusual interest.

(c) Intelligence reports should not be included in reports of proceedings but should be forwarded separately, addressed to the Director of Naval Intelligence.

(d) Visits of important personages and official calls paid by the Commanding Officer.

(e) Any outstanding incidents or strange occurrences.

(f) Organized entertainments and recreation.

It should be understood that reports of proceedings are for information and as a permanent record, and any matters requiring action should be separately reported to the appropriate authority. Reference should be made if necessary in the report of proceedings to the separate report.

6. Reports are to conclude with general remarks on the health, welfare and conduct of the ship's company, conditions on board, and condition of the ship.

Appendices are to be attached as follows :-

APPENDIX A is to show the following figures for the month in review :-

(a) Distance steamed during the month.

(b) Hours under way during the month, i.e., the time in hours (minutes expressed as sixtieths of an hour) from the first engine movement to the last engine movement.

(c) Average distance per ton of fuel.

(d) Total distance steamed since commissioning (giving date of commissioning).

(e) Total hours under way since commissioning.

(f) Economical speed exceeded in accordance with **Navy Order 2 of 1953.**

APPENDIX B - WHALE SIGHTING REPORT in accordance with Australian Fleet General Order 227.

7. Reports of proceedings by Flag Officers-in-Charge, Naval Officers-in-Charge, and Resident Naval Officers are to be forwarded quarterly to the Secretary, Department of the Navy, in triplicate as soon as practicable after the first day of each quarter.

8. It is not intended that such reports should follow any prescribed form, or that the contents should duplicate returns normally rendered, such as periodical docking and refit reports. Items which normally should be included are changes in organisation or administration, progress in major works items or unusual maintenance problems, brief reports of unusual sea passages within the Command such as towing, visitors to the Command, important social engagements and important Naval sporting fixtures.

9. These reports as well as fulfilling the object stated, will serve as an historical record of events and happenings within the various Commands. New matters of policy on which a decision is required should not, therefore, be included unless already submitted to the Naval Board in accordance with Consolidated Orders and Regulations, Article 336.

10. Navy Order 107 of 1948 is hereby cancelled.

(4336/31/20)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

249.

MACHINERY - DIESEL ENGINES (FRESH WATER COOLED) - COLD WEATHER PRECAUTIONS.

Attention is called to B.R. 16, Article 63, paragraph 1. Pending the general introduction of an anti-freeze compound which will meet the requirements of both frost protection and corrosion inhibition, it will be necessary for Engineer Officers and Squadron Engineer Officers to issue the necessary detailed instructions to suit the conditions obtaining in the ships and craft for which they are responsible when danger of damage by frost is possible.

2. Where adequate protective heating cannot be arranged, draining of systems must be carried out, care being taken that no pockets of water are left. Distilled water should if possible be saved for subsequent use, but where this is not practicable systems, (with the exception of Deltic engines), may subsequently be refilled with clean fresh water, with the addition of the necessary inhibitors where these are specified.

(The foregoing is the text of A.F.O. 103/1955 altered to meet R.A.N. conditions.)

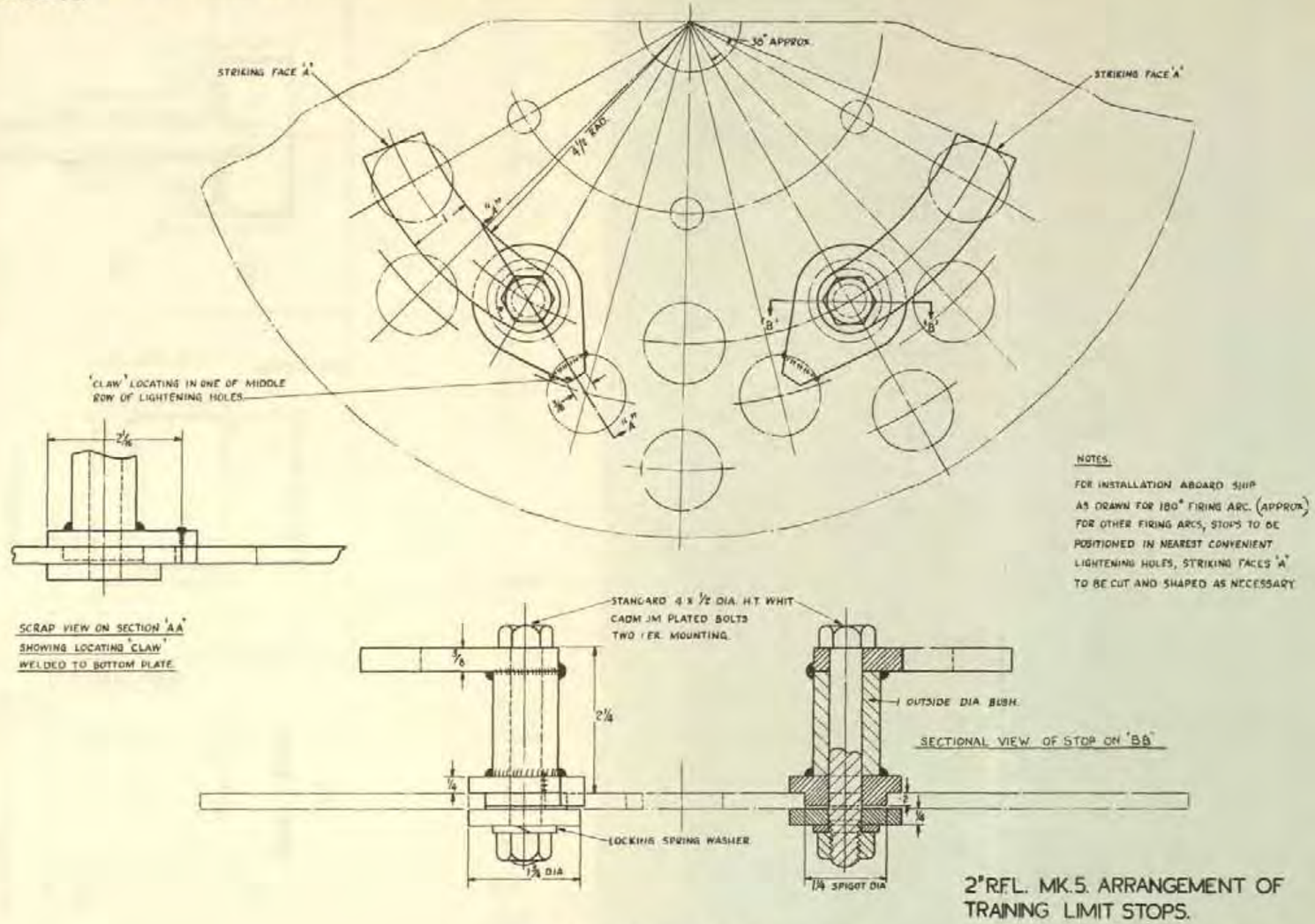
(3760/1/62)

250.

LAUNCHERS, ROCKET - 2 in. ROCKET FLARE LAUNCHERS, MARK 5 - TRAINING LIMIT STOPS - MODIFICATION.

(a) *Ships, Establishments and Authorities concerned*	Frigates, Type 12, R.E.A. Gunnery School, Gunnery Equipment Depots and Stores.
(b) *Types and Marks of Mountings*	2-in. Rocket Flare Launchers, Mark 5.
(c) *Part of Mounting affected*	Training Base.
(d) *Purpose of Modification*	To fit a standard pattern of Training Stop (Right Hand and Left Hand).
(e) *Nature of Modification*	Fit in appropriate lightening holes, shape striking face to give correct angle and tighten bolts.
(f) *Drawing or Navy Order Diagram*	Navy Order 250 of 1955 Diagram.
(g) *By whom to be done*	By ship's staff and/or depot staff.

D.N.O. 8323/21 THIRD ANGLE PROJECTION.



2" R.F.L. MK.5. ARRANGEMENT OF TRAINING LIMIT STOPS.

4/55 N.C.

D.N.O. 8323/21

4213/55. 1.

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(b) *Typ*
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(c) *Par*

(d) *Pur*

(e) *Nat*

(f) *Dra*
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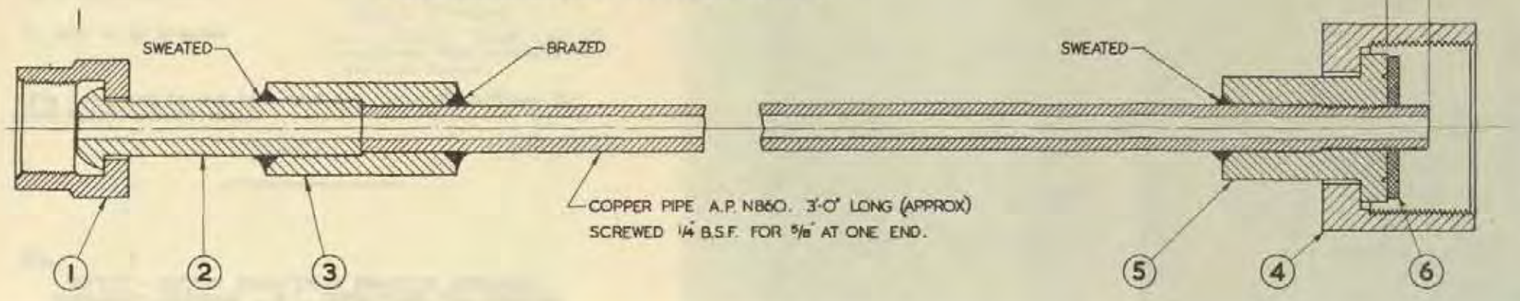
(g) *By*

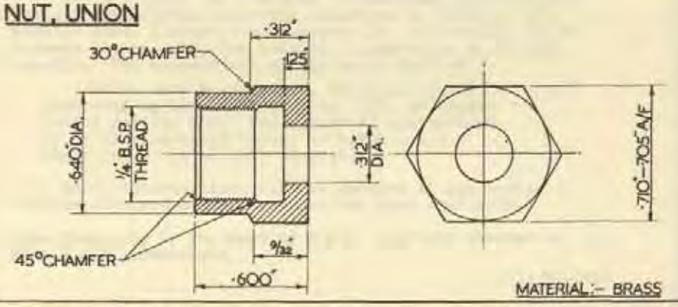
NAVY ORDER 251 OF 1955 DIAGRAM.

DIVING – GENERAL. PATTERN 5561A/5562A BREATHING APPARATUS — EMERGENCY CYLINDERS

H.P. CONNECTION FOR CHARGING

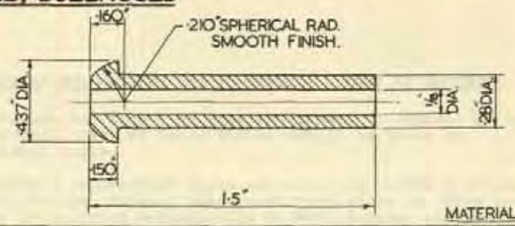


1 NUT, UNION



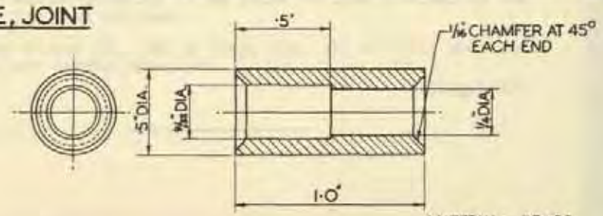
MATERIAL:– BRASS

2 NIPPLE, BULLNOSED



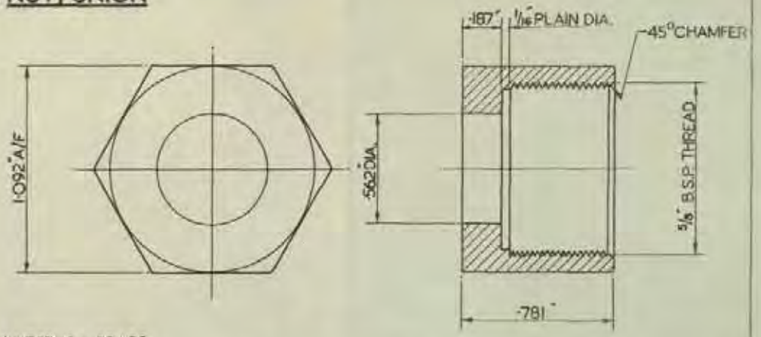
MATERIAL:– BRASS

3 SLEEVE, JOINT



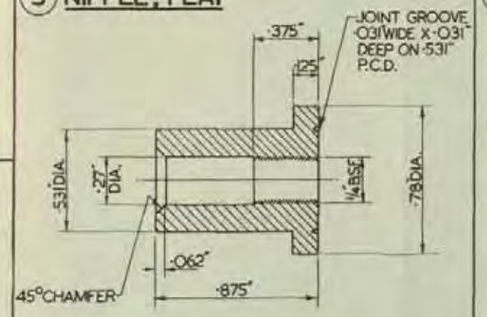
MATERIAL:– BRASS

4 NUT, UNION



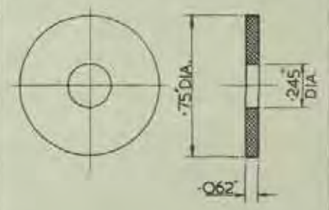
MATERIAL:– BRASS

5 NIPPLE, FLAT



MATERIAL:– BRASS

6 WASHER



MATERIAL:– FIBRE

U.W.(E.) 1004

3/55 N.C.

4213/55. 2.

(h) *When to be done*	As soon as possible after receipt of stops.
(i) *How to be treated*	As a defect. Stops will be supplied when available without demand.

(The foregoing is the text of A.F.O. 221/1955 altered to meet R.A.N. conditions.)

(4428/63/14)

251.

DIVING - PATTERN 5561A/5562A BREATHING APPARATUS - EMERGENCY CYLINDERS - H.P. CONNECTIONS FOR CHARGING.

To facilitate the charging of Emergency Cylinders of Pattern 5561A/5562A Breathing Apparatus by Pattern 1476 Booster Pump, authorities concerned are to arrange, as an interim course only, for suitable connections to be made locally. The connections should be as follows :-

Union nuts $\frac{3}{8}$-in. B.S.P. and $\frac{1}{4}$-in. B.S.P. connected by brazed nipples to 3 ft. of copper tubing Pattern 860. The assembled connections to be hydraulically tested to 4,800 p.s.i. (Navy Order 251 of 1955 diagram).

2. Establishment lists will be amended in due course to include standard pattern connections when available.

(The foregoing is the text of A.F.O. 223/1955 altered to meet R.A.N. conditions.)

(4512/50/208)

252.

CHARGES FOR BEDDING (NAVAL STORES) - LOST BY NEGLECT.

Charges in respect of specific losses by neglect of loan bedding dealt with as Naval Stores should be based on replacement costs.

2. Current replacement costs are shown in column 4 of the Appendix to this Order. Subsequent variations in these costs will be promulgated periodically in Navy Orders, and on receipt, should be noted in the blank columns provided in the Appendix for this purpose.

3. Navy Orders 361, 430 of 1953, 135, 313 of 1954, and 27 of 1955, are hereby cancelled.

(3190/1/87)

A P P E N D I X

Item No. (1)	Patt. No. (2)	Description. (3)	Current Replacement Cost. (4)	Subsequent Variations. Cost. (5)	Auth. (6)	Cost. (7)	Auth. (8)	Cost. (9)	Auth. (10)
1	37	Pillows, hair, 28" x 18"	16. 0						
2	-	Pillows, kapok, 29" x 19" and 28" x 18"	13. 1						
3	37a	Covers for Pattern 37 pillows	2.10						
4	5	Cases, pillow, substitute linen, 17" x 31"	6. 4						
5	T.324 & Like	Blankets, white, hospital and officers' bedsteads, 96" x 72"	£3.18. 6						
6	T.362 & Like	Blankets, white, officers' bedberths, 96" x 62"	£3. 8. 3						
7	-	Blankets, underlay, 26 ozs. 68" x 30"	£1. 4. 0						
8	-	Blankets, underlay, 68" x 36"	£1. 3. 8						
9	-	Blankets, seamen's (white or coloured)	As promulgated in Fixed Issuing Clothing Price List.						
10	34	Sheets, white cotton, 72" x 108"	£1. 5. 1						
11	37	Sheets, substitute linen, 72" x 108"	£1.12. 0						
12	25	Coverlets, blue and white, cotton	£1.14. 2						
13	295	Counterpanes, white, cotton	£2. 3. 5						
14	21	Mattresses, coir, 6'4" x 2'6"	£2.16. 9						
15	399	Mattresses, coir, 6' x 2'2"	£3.18.11						
16	-	Mattresses, coir, 6' x 2'6" x 4"	£2.12. 0						
17	-	Mattresses, coir, 6'4" x 3' x 4"	£3. 6. 0						
18	-	Mattresses, fibre, 6'2" x 3' x 4"	£3. 0. 0						
19	T.372	Mattresses, hair, 6'4" x 2'6"	£7. 0. 0						
20	T.373	Mattresses, hair, 6' x 2'2"	£4.17. 9						
21	T.374	Mattresses, hair, 5'4" x 1'10"	£6. 5. 2						
22	-	Mattresses, hair, 6' x 3"	£9.10. 9						
23	-	Mattresses, hair, 6'6" x 3' x 4"	£7. 8. 7						
24	17a	Covers for mattresses, Pattern T.374	12. 0						
25	18a	Covers for mattresses, Pattern T.372	£1. 7. 9						
26	-	Covers for mattresses, 6'2" x 3' x 4"	£1. 3.11						
27	-	Covers for mattresses, khaki, 6'5" x 3'1" x 4".	£1.19. 8						

253.

LIFESAVING - HELICOPTER SEARCH AND RESCUE PACK - INTRODUCTION.

A Helicopter Search and Rescue Pack is to be carried by all Search and Rescue Helicopters operating over the sea.

2. The pack consists of an 'L' type dinghy fitted to a modified 'J' pack, and is designed to enable an inflated dinghy to be thrown to survivors awaiting rescue. It will inflate fully if dropped at heights exceeding 20 ft.

3. The pack measures 16" x 12" x 8" and weighs approximately 20 lb.

4. Packs should be made up by H.M.A. ships and R.A.N. Air Stations on the basis of two packs for each Search and Rescue Helicopter borne. Items required are to be demanded from the R.A.N. Air Store Depot, Randwick. Supplies are not expected to be available before June, 1955. Components of the 'L' type dinghy should be demanded separately.

5. The equipment should be serviced at three monthly intervals.

6. Details of construction and operation are contained in the Appendix to this Order.

7. The Air Store Establishment will be amended.

8. These instructions are being incoprorated in AP.1182D, Volume 1.

(The foregoing is the text of A.F.O. 3174/1954 altered to meet R.A.N. conditions.)

(4404/3/81)

APPENDIX

(i) *Materials Required* :—

	Stores Reference Number
"L" type dinghy	27C/1897
"J" type pack cover	27C/2228
"G" Mark 3 operating head	6D/803

(ii) *Modification to pack cover* :—

(*a*) Carefully remove canvas top of exposure suit pocket by cutting all securing stitching.

(*b*) Cut off both side flaps about ¾-in. from pack and bind raw edges with 1-in. cotton Khaki tape (15A/158).

(*c*) Insert ¼-in. spurred grommet, size 0 in position 1-in. from bottom left hand corner of pack, close to main side seam.

(*d*) Take an 8-in. length of any suitable medium weight webbing and stitch on to pack midway between bottom of pack and operating pin protective flap for use as carrying handle.

(*e*) Remove bellows from dinghy.

(iii) *Modification to Operating Head.*—(*Note.*—In the original pack the CO_2 operating mechanism was made up from parts of two operating heads, but it has now been found possible to dispense with the "G" star operating head (Stores Reference Number 6D/754) by modifying the "G" Mark 3 head (6D/803) to give the same results).

(*a*) Remove cover plate from "G" Mark 3 operating head (6D/803).

(*b*) Rotate pulley wheel by fully extending operating cable and make a pencil mark on that part of wheel which is now opposite the outlet port.

(*c*) Unscrew and remove operating cable and reduce length to 12-in. by cutting off 4-in. from screw end. Attach ¼-in. spherical steel nipple to cut end.

(*d*) Drill the outlet channel on cover plate to 3/16-in. to allow easy passage of cable and nipple (A in diagram).

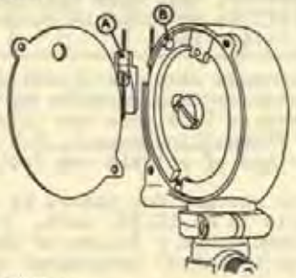
(*e*) In position previously marked on pulley wheel file a semi-circular groove approximately ¼-in. deep, large enough to house nipple (B in diagram).

(*f*) Feed nipple of cable into operating head by passing it through outlet channel on cover plate and getting it in position in groove of pulley wheel.

(*g*) Attach operating head to Mark 8 CO_2 cylinder (6D/542).

(*h*) Fold dinghy and place in pack with operating head alongside eyelet hole. Feed cable through hole.

(*j*) Secure lanyard from pack opening pin to loop at end of cable as near to pin as possible, checking that slight tension exists between pin and cable to ensure pin will be pulled out before cable rotates pulley wheel to operate CO_2 cylinder.



(iv) *Dropping Instructions* :—

Pilot.—Hover between 15-ft. and 25-ft. slightly upwind of survivors.

Aircrewman :—

(*a*) Open port side door and push out pack. The static line will pull open the pack cover and release CO_2. The dinghy will then inflate and float towards survivors.

(*b*) Haul in static line to retrieve pack cover.

7. The Air Shore Establishment will be amended.

8. These instructions are being incorporated in A.P. 1182D, Volume 1.

254.

NAVAL STORES (GENERAL) (CLASS E, GROUP 6) - ROSIN - SUPPLY.

Future purchases of common rosin, Pattern 67, will be made to specifications D.O.T.M. 998 or C.S. 2218B.

2. No further purchases will be made of the undermentioned items but present stocks are to be used up :-

Pattern.	Description.
66	Rosin, fine.
	Rosin, powdered.

(4512/60/167)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

255.

VICTUALLING STORES - LOAN CLOTHING - INTRODUCTION OF COATS, FOUL WEATHER.

Coats, foul weather, have been introduced to supersede coats oilskin and will be supplied in future in satisfaction of demands for the latter item.

2. These coats are made of black plastic-coated fabrics and are generally similar in appearance to oilskin coats. The scales of allowances laid down for oilskin coats in Appendix 56 of the Victualling Manual, B.R.93 (51), will apply to total holdings of oilskin and foul weather coats.

3. The price to be charged for losses by neglect, etc., of foul weather coats is £5.15.5d. each. Page 13 of the current "Official Memorandum - Prices of Clothing, etc. Maintained for Issue to Ships' Companies" is to be noted accordingly.

4. Details of the size range and scale of measurements of the new item are promulgated in the Appendix to this Order.

(4533/34/17)

APPENDIX

Size.	0	1	1A	2	2A	3	3A	4	4A	5A
Measurements of wearer										
Height	5' to 5'2"	5'3" to 5'5"		5'6" to 5'7"		5'8" to 5'9"		5'10" to 5'11"		6' to 6'2"
Chest	33" and under	33" to 35"		34" to 36"		36" to 38"		38" to 40"		40" to 42"
Measurements of Garments										
Girth at armpits when buttoned	42"	44"	50"	45"	52"	47"	54"	49"	56"	58"
Length at back from collar seam to bottom of coat	41"	42"	43"	44"	45"	46"	47"	48"	49"	50"
Length of sleeve from centre back	30½"	31½"	33½"	32½"	34"	33½"	35"	34½"	36"	37"

NOTE:- Sizes 1A, 2A, 3A, 4A and 5A are intended for wear over special items of cold weather clothing.

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W. M. HOUSTON, Government Printer, Melbourne.

C.N.O. 256/55

RESTRICTED

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.

25th April, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

TABLE OF CONTENTS

N.0071

256.

BOOKS - DISTRIBUTION OF NON-ACCOUNTABLE PUBLICATIONS AND AMENDMENTS DURING FEBRUARY, 1955.

The undermentioned non-accountable publications and amendments to A.P's, B.R.'s, etc., have been distributed to ships and services during February, 1955. Navy Order 110 of 1954 is relevant.

MAGAZINES, PAMPHLETS, ETC.

TITLE	DATE
"Flight"	26th November, 1954.
"Flight"	3rd December, 1954.
"Aeroplane"	26th November, 1954.
"Aeroplane"	3rd December, 1954.
"Aircraft" Vol. 33 No. 4	January, 1955.
"Aircraft" Vol. 33 No. 5	February, 1955.
List of Propellant Lots, Amendments 16, 18.	

AMENDMENTS TO AIR PUBLICATIONS

A.P. NO.	A.L. OR LEAFLET
970 Vol. 1	A.L. Slip A.D.M. October, 1954. A.L.58
1086 Book 3 Pt. 2	A.L.31, 32, 33, 34 and 36
1086 Book 12 (2nd Edition)	A.L.55, 56, 57 and 58
1086 Book 13	A.L.54
1086 Book 15	A.L.56
1095A Vol. 4 Pt. 6	A.L.17
1181 Vol. 1 and Vol. 6 Pt. 1	A.L.49
1181 Vol. 2	Leaflet (A.L.4) B.3
1182A Vol. 1	A.L.105, 106 and 107
1182A Vol. 2 Pt. 1	Leaflet C.9 and C.10
1182B Vol. 2 Pt. 1	Leaflet (A.L.8) B.5
1182C Vol. 1	A.L.79 and 80 A.I.L.1/54, 2/54 and 3/54
1182C Vol. 4 Pts. 2 & 6	A.L.5
1234A Vol. 1	A.L.1 and 2
1275A Vol. 1	A.L.436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448 and 449
1275A Vol. 2 Pt. 1	Leaflet (A.L.219) B.15 (A.L.220) B.16 (A.L.221) B.17 (A.L.218) C.13 (A.L.222) J.32 Alt. 1
1275B Vol. 1	A.L.229
1275E Vol. 1	A.L.52
1275E Vol. 2 Pt. 1	Leaflet (A.L.103) D.22
1275E Vol. 6	A.L.9 and 10
1275G Vol. 2 Pt. 1	Leaflet (A.L.37) E.6
1275T Vol. 1	A.L.8
1355 Vol. 2 Pt. 1	Leaflet (A.L.78) D.123
1355A	A.L.48 and 49
1355H Vol. 1	A.L.8
1374B Vol. 2 Pts. 2 & 3	A.L.29
1464B Vol. 1	A.L.133, 134, 135, 136, 137 and 138
1464G Vol. 1	A.L.122, 123, 124, 125 and 126
1538 Vol. 1	A.L.43
1538D Vol. 1 & Vol. 6 Pt. 1	A.I.L.2/54 A.L.52
1538D Vol. 6 Pts. 2 & 4	A.L.39, 40, 41 and 42
1538E Vol. 2 Pt. 3	A.L.68

A.P. NO.	A.L. OR LEAFLET
1538J Vol. 2 Pt. 1	Leaflet No. 7 (A.L.2)
1538L Vol. 6 Pts. 2 & 4	A.I.L.1/54 A.L.20 and 21
1538P Vol. 1 and Vol. 6 Pt. 1	A.L.20 and 21
1661B Vol. 1	A.L.55 and 56
1661B Vol. 1, 2nd Edition	A.L.57 and 58
1664C Vol. 2 Pt. 3	A.L.20
1661D Vol. 1 2nd Edition	A.L.86 and 87
1661F Vol. 1	A.L.37
1641F Vol. 1 Pts. 1 & 3	A.L.19, 20, 21, 22 and 23
1641S Vol. 1 Pts. 1 & 3	A.I.L.1/54 with Marker Card A.I.L.2/54, 3/54, 4/54 and 5/54
1803 Vol. 2 Pt. 1	Leaflet B.26, C.18, D.58, D.62, D.63, E.54, E.57, E.58, E.63, F.28 (A.L.1), F.29 (A.L.1), F.31 (A.L.1), J.5 and J.5 (A.L.1)
1803D Vol. 1 Book 3	A.L.32
1803D Vol. 2 Pt. 2	A.L.125 and 126
1803E Vol. 1	A.L.66
1803F Vol. 1	A.L.114
1803F Vol. 2 Pt. 2	A.L.33
1803F Vol. 2 Pt. 3	A.L.38
1803J Vol. 1	A.L.28, 29 and 30
1803J Vol. 2 Pt. 3	A.L.16
1803P Vol. 1	A.L.44
1803S Vol. 1	A.L.50 and 51
2002 Vol. 3 Pt. 1	A.L.4
2029A/2441A Vol. 3	A.L.13
2102F Vol. 1	A.L.50
2102F Vol. 2 Pt. 1	Leaflet (A.L.1) B.21
2102H Vol. 2 Pt. 1	Leaflet (A.L.1) B.8
2239A Vol. 1	A.L.61
2239A Vol. 2 Pt. 3	A.L.83
2240A Vol. 1	A.L.106
2240A Vol. 6 Pt. 2	A.L.47, 48, 59, 50, 51, 52 and 53
2264B Vol. 1	A.L.33
2276F Vol. 1	A.L.40 and 41
2306M Vol. 1 & 6	A.L.9
2337 Vol. 1	A.L.106
2337 Vol. 6	A.L.20 and 21
2463	A.L.82 and 83
2536C Vol. 1 Pt. 1	A.L.6
2817A Vol. 1 & 6 Pt. 1	A.L.112
2850A Vol. 1 & 6 Pt. 1	A.L.100
3042	A.L.16
3042A	A.L.22 and 23
3225	A.L.7
3282A Vol. 1	A.L.5
3282A Vol. 3	A.L.4
3282A Vol. 5	A.L.5
3282A Vol. 7	A.L.5
3282A Vol. 9	A.L.5
3282A Vol. 10	A.L.5
3282A Vol. 14	A.L.6
3282A Vol. 18	A.L.8 and 9
3282A Vol. 19	A.L.7 and 8
4018A Vol. 2 Pt. 1	Leaflet A.28 and D.10
4018B Vol. 2 Pt. 1	Leaflet A.25 and D.11
4089A	Leaflet A/3 Issue 1
4089C	Index C/500-C/599
4089E	Leaflet E/151 Issue 3, E/157 Issue 2 and E/176 Issue 2
4099J Vol. 2	Leaflet (A.L.112) H.9 Alt. 1

A.P. NO.	A.L. OR LEAFLET
4099J Vol. 3 Pt. 2 (App. "A" 1969)	A.L.37, 38, 49, 40, 41, 42, 43, 44 and 45
4121B & C Vol. 1	A.L.26
4121C Vol. 2 Pt. 1	Leaflet (A.L.54) H.1 (A.L.55) H.1 Alt. 1 (A.L.56) H.1 Alt. 2 and (A.L.53) Q.10
4121C Vol. 3 Pt. 1	A.L.12
4282 Vol. 2 Pt. 2	A.L.9
4282B Vol. 1	A.L.5, 6 and 7
4288N Vol. 1	A.I.L.1/54, 2/54, 3/54, 4/54, 5/54 and 6/54 A.L.11
4300A Vol. 1	A.L.20
4300A Vol. 2	Leaflet D.2 and F.3
4300C Vol. 1	A.L.27
4300C Vol. 6 Pt. 1	A.L.16
4301A Vol. 3 Pt. 1	A.L.16 and 17
4302A Vol. 1	A.L.43
4303C Vol. 1	A.L.76
4303D Vol. 1	A.L.31 and 32
4303E Vol. 1	A.L.17
4320 Vol. 6 Pt. 2	A.L.6
4320B Vol. 2	Leaflet (A.L.23) F.2, (A.L.21) C.4 and (A.L.22) P.1
4340 Vol. 1	A.L.50 and 51
4343 Vol. 1	A.L.60, 61, 62 and 63
4343A Vol. 1	A.L.22
4343B Vol. 1	A.L.147 and 148
4343B Vol. 2	Leaflet (A.L.28) P.1 (Alt. 1)
4343E Vol. 1	A.L.52 and 54
4343G Vol. 1	A.L.20
4353	A.L.8 and 9
4360A Vol. 1	A.L.23 and 32
4361B, C, D, E, G, H Notes	A.L.8
4389A Vol. 1	A.L.28
4471A Vol. 1	A.L.52
4487 Vol. 6 Pt. 1	A.L.3
4487A Vol. 1	A.L.22, 23 and 24
A.P.(N) 383	Correction Slip to A.L.75 and A.L.76
A.P.(N) 1025	A.L.5 and 6
S.A.L.377/378 (Fi)	A.L.2
S.A.L.383	A.L.78
A.D.4681 (Issue 3)	
A.D.5044A (Issue 2)	
A.D.5061/N.B. Sheet 2	
N.A.M.O. Engines	A.L.15 dated 3/12/54 Leaflet M.1 Issue 2 (29/11/54), SI/Propeller/RAN.2 (Dec. 54), STI/Nene/5 dated 22/11/54 and SI/Centaurus/5A dated 13/12/54
N.A.M.O. Firefly	Leaflet SI/26A dated 2/12/54 and STI/119 dated 12/11/54
N.A.M.O. General	Leaflet I.63 dated 6/12/54, L.39 Issue 2 dated 9/12/54, L.64 dated 2/12/54, W.34 dated 3/12/54, STI/Electrical/80 2/12/54, STI/Ground Equipment/5 10/12/54, RANAMO/W.4 (Dec. 54), X.65 dated 12/11/54, STI/Miscellaneous/215 Iss. 2 15/11/54, STI/Instruments/41 (12/11/54),

A.P. NO.	A.L. OR LEAFLET
N.A.M.O. General	SI/Instruments/10 (20/11/54), SI/Instruments/10 Diagram Figs. 1 to 4, R.41 Issue 2 (12/11/54), Leaflet SI/Instruments/78 (12/11/54) and A.L.28 dated 15/12/54
N.A.M.O. Miscellaneous	A.L.15 dated 26/11/54 A.L.16 dated 9/12/54 Leaflet Dragonfly/G.1 Issue 3 (2/12/54) Leaflet Whirlwind/G.1 Issue 3 (2/12/54) Leaflet STI/Meteor/108 11/12/54 Leaflet STI/Oxford/10 (27/11/54) Leaflet STI/Vampire Trainer/RAN.4 (Dec. 54) Leaflet STI/Sycamore/RAN.12 (2 leaves Dec. 54) Leaflet STI/Meteor/107 dated 13/12/54 Leaflet STI/Meteor/103A (2 Leaves) 9/12/54 Leaflet STI/Meteor/103A Diagram
N.A.M.O. Sea Venom	A.L.1 (3 leaves, dated 30/11/54) Leaflet R.1 dated 22/11/54, E.I. dated 11/12/54 and STI/84 dated 30/12/54
Air Clues	October, 1954. November, 1954.
Air Pictorial	November, 1954.
De Havilland Ghost Spare Parts Schedule	A.L.19
De Havilland Goblin Operation Operation, Maintenance and Overhaul Handbook	A.L.24
Sperryscope	2nd Quarter, 1954.
R.A.A.F. Radio & Facility Charts Aust. & N.Z. Area 'D'	Military Aviation Notice Serial No. 3D dated 17/1/55 Military Aviation Notice Serial No. 4D dated 24/1/55 Military Aviation Notice Serial No. 6D dated 7/2/55 Military Aviation Notice Serial No. 5D dated 31/1/55
S.R.629/N.B.	
S.R.633/N.B.	
S.R.651/N.B.	
S.R.652/N.B.	
S.R.653/N.B.	

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B.R.16	15
B.R.125	Supplement 10
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B.R.668	13
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B.R.1954(4)	1
B.R.2075	14

TITLE	DATE
Lloyds Shipping Index	21st February, 1955. 1 No.
Lloyds Shipping Index	28th February, 1955. 1 No.

(4139/3/102)

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
2nd May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0075

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257.

APPOINTMENT OF ASSISTANT TO CHIEF NAVAL JUDGE ADVOCATE.

It has been decided to appoint to Navy Office, on the staff of the Director-General of the Supply and Secretariat Branch (D.G.S.), an (S) officer qualified as a barrister or solicitor of a Supreme Court and the High Court of Australia.

2. The duties of the officer, who will be known as Assistant to Chief Naval Judge Advocate (Short title A.C.N.J.A.), will be as follows :-

(a) To be available for appointment as Judge Advocate or Prosecutor of Courts-Martial of legal complexity. (B.R.11 Chapter 4, Articles 22 to 27).

(b) To be available to give advice to Administrative Authorities, Commanding and other officers seeking assistance or guidance in connection with the Naval Discipline Act and associated Regulations and Orders.

(c) To act in a professional capacity for instruction in law and lectures on law and Court-Martial procedure.

(d) To perform such other duties as may be required of him by the Director-General, Supply and Secretariat Branch.

3. The first appointee, Acting Lieutenant-Commander (S) L.J. Caldwell, LL.B. (Melb.), R.A.N., commenced duty on 4th April, 1955.

4. In regard to paragraph 2(a) applications for the appointment of A.C.N.J.A. as Judge Advocate or Prosecutor are to be made to the Naval Board. In this connection, attention is invited to Q.R. & A.I., Article 2126.

5. In Courts-Martial to adjudicate on charges of a very grave character or where questions of great legal complexity are likely to arise, or where A.C.N.J.A. is not available for one or other of the duties, the Naval Board may appoint experienced Counsel for each or either of the duties of Judge Advocate or Prosecutor.

6. With regard to paragraph 2(b) Administrative Authorities desiring the personal attendance of the A.C.N.J.A. for consultations are to apply to the Naval Board. Unofficial communications may take place with the A.C.N.J.A. but if an authoritative ruling or decision is required, application for same is to be made through the usual channels to the Naval Board.

7. Instructions regarding paragraph 2(c) will be issued at a later date.

(3406/14/48)

258.

FOREIGN CURRENCY.

The following instructions regarding foreign currency are to be complied with by H.M.A. Ships visiting foreign ports :-

1. SUPPLIES.- Supplies of foreign currency are to be obtained as follows, Form A.S.5 being prepared and presented in every case to the Supplying Authority, except as in (c) below :-

(a) Ships serving on Far East Station, normally from H.M.A.S. COMMONWEALTH or from Australian Army sources in Japan. Admiralty has relaxed the embargo on supplies from R.N. sources to the extent that H.M.A. Ships, serving in Korean waters, may where necessary obtain supplies from H.M. Ships in the area, or from Dockyard Cashiers at Singapore and Hong Kong.

(b) Elsewhere, when possible, by application to the local representative of the Commonwealth of Australia, to whom ample advice of requirements is to be sent by the ship. It is indicated by the Department of External Affairs that if the itinerary of ships proceeding abroad is supplied by this Department in advance, to indicate the ports at which supplies of currency may be required, together with the approximate requirements in each case, no difficulty is anticipated in making the amounts available.
It will be necessary in the case of ships proceeding abroad for the information in regard to anticipated drawings at specified ports to be furnished to Navy Office as early as possible in order that appropriate arrangements may be made.

(c) In cases other than as provided in (a) and (b), by Bill of Exchange drawn on the local bank.

2. The amount of foreign currency requisitioned is to be limited to sufficient to cover anticipated necessary expenditure for goods or services whilst in port, and for exchanging of Australian Currency or Sterling on board.

3. Prior to departing from a foreign port at which foreign currency has been obtained, the Supply Officer is to make every endeavour to reconvert all surplus foreign currency, or transfer it to another R.A.N. Ship which is remaining in or proceeding to that area, using Forms A.S.5 for the purpose.

4. Wherever practicable, foreign currency is to be obtained in denominations sufficiently small to ensure that, when changing money on board, personnel are paid as near as possible the value of the money tendered.

5. In normal circumstances, foreign currency should not be obtained by the Supply Officer for non-public purposes, such as messes and canteens management, unless requisitioned for by them, in which cases the currency should be immediately issued upon receipt by the Supply Officer. Any currency so issued and subsequently returned must not be exchanged by the Supply Officer at a valuation greater than that at which the currency was requisitioned.

6. When a variation occurs in the rate of exchange of foreign currency held, the Supply Officer will convert the currency at the new rate by taking on charge the gain, or passing a voucher through the Cash Account for the loss, in accordance with the provisions of Naval Account Regulations and Instructions, Article 47A.

Any losses in respect of foreign currency held by messes or canteens are to be borne by them.

7. Cash Account entries are to show the foreign currency equivalent, and contain a reference to the date and place of supply and exchange rate. Forms A.S.5 are to be endorsed accordingly.

8. PAYMENTS.- Use of foreign currency is to be restricted to payments for goods and services in the ports utilising the particular currency and for changing of Australian currency or Sterling on board. Payment vouchers are to show the Australian or Sterling equivalent, and the rate of exchange, and Cash Account entries are to show the foreign currency equivalent and rate of exchange.

(4807/1/7)

259.

RETURN OF SIGNALLING WITH BRITISH MERCHANT SHIPS FOR YEAR ENDING 31ST DECEMBER, 1954.

GENERAL.

The returns show a total of 789 exercises and there were only 3 failures to establish communication.

2. Successful exercises reported by H.M.A. Ships were as follows :-

SHIP	SUCCESSFUL EXERCISES
ANZAC	36
ARUNTA	8
AUSTRALIA (Paid off 31/8/54)	35
BATAAN (Paid off 13/10/54)	15
BARCOO	82
CONDAMINE	76
COOTAMUNDRA	9
GLADSTONE	8
HAWKESBURY	25
JUNEE	5
KARANGI	1
KOALA	1
KANGAROO	24

SHIP	SUCCESSFUL EXERCISES
MURCHISON	36
QUADRANT	74
QUEENBOROUGH (Commissioned 7/12/54)	2
SHOALHAVEN	17
SPRIGHTLY	55
SYDNEY	47
TOBRUK	31
VENGEANCE	118
WAGGA	19
WARREGO	28
WOOMERA	37

The number of exercises carried out by VENGEANCE, QUADRANT, BARCOO, CONDAMINE and SPRIGHTLY is noteworthy.

3. Non-British ships are still being included on Form A.S.174 and column 4 of this form is still not being completed in numerous cases. Small ships which do not carry the necessary publications to enable them to identify the owners (or line) should make every endeavour to obtain this information from H.M.A. ships in company, or on return to harbour, or during the exercise with the ship concerned; the latter being the most satisfactory method if convenient.

4. The following table shows the number of successful exercises carried out by the various shipping companies. This table is not intended as a comparative indication of signalling efficiency of companies listed. Those companies with less than 10 exercises have not been included.

NOTE:- Reprints of this Order are being forwarded to the shipping companies listed hereunder.

SHIPPING COMPANY	SUCCESSFUL EXERCISES
Adelaide S.S. Co. Ltd.	45
Albyn Line	11
Anglo-Saxon Petroleum Ltd.	11
Australian S.S. Pty. Ltd.	11
Australian-Oriental Line	11
Blue Star Line	12
Broken Hill Pty. Ltd.	36
British Tankers Pty. Ltd.	16
China Navigation Co. Ltd.	10
Commonwealth of Australia (D. of S.)	71
Huddart Parker Ltd.	12
Melbourne S.S. Pty. Ltd.	15
McIlwraith McEacharn Ltd.	17
Orient Steam Navigation Co. Ltd.	13
Pool Shipping Co. Ltd.	20
Port Line Ltd.	19
Shaw, Saville & Albion Co. Ltd.	21
Union S.S. Co. of New Zealand	12

5. Merchant vessels continue to maintain a high standard of signalling both by light and flags; semaphore hand-flags have, on occasion, been used with success. The task of selecting vessels for particular attention is a difficult one and the following list shows examples which are typical of many :-

H.M.A. SHIP	DATE	MERCHANT VESSEL	REMARKS
AUSTRALIA	2/3/54	BRITISH ADVOCATE	10 w.p.m. - 6 miles - Good
AUSTRALIA	7/3/54	WOOMERA	6 w.p.m. - 11 miles - Very good
AUSTRALIA	17/3/54	ULOOLOO	8 w.p.m. - 10 miles - Very good
ARUNTA	9/7/54	ADMIRAL HARDY	8 w.p.m. - Good - Very quick to answer
ANZAC	4/6/54	STRATHNAVER	10 w.p.m. - 2 miles - Very good
ANZAC	12/8/54	THISTLEDALE	10 w.p.m. - Excellent
BATAAN	27/3/54	HIMALAYA	10 w.p.m. - Very good
BARCOO	7/1/54	OTRANTO	8 w.p.m. - 6 miles - Very good indeed
BARCOO	11/2/54	STRATHAIRD	10 w.p.m. - Very good indeed
CONDAMINE	30/11/54	TRAVEL STAR	8 w.p.m. - 5 miles - Procedure excellent
COOTAMUNDRA	4/6/54	DAUPA	8 w.p.m. - Excellent - A pleasure to work with
GLADSTONE	7/10/54	CALTEX	10 w.p.m. - Operator very good
HAWKESBURY	21/12/54	PORT SAINT JOHN	8 w.p.m. - Very good
KANGAROO	16/1/54	RIVER LODDON	10 w.p.m. - Excellent
MURCHISON	1/11/54	BRITISH MARINER	10 w.p.m. - Excellent
QUADRANT	14/4/54	BARSON	9 w.p.m. - Very good
QUADRANT	13/8/54	IRON MASTER	8 w.p.m. - Very good
SHOALHAVEN	12/3/54	KANIMBLA	8 w.p.m. - 5 miles - Very good
SHOALHAVEN	9/7/54	ELMORE	8 w.p.m. - Very good
SYDNEY	2/2/54	NEOCARDIA	8 w.p.m. - 5 miles - Very good
SYDNEY	9/6/54	BILKUNA	8 w.p.m. - 6 miles - Very good
SYDNEY	28/8/54	CARADALE	6 w.p.m. - Excellent morse
SPRIGHTLY	3/12/54	WESTRALIA	Flags, prompt signalling
TOBRUK	15/2/54	IRON WYNDHAM	10 w.p.m. - 2 miles - Excellent
VENGEANCE	3/4/54	STRATHEDEN	10 w.p.m. - 2 miles - Very good indeed
VENGEANCE	21/9/54	MATICINA	10 w.p.m. - Very good operator
WARREGO	19/9/54	PERSIC	10 w.p.m. - 2½ miles - Very good
WOOMERA	16/12/54	RIVER CLARENCE	10 w.p.m. - Excellent

(4363/11/140)

260.

THE COLLINS TROPHY.

A trophy, in the form of a silver model "Gannet" aircraft, has been presented to the Royal Australian Navy, for annual competition between Air Squadrons. In accordance with the wishes of the donors, the trophy will be known as "The Collins Trophy". It will be 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 selection of the most efficient squadron will be made jointly by the Flag Officer Commanding, Her Majesty's Australian Fleet and the Flag Officer-in-Charge, East Australian Area.

(3473/2/61)

SECTION 2 - PERSONNEL

261.

A.B.R.10/1953 - R.A.N. ADVANCEMENT INSTRUCTIONS - SELECTION FOR AIRCRAFT MECHANICIAN.

A.B.R.10/1953 is amended by deleting Appendix 112 (F) entirely and substituting the following :-

"(F) (i) Aircraft Mechanician candidates will be selected from three sources -

(a) Leading Airmen Pilots' Mates -

Selection from this source will depend primarily on expectation of ability when trained to master and practise trades of Airframes and Engines. A first recommendation of those exceptionally suitable is to be made to Navy Office on completion of the Pilots' Mates course. Men so recommended, together with any others who may develop the requisite qualities at a later stage, are to be placed on a yearly report, which should reach Navy Office by the 15th July each year. Subject to continued satisfactory conduct, candidates will be considered for selection just before the beginning of the course. A man who has not been selected by the time he commences Part II of the Petty Officers' Trade Courses becomes ineligible for further recommendation.

(b) Leading Airmen Mechanics (O) -

A first recommendation of those exceptionally suitable is to be made on completion of the Leading Airmen Mechanics (O) course and thereafter the procedure outlined in F (i)(a) hereof will apply.

(c) Leading Airman Pilot's Mate, Leading Air Mechanics (A) (E) or (O) or Petty Officer Air Mechanics (A) (E) or (O) Who are Recommended on Completion of Part I of the Petty Officers' Trade Course.

This recommendation is to be forwarded immediately.

(ii) Ratings undergoing the Petty Officers' Trade Course will complete Part II of the course only if an Aircraft Mechanicians' Course is not immediately available.

(iii) Ratings who have been advanced to Acting Petty Officer Airman Mechanic or Acting Petty Officer Airman Fitter in the case of the ratings who successfully complete Part II of the Petty Officers' Trade Course, remain eligible for selection for the Aircraft Mechanician Course.

(iv) Ratings selected to undergo the course will be rated Acting Petty Officer Airman Mechanic, or Acting Petty Officer Airman Fitter for ratings who have completed the Petty Officers' Trade Course, on joining, unless they already hold that rating, irrespective of their position on the roster. The seniority as Petty Officers of those so rated will be the date the course begins. Provided their conduct has been continuously very good for at least one year all ratings on successful completion of the course are to be rated Aircraft Mechanician 3rd Class.

(v) Ratings undergoing the Aircraft Mechanicians' Course will be ineligible for advancement to Chief Petty Officer Airman Fitter and are not to be included on Form A.S.507.

(vi) Acting Petty Officer Airman Mechanics who have completed but failed the course, will, if recommended by the Commanding Officer, be regarded as having qualified technically for Petty Officer Airman Fitter in their original trade. Before being confirmed in this rating they will have to acquire the other necessary qualifications.

(vii) Acting Petty Officer Airman Fitters who fail the course are to revert to their original trade.

(viii) Candidates may be recommended by the Commanding Officer of the Training Establishment for accelerated advancement, of up to 6 months, to Aircraft Mechanician 2nd Class on completion of the course. (See (ix) below). Subject to this recommendation being endorsed by the Air Engineer Officer and concurred in by the Commanding Officer of the ship or air station in which a rating is serving at the time of his advancement to Aircraft Mechanician 2nd Class, his seniority and pay on advancement is to be ante-dated to correspond to the period of accelerated advancement awarded.

(ix) The number of weeks accelerated advancement is to be in accordance with the following scale :-

Pass Marks	80% and over 1st Class pass	70% - 79% 2nd Class pass	60% - 69% 3rd Class pass	45% - 59% 4th Class pass
(1) School Subjects	4	2	1	-
(2) Technical Subjects	8	4	2	-
(3) Trade Test	8	4	2	-
(4) Service Marks	6	3	2	-

NOTES:- (a) The general pass mark is 45%.

(b) A minimum aggregate of 60% in groups (2) and (3) is required to permit additional seniority to be recommended.

(c) Service marks are to be awarded on power of command, Petty Officer like qualities, etc."

2. A.B.R.10/1953 will be amended by R.I. series in due course.

(4008/4/99)

262.

AIRCREW ENTRY - SELECTION OF RATINGS FOR TRAINING AS PILOTS OR OBSERVERS.

The following rating was selected for the 14th entry of Naval Airman (Aircrew), course for which commenced 4th April, 1955 :-

Acting Leading Radio Electrician's Mate (Provisional) D.A. Innes, O.N. 44602.

(4019/140/813)

(This Order will be reprinted for posting on Notice Boards.)

263.

BURIALS IN JAPAN.

In order to provide for the upkeep of the graves by the Imperial War Graves Commission, personnel of the Royal Australian Navy who die in Japan should, where possible, be buried in the Post War Plot adjoining the British Commonwealth War Cemetery at Yokohama.

(4014/31/35)

264.

MEDICAL AND DENTAL EXAMINATION ON APPOINTMENT OR DRAFT.

The following procedures are to be observed in lieu of the instructions contained in Consolidated Orders and Regulations, Article 566, for the medical and dental examination of officers and men serving in the Royal Australian Navy when appointed or drafted to another ship or depot.

Members appointed or drafted to another ship.

2. Medical and dental examinations of members appointed or drafted to another ship or establishment are to be made -

(a) if practicable on receipt of appropriation; and

(b) in all cases immediately before proceeding in the next ship or depot.

Where a member is found to be unfit, Navy Office is to be informed at once by signal stating also the estimated duration of unfitness.

3. All members appropriated for duty ashore in the tropics are to be specially medically examined as to their fitness for such service.

4. The medical officer conducting the draft-out examination is to ascertain whether the member requires special observation in the future such as further medical survey, X-Ray examination, pathological tests, etc.

5. Where such a situation exists the medical officer is to attach a suitably explanatory memorandum to the member's medical history documents for the guidance of the medical officer of the member's next ship.

6. Where no medical officer is borne, the Commanding Officer is to arrange for the draft-out examination to be carried out by the nearest available naval medical officer.

7. Medical officers are to ensure that the member is referred to a Naval dental officer where one is available for the dental part of the draft-out examination. If a dental officer is not available the medical officer is to carry out the dental part of the examination.

8. Where the member is to be appointed or drafted to a ship or depot where full dental facilities are available, e.g., SYDNEY, VENGEANCE and all depots at capital cities, ALBATROSS, MELVILLE and TARANGAU, every endeavour is to be made to ensure completion of dental work outstanding before transfer but priority is to be given over these cases to those members requiring further treatment who are appointed or drafted to ships or depots (e.g., other than carriers) in which Service dental facilities (excluding contract dentists in this case) are not available.

9. A memorandum describing the outstanding dental treatment is to be included with the member's medical history documents.

10. A draft-in examination is to be carried out as soon as possible after a member joins his new ship or depot and when his medical history documents have been received. If these are not received in reasonable time, action is to be taken to obtain them.

11. Medical officers of the receiving ship are to scrutinise carefully each member's medical history documents and ascertain whether the member requires to have conducted any periodical test, e.g., X-Ray of chest, interim medical survey.

12. Action is to be taken to ensure that any such test, examination, etc., is carried out on the due date.

13. With the introduction of the new medical documentation system (on the 1st April, 1955), the medical officer conducting the draft-out examination is to endorse on A.F. Med. 5 (Attending List Card) any requirement as indicated above and the medical officer conducting the draft-in examination is to record on that form any test or examination he considers is needed, taking care that all such examinations and tests are carried out without delay.

14. In the event of a member not having undergone a draft-out examination, and joining a ship not carrying a medical officer, the Commanding Officer is to ensure that the member is referred at the first available opportunity to a naval medical officer who should be loaned the member's medical history documents for the purpose.

Medical aspects relating to appointment or draft prior to discharge.

15. In regard to draft-in and draft-out routine of members about to be discharged the following procedure is to be observed.

16. Immediately after joining the depot from which discharge is to be effected, and prior to any grant of long leave, each member is to be given a thorough medical (including dental) examination and the result recorded on Form A.M. 146Z, which is then to be signed by the medical officer.

17. Any necessary investigations, e.g., X-Ray of chest and also reference to a specialist where such is required by the examining medical officer, are to be arranged without delay and prior to any grant of long leave. (Navy Office letter 50480 - 4018/9/55 of 11th January, 1955, is relevant)

This will also permit any necessary in-patient treatment to be commenced and avoid retention beyond the due date for discharge.

18. Where hospital treatment is likely to extend beyond the date fixed for discharge, the pertinent circumstances of the case are to be reported by signal to the Naval Board as soon as possible in order that the member's retention on pay beyond the due date may be considered.

19. In general such retention will not be approved for the treatment of disabilities for which treatment could have been obtained prior to this examination had they been reported by the member, if the member is considered to have been aware of their presence but had not previously reported them.

20. On the day when discharge is to be effected the member is again to be medically examined and if found fit for discharge, the Form A.M. 146Z (previously completed, vide Clause 16 above) is to be suitably endorsed, signed and dated by the examining medical officer.

21. If found unfit at this final examination, the circumstances are to be advised forthwith by signal to Navy Office as in paragraph 2 above. Approval for retention in such cases will not normally be given except for disabilities which are clearly attributable to service or for cases requiring urgent in-patient hospital treatment.

22. In those cases where the member is delayed in joining the discharge depot and where there is insufficient time for the in-patient treatment of any disability discovered to be carried out before the date due for discharge, full particulars are to be advised to Navy Office by signal. The signal is to contain information as to whether the member was aware of the condition and, if so, whether it is considered it would have been possible for him to have obtained treatment earlier if the condition had been reported at the proper time. Navy Office decision on each case will be advised by signal.

23. Where a member requires dental treatment and has had the opportunity of obtaining such treatment from Service sources during the preceding six months and has not availed himself of facilities for Service treatment, he should be afforded treatment only for the relief of pain.

(This Order will be included in R.I. Series.)

(4018/4/101)

265.

NEW PAY-ACCOUNTING SCHEME - SHIPS' SYSTEM.

The new pay-accounting system for H.M.A. Ships and Fleet Establishments, referred to in Navy Order 61 of 1954, will be put into effect as soon as possible after the delivery of certain accounting machines for the new Navy Office system. These machines are expected to be delivered in the latter part of this year.

2. A revised Manual of Instructions will be issued and first supply of the necessary forms will be effected in due course.

(4801/5/56)

266.

SHORT COURSES FOR OFFICERS IN R.A.N. SHORE ESTABLISHMENTS.

The Appendix to Navy Order 67 of 1953 is to be amended to include the following course :-

	Place	Subject	Length	Officers for Whom Suitable	R/A See Note 1	Remarks
31	Supply School, Flinders Naval Depot.	Victualling Duties in Small Ships.	2 weeks	Executive Officers carrying out or about to carry out Victualling Duties in small ships.	A	C.N.O. 732/54 refers.

(4006/21/43)

267.

TRANSFERS FROM ONE BRANCH TO ANOTHER.

The instructions in this Order will apply to transfers "at own request", with the following exceptions :-

(a) transfers during the recruit period, which will be dealt with in accordance with A.B.R. 10/1953, Article 153; and

(b) transfers solely in the interest of the Service :-

(i) for medical reasons;

(ii) consequent on a call issued by Naval Board for volunteers;

(iii) to branches to which transfer is the normal mode of entry -

e.g. Regulating Branch,
Butcher Branch,
Printer Branch,
Sailmaker Branch -

which will be dealt with in accordance with the relevant provisions of A.B.R. 10/1953, viz. Articles 22(5) and Appendix Serial Nos. 94, 77, 97 and 11,

(iv) transfers to the Artificer and Artisan Branches which will be decided by the Naval Board when the trade qualifications have been established.

2. When ratings transfer from one branch to another it is generally necessary for them to undergo training appropriate to the new branch. The expense of training, twice, a rating who has served twelve months or more of an engagement of less than 12 years is justified only if the rating re-engages to complete 12 years' service from the date of entry.

3. Transfers at the request of the rating will be permitted only in exceptional circumstances, and will be subject to -

(a) The rating successfully completing a trial, prior to application being forwarded to the Naval Board, to show that he is fitted for the new branch (where necessary application is to state whether rating is prepared to re-engage in accordance with clause (b) hereof if the application is approved).

(b) A rating who is serving on an initial engagement of less than twelve years and who has completed 12 months' service, or more, over the age of 18 years, re-engaging to complete 12 years' service from the date of entry.

(c) The medical standards required for the new branch being fulfilled.

4. All transfers will be to the recruit grade of the new branch except in the case of ratings who are not required to undergo a recruit technical course in the new branch, i.e., those referred to in paragraph 8.

5. A rating whose transfer is approved will be drafted to Flinders Naval Depot as early as possible to undergo the recruit technical course appropriate to his new branch. Drafting action will not be taken in the case of a rating required to re-engage until advice by signal has been received in Navy Office that such re-engagement has been effected. Actual transfer to the new branch is not to be made until arrival at Flinders Naval Depot where transfer is to be effected with seniority as recruit adjusted to date of commencement of the recruit technical course. The period of service as recruit will be three calendar months plus any period of back classing required to pass the course.

6. Time gained during the new recruit technical course will count for advancement to the "Able" rate in the new branch, and, where the rating had previously been awarded "Time Gained" in the recruit disciplinary course, this will also count. Time gained and time lost undergoing the recruit technical course and in the Part I and Part II examinations of the old branch will be disregarded.

7. Any previous service in the "Able" rate will count for pay increments when advanced to the "Able" rate in the new branch.

8. In the case of transfer to a rate for which the recruit technical training is identical with that already successfully completed in the rate from which transfer is being effected (i.e., within the Communication Branch or within the Electrical Branch), transfer will be to the ordinary rate, with effect from, and with seniority of, the date of commencement of the Part I training for the new branch.

Where it appears warranted, by virtue of previous training, experience and service, special consideration may be given to the seniority of ratings of these branches who are permitted to transfer at own request. All such cases will be determined by the Naval Board and in general favourable consideration will be given only where substantial reduction in subsequent training can be anticipated.

Time gained or lost in the new Part I and Part II examinations will count for advancement in the new branch, as also will time gained in the recruit disciplinary and recruit technical courses for the old branch. Time lost or gained in the Part I and Part II examinations in the old branch will be disregarded.

9. The foregoing instructions will apply also to a rating who transfers to another branch due to unsuitability in his present branch, except that the question of re-engagement will be decided by the Naval Board.

10. The date when transfer to new branch is actually effected is to be reported on Form A.S. 161 in all cases.

11. Navy Order 255 of 1953 is hereby cancelled.

(4001/10/27)

268.

TRAVEL ON DUTY AND ON LEAVE.

The present composite warrant for travel other than by rail is intended for use for travel both on duty and approved leave.

2. Care is to be taken that in all cases of travel by air the duplicate warrants are appropriately endorsed to indicate the relevant paragraph of Navy Order 326 of 1953 under which issued and, where paragraph 10 thereof applies, the amount recovered from or prepaid by the member with Cash Account or ledger reference thereto.

3. When assessing the difference between rail and air travel to be recovered from or prepaid by personnel, cost of reserved seats, where compulsory, is to be included in the Departmental liability.

(4677/51/13)

269.

UNIFORM - RATINGS - "SCHOONER RIG" FOR WEAR IN HOT WEATHER.

Paragraph 2 of Navy Order 42 of 1953 is to be amended by deleting "and blue belt" from line 2 thereof and by adding at the end of the paragraph "Belts are not to be worn with this uniform".

(4716/1/214)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

270.

AIRCRAFT - CARTRIDGES, POWER, KJ079 CTGES ENGINE STARTER, ELECTRIC NO.8 MARK 1.

The following stores have been introduced into Naval Service :-

KJ 079 CTGES ENGINE STARTER, Electric, No. 8, Mark 1 (R.A.F. reference No. 12D/1198).

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.

2. These cartridges are described in Air Publication A.P. 1661F, Volume 1.

3. Cartridges will be supplied to service packed in tin plate press-cap cylinders No. 611, eight of which are packed in a steel box H.50 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.

4. 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.

5. The provisional service life allocated to these cartridges is 5 years when stored and used in a Temperate Zone within Australia, and 2 years in H.M.A. Ships or when stored and used in a Tropical Zone within Australia, except after stowage in aircraft, see paragraph 8.

6. The method of securing the clamp bolt to the grid of cartridges produced prior to December, 1953, was not entirely satisfactory and a cartridge with a modified bolt was introduced. Cartridges of pre-December, 1953, manufacture which have the marking "Clamp bolt checked" placed on the cartridge case and package, and those manufactured subsequent to that date are the only cartridges to be used in Naval aircraft.

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 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 C.B. 4485B. 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 windmilling the airscrew in the slipstream of the first engine started.

10. R.A.N. Armament Depots only -

(a) Separate instructions will be issued regarding action to be taken with cartridges returned in accordance with paragraph 6.

(b) The following notation should be made on Sheet 276 of Restriction List (B) :-

Column 1	5.
Column 2	Elec. No. 8 Mark 1(B).
Column 3	Filled prior to 12/53.
Column 4	Withdraw.
Column 5	Rectify.
Column 6	C.N.O. 270 of 1955.

(The foregoing is the text of A.F.O. 104/1955 altered to meet R.A.N. conditions.)

(4443/11/10)

271.

AMMUNITION - 20 mm. HISPANO - USE OF A.P. TRACER TO INDICATE "END OF BELT".

Attention is drawn to the authorised use of 20 m.m. Hispano A.P. Tracer ammunition, of which ample stocks are held, to indicate "end of belt" - or "three quarters expended" if desired.

2. Negligible expenditure of this ammunition would appear to indicate that its availability for this purpose is not widely known.

3. It is considered that the inclusion of this tracer round in belts to indicate that all, or some specified proportion, of the ammunition load has been expended, can be extremely useful to the pilot, especially in practice firings.

4. Care should be taken that A.P. Tracer ammunition is used only in exercises over the sea. It must not be used on land ranges because of the bush fire risk involved.

5. Demands should be rendered to the nearest R.A.N. Armament Depot in the normal way.

(The foregoing is the text of A.F.O. 3323/1954 altered to meet R.A.N. conditions.)

(4442/25/5)

272.

ARMAMENT STORES - AMMUNITION (INCLUDING T.A.S. STORES) - RETURN OF.

Returns of expenditure, requirements and stocks of ammunition are to be rendered to the Secretary, Department of the Navy, as follows :-

A. EXPENDITURE.-

(i) Returns of expenditure of ammunition, etc., are to be rendered on the 1st January and 1st July of each year by H.M.A. Ships and White Ensign Establishments (including R.A.N. Air Stations).

(ii) Returns for A/S explosives, aircraft bombs and rockets, etc., are to include details of main components used with parent stores, e.g., number and types of pistols, detonators, fuzes, saddles, fins, etc.

(iii) The following stores need NOT be included in expenditure returns :-

Ships' Pyrotechnics (signal cartridges and rockets, etc.);

Minor components of depth charges (placer primers, pads, etc.);

Minor components of demolition stores (mouth pieces, etc.).

(iv) Where the expenditure of major items (gun and underwater ammunition, bombs and rocket projectiles, etc.) is for purposes other than authorised practice, this should be indicated.

(v) Training ships and establishments are to show expenditure in three columns headed - (1) Own Use; (2) Naval Reserve Personnel; and (3) National Service Personnel.

(vi) Those ships in which accounts are closed during a half-yearly period, are to render reports of expenditure up to the date of closure of accounts, such reports being endorsed accordingly.

(vii) Nil reports are required.

B. ESTIMATED REQUIREMENTS.-

(i) Training Establishments (including Naval Reserve and National Service Training Establishments) and Air Stations, are to render on 1st February of each year a return, (copy to the nearest Naval Armament Depot), showing the quantities of ammunition, etc., which it is estimated will be expended within the establishment and by ships and aircraft employed on training duties during the 12 months from the succeeding 1st July. Stock of each item which it is estimated will be held at the 30th June, is to be shown in a separate column. Requirements for use by disembarked F.A.E. aircraft are not to be included in this return.

(ii) A separate return is to be rendered by the T.A.S. School, copy to the Superintendent, R.A.N. Torpedo Establishment, showing the estimated requirements of torpedo non-explosives and paravane stores for the same period.

C. STOCKS AVAILABLE.-

(i) Returns showing particulars and quantities of ammunition, etc., held on board H.M.A. Ships and White Ensign Establishments (including Air Stations), as at 30th June and 31st December, are to be rendered as soon as possible after those dates.

(ii) Stocks of stores containing propellant (e.g., Cartridges B.L. and Q.F. and motor rockets) are to include details of the lot numbers and the quantity of each lot number held. The use of Form A.S.1147Z is discontinued.

(iii) Stores landed temporarily on deposit should be included.

2. For the purposes of these returns the general description of ammunition covers -

(a) Separate Cartridges B.L. and Q.F.

(b) Separate Shell B.L. and Q.F.

(c) Fixed Ammunition Q.F. 40 mm. and above.

(d) Small Arms Ammunition 20 mm. below.

(e) Loose fuzes, vent tubes, primers and tracers.

(f) Aircraft bombs and components.

(g) Underwater explosives, viz. depth charges, hedgehog, A/S projectiles, torpedo explosives and their components, and minesweeping explosives.

(h) Demolition stores including non-explosive items, Cox gun ammunition and de-icing harness.

(i) Pyrotechnics, including lachrymatory stores, smoke floats, grenades, aircraft pyrotechnics, engine starter cartridges, stores for A.B.C.D. Schools, and Lights Indicating Lifebuoy.

(j) Mortar ammunition.

(k) Rocket ammunition and R.A.T.O.G.

(l) Blank ammunition.

(m) Airfield Control Pyrotechnics.

3. The description of items should conform to that used on supply vouchers from Naval Armament Depots, elaborated as necessary to reflect changes, such as fuzing carried out on board.

4. R.A.N. AIR STATIONS ONLY: The use of Form A.A.37/39 will be discontinued in the Royal Australian Navy when existing stocks of this form are exhausted.

5. Consolidated Orders and Regulations, Articles 375, 375A, 376 and 377 are superseded by these instructions and will be amended accordingly.

6. Navy Orders 42 of 1950, 382 of 1952 and 159 of 1953 are hereby cancelled.

(4433/1/757)

273.

ALTERATION AND ADDITION ITEMS - BOOM WORKING VESSELS.

The following alteration and addition item is approved in principle for Boom Working Vessels :-

Class List Item No. 107 Classification "A"

Item: Aldis lamp to be permanently wired from Ship's Low Power Supply with alternative operating positions at wheelhouse and compass platform.

Compensating Weight Required: 250 lbs. at Upper Deck Level.

2. Proposals to meet compensating weight requirements are to be forwarded.

(4286/1/35)

274.

PLOTS AND PLOTTING - GRIDS, GRATICULES AND REFERENCE SYSTEMS.

Navy Order 39 of 1955 is to be amended as follows :-

The note in brackets at the foot thereof is to be amended to read - The foregoing is the unaltered text of A.F.O. 2753 of 1955.

(3858/1/7)

275.

BAROGRAPHS, PATTERN 503 - ALLOWANCES.

The existing allowance in accordance with the relevant Admiralty Establishments of Sea Stores of 1 No. Pattern 503 Barograph to each Destroyer and Frigate in wartime only has been amended, and in future ships in commission will be allowed one as a firm peace and war allowance.

2. The existing special R.A.N. allowance of 1 No. Pattern 503 Barograph to Frigates, is accordingly withdrawn.

3. Demands should be lodged with the (Superintending) Naval Store Officers of Storing Yards by H.M.A. Ships concerned, in commission, which do not hold the item. (Superintending) Naval Store Officers of Storing Yards should arrange supply to ships concerned under construction, conversion and modernisation in the usual manner.

4. Approval has also been given for the allowance of a Barograph, Pattern 503, to Ocean Minesweepers and Ocean Tugs and issue will be effected without demand when sufficient stocks are available. Dormant demands for ships concerned in reserve will be prepared by the appropriate Storing Yard in the normal manner.

5. The relevant Establishments of Sea Stores will be amended.

(The foregoing is the text of A.F.O. 3265/1954 altered to meet R.A.N. conditions.)

(4518/36/289)

276.

LISTS OF PORTABLE FITTINGS AND FIXTURE LISTS - SUPERSESSION OF FORMS A.D.320 AND A.D.787 TO A.D.798 INCLUSIVE.

Forms A.D.320, A.D.320b and A.D.787 to A.D.798 inclusive are being superseded by Forms A.D.787/A.S.473 series as indicated hereunder -

EXISTING FORM	NEW FORM
A.D.320 - Cover and list complete A.D.320b - Cover and list complete A.D.787 - COVER	A.D.787/A.S.473 - COVER.
D.320 - MEMORANDUM A.D.320b - MEMORANDUM A.D.788 - MEMORANDUM A.D.789 - MEMORANDUM A.D.790 - MEMORANDUM A.D.791 - MEMORANDUM	A.D.787A/A.S.473 - MEMORANDUM.
A.D.792 - INDEX	*A.D.787B/A.S.473B - INDEX.
A.D.793	*A.D.787G/A.S.473G
A.D.794	*A.D.787H/A.S.473H A.D.787J/A.S.473J
A.D.795 - CERTIFICATE 'A'	A.D.787C/A.S.473C - CERTIFICATE 'A'.
A.D.796 - CERTIFICATE 'B'	A.D.787D/A.S.473D - CERTIFICATE 'B'.
A.D.797 - CERTIFICATE 'C'	A.D.787E/A.S.473E - CERTIFICATE 'C'.
A.D.798 - CERTIFICATE 'D'	A.D.787F/A.S.473F - CERTIFICATE 'D'.

NOTE:- * These forms are printed on tracing paper in the A.D. series for use when reproduction is required, and on paper in the A.S. series for draft work and temporary pages pending reproduction.

2. The new forms are to be used for all Lists of Portable Fittings and Fixture Lists raised subsequent to the issue of this Order.

3. Existing Lists are to continue to be maintained by the use of Form A.D.794 until stocks become exhausted.

4. Lists of Portable Fittings and Fixture Lists as reconstituted by the use of the new forms will be titled "List of Equipment, Portable Fittings, Spare Gear, Drawings and Instructions Books" - short title "List of Equipment, Etc.".

(4355/1/40)

277.

NAVAL STORES (GENERAL) (CLASS B, GROUP 6) - GOLD LEAF - SUPPLY.

Following upon the recommendations of the Naval Paint Committee, it has been decided that no further purchases will be made of ordinary deep colour gold leaf, pattern 28, when present stocks are exhausted. Transfer deep colour gold leaf, which is also accounted for as pattern 28, will be supplied in lieu.

(4512/60/168)

278.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - FLOOR POLISH - EXTENSION OF USE IN H.M.A. SHIPS.

It has been approved for the use of Floor Polish to be extended to all H.M.A. Ships in full commission and to living ships in reserve.

2. The general use of floor polish on ordinary or P.V.C. linoleum deck coverings instead of the routine washing down of decks with water will help to keep between-decks dry and reduce deck corrosion, hull maintenance and repairs, and give some economy in labour.

3. Two types of polish are involved, viz. Pattern 4161 for use on ordinary linoleum and Pattern 7733 for use on P.V.C. linoleum. Ordinary linoleum is at present used in H.M.A. Ships, but initial supplies of P.V.C. linoleum are being arranged. Demands on Naval Store Depots for floor polish should indicate the type of linoleum generally fitted throughout the ship.

4. First outfit quantities to all classes of ships concerned are detailed in the Appendix. Replenishment demands, based on past expenditure as for other consumable stores, are not to exceed the quantity provided in the first outfit.

5. Commanding Officers of ships concerned in commission, and Commanding Officers Reserve Ships on behalf of living ships in reserve, should lodge demands on their Storing Yards for the appropriate first outfit quantities. Supply to ships on first storing, or re-storing, should be arranged by Storing Yards in the usual manner.

6. Liquid floor polish should still be used with the floor polishing machines allowed by Navy Order 343 of 1953.

(The foregoing is the text of A.F.O. 3184/1954 altered to meet R.A.N. conditions.)

(4512/71/68)

APPENDIX

FIRST OUTFIT QUANTITIES OF FLOOR POLISH FOR H.M.A. SHIPS.

Class	Quantity of Pattern 4161 in lbs.	or Pattern 7733 in gallons
Aircraft Carriers	98	9
Cruiser	49	5
Darings	14	1
Destroyers	14	1
Frigates and Survey Ships	14	1
Ocean Minesweepers	7A	1A
Tugs and Boom Vessels	7B	1B
Inshore Minesweepers	7B	1B
All other small craft	7B	1B

A = This quanitity to last for 4 months.

B = This quanitity to last for 6 months.

279.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2A, PART 3) ELECTRIC LAMPS - RE-INTRODUCTION.

It has been decided to re-introduce into the Rate Book, under Class F, Group 2A, Part 3, the following item :-

Interservice Ref. No.	Description	Category
X.954203 (16112)	Lamp, electric, 24 volts, 6 watts, spherical, clear Bayonet Cap.	X

2. The Rate Book and Authorised List of Naval Stores will be amended.

(The foregoing is the text of A.F.O. 285/1955 altered to meet R.A.N. conditions.)

(4518/22/248)

280.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B, PART 4) - GUARDS FOR ELECTRIC PANEL FIRES - RE-INTRODUCTION.

H.M.A. Ships

To meet current safety standards, wire guards for electric panel fires are being re-introduced and are to be accounted for in accordance with the procedure for portable fittings. These guards will be dealt with under Class F, Group 2B, Part 4, as follows :-

Pattern No. of Guard	Pattern Nos. of Fires for which used
19642	19538 and 19540
19643	19534 and 19536
19644	19532 and 19533
19645	19530 and 19531
19646	19551 and 19554

2. The obsolete panel fires, Patterns 19531, 19533, 19536 and 19551, have been referred to above as the appropriate wire guards are to be fitted to any of these fires still in service.

3. Guards, Patterns 8130 to 8134, formerly dealt with under Class B, Group 10D, are obsolescent and superseded by Patterns 19642 to 19646 respectively.

4. The small stocks of obsolescent guards still available will be issued until expended.

(The foregoing is the text of A.F.O. 3334/1954 altered to meet R.A.N. conditions.)

(4518/27/140)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954)

(For list of A.F.O.'s from 900/1954 to 2199/1954 which have been repromulgated, see list following Navy Order 177 of 1955.)

A.F.O.'s (2200 of 1954 Onwards.)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1954		
2205	624/54	-
2206	-	569/54
2242	-	160/55
2250	-	696/54
2256	-	4/55
2257	-	751/54
2260	-	775
2262	-	677
2265	683	-
2272	-	139/55
2298	-	764/54
2306	-	729
2311	-	791
2327	-	698
2338	-	699
2339	-	676
2340	647	-
2341	-	648
2342	-	45/55
2345	-	636/54
2346	637	-
2348	711	-
2349	-	174/55
2353	-	725
2354	-	760
2403	-	122/55
2412	670	-
2413	-	135
2418	85/55	-
2452	-	768/54
2470	-	671
2471	675/54	-
2472	-	8/55
2473	-	736/54
2476	-	759
2478	-	685
2480	707	-
2484	724	-
2491	-	188/55
2498	-	728/54
2516	-	15/55
2526	5/55	-
2527	752/54	-
2529	-	187/55
2530	-	720/54
2531	-	702
2532	-	209/55
2534	-	762/54
2535	-	780

A.F.O.'s (2200 of 1954 Onwards.)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2537	-	114/55
2551	-	98
2577	-	41
2590	774	-
2593	717	-
2594	-	858/54
2595	-	719
2596	-	776
2597	-	754
2598	721	-
2603	-	805
2604	738	-
2660	-	792
2661	-	75/55
2662	-	46
2663	-	777/54
2666	-	779
2670	-	212/55
2688	-	807/54
2696	-	786
2704	-	65/55
2705	-	40
2706	-	66
2724	803	-
2728	-	823/54
2730	82/55	-
2753	-	39/55
2755	-	785/54
2758	-	100/55
2765	-	834/54
2768	806/54	-
2777	-	87/55
2779	-	796/54
2780	-	44/55
2781	-	796/54
2783	-	846
2785	-	821
2791	-	53/55
2795	-	247/55
2823	852	-
2828	-	64
2835	-	242/55
2836	788	-
2845	-	839/54
2847	-	842
2852	843	-
2861	-	144/55
2862	-	860/54
2873	84/55	-
2890	-	855
2901	-	166/55
2902	-	841/54
2903	-	76/55
2904	-	171/55
2905	-	43
2906	-	797/54
2908	-	50/55
2914	-	9

A.F.O.'s (2200 of 1954 Onwards.)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2915	863/54	-
2917	80/55	-
2941	-	814/54
2948	-	104/55
2961	857/54	-
2964	-	802/54
2965	47/55	-
2966	-	49/55
2967	-	52
2969	-	861/54
2971	-	173/55
2978	142	-
2979	-	137/55
2981	-	193/55
3027	-	68
3040	-	167/55
3045	-	859/54
3046	-	77/55
3048	817/54	-
3049	-	6
3051	844	-
3060	-	862/54
3062	-	191/55
3097	103/55	-
3107	129	-
3108	-	107/55
3110	42	-
3114	51	-
3119	-	89
3154	-	123
3168	-	168/55
3172	-	206
3174	-	253
3182	138	-
3184	-	278
3194	-	146
3239	-	222
3242	-	183
3250	131	-
3253	73	-
3257	-	108
3262	79	-
3265	-	275
3269	-	190
3270	141	-
3282	-	225
3309	-	223
3313	-	203
3314	-	202
3320	154	-
3322	-	169
3323	-	271
3325	-	229
3334	-	280
3338	135	-
3340	143	-
3362	-	196
3364	157	-
3374	-	239

A.F.O.'s (2200 of 1954 Onwards.)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
3387	-	201
3388	151	-
3389	152	-
3391	-	243
3403	-	130
3405	155	-
3425	-	236
1955		
31	153	-
36	-	185
46	156	-
48	-	211
50	-	235
103	-	249
104	-	270
114	-	210
162	-	232
163	-	230
221	-	250
223	-	251
276	-	226
283	-	231
285	-	279
336	111	-
510	-	119

NOTE:- A.F.O.'s subsequent to 900/1954, which are not in the above list or in the list following Navy Order 177 of 1955 can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206 of 1954 to 280 of 1955, dated 1st June, 1954, to 2nd May, 1955.)

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C.N.Os. 281-302/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.

9th May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0073

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SECTION 1 - ADMINISTRATIVE AND GENERAL

281.

AUTOGRAPHED PHOTOGRAPHS OF HER MAJESTY THE QUEEN AND HIS ROYAL HIGHNESS THE DUKE OF EDINBURGH.

H.M.A. Ships and Establishments desirous of obtaining signed photographs of Her Majesty The Queen and His Royal Highness the Duke of Edinburgh should forward their applications to the Secretary, Navy Office, through their administrative authority.

2. The consent of The Queen and the Duke of Edinburgh will be sought and the applicant informed of the decision. Arrangements for the purchase and signing of the photographs will be made by Navy Office.

3. There is one portrait of The Queen in Court Dress with Tiara, one of the Duke of Edinburgh in Naval Uniform and one in the Uniform of an Elder Brother Trinity House.

4. The scale of allowances of photographs is as follows :-

One set for Flag Officers.

Cruisers and upwards - one set for officers and one set for principal recreation space. If a gunroom is carried, consideration will be given to a set for the gunroom also.

Destroyers and below - one set only.

Barracks, Air Stations and similar establishments - one set for officers and one set for principal recreation space.

5. Prices, exclusive of Purchase Tax, are approximately as follows :-

Size in.	Mounted to in.	Price without Frame (Sterling).
7½ x 6	13 x 9½	£ 1.15.0
10 x 8	17 x 11	£ 2. 2.0
12 x 10	20 x 13	£ 2.12.6
15 x 12	24 x 18	£ 4. 4.0
18 x 15	26 x 19	£ 5.15.6
20 x 16	30 x 22	£ 7. 7.0
24 x 20	34 x 24	£10.10.0
34 x 24	40 x 30	£12.12.0

6. Possession and disposal of signed photographs of Her Majesty The Queen and His Royal Highness the Duke of Edinburgh are subject to the following conditions :-

(a) They become the property of the ship or establishment and not of any individual. In the case of Flag Officers they are appurtenant to the appointment.

(b) The photographs are to be accounted for in the Presentations, Relics and Trophies Account in accordance with Navy Order 297 of 1955.

(c) On transfer of the Flag, autographed photographs held by the Flag Officer Commanding H.M.A. Fleet should be transferred with other items in the Flagship Inventory Account.

(d) They are not to be sold or otherwise disposed of when a ship or establishment pays off, or when a Flag Officer's appointment lapses, but are to be returned for safe custody to the appropriate Naval Store Depot.

(e) If, owing to condition, it is considered necessary to destroy any such signed photograph, destruction is to take place in the presence of an officer who is to certify on Form A.S.331 that the destruction was carried out in his presence. The original copy of Form A.S.331 bearing the approval of the Commanding Officer is to be forwarded to Navy Office without delay.

7. Signed photographs returned to a Naval Store Depot will normally be retained until the ship or establishment recommissions or another ship or establishment of the same name is commissioned. H.M.A. Ships and Establishments desirous of obtaining signed photographs on loan should make application to Navy Office, through Administrative Authority, stating particulars of the photographs it is desired to borrow. Consent will then be sought in the same way as for the purchase of photographs and the ship or establishment will be informed of the decision.

8. Autographed photographs of other members of the Royal Family should also be accounted for and disposed of in accordance with the foregoing instructions.

(3583/71/377)

282.

WEARING OF AIGUILLETTES BY HONORARY AIDES-DE-CAMP TO HIS EXCELLENCY THE GOVERNOR-GENERAL.

His Excellency the Governor-General has commanded officers who hold appointment as Honorary Aide-de-Camp or Honorary Surgeon or Honorary Physician or Honorary Dental Surgeon to His Excellency, to wear aiguillettes on the following occasions :-

(i) At Royal or Vice Regal Levees in Australia.

(ii) When in the presence of the Governor-General when uniform is being worn.

(iii) When representing the Governor-General.

(iv) When detailed for duty in uniform in the capacity of Honorary Aide-de-Camp, otherwise than under (ii) and (iii) above.

(v) On other formal or public occasions as ordered by the Governor-General.

(4716/1/220)

SECTION 2 - PERSONNEL

283.

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.

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 complaint of pain, in which case morphia is not necessary, and may even do more harm than good.

3. 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.

The method by injection of the contents of syringe ampoules is by far the most effective. When the ampoules are available they should certainly be used.

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 ampoule are given on a leaflet with diagrams contained in the box or tin. These should be studied.

The dose of each form of morphia is one unit, i.e., one syringe 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 ampoule at the same time.

The dose of one or two tablets or lamellae or of one syringe ampoule can be repeated if necessary provided four hours have elapsed since the previous dose was given.

4. All forms of morphia should be kept under lock and key in the charge of the Commanding Officer, and, when called for, 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, it is a matter of internal organisation for him to arrange that such persons as are likely to be called upon to perform this function should be thoroughly conversant with the terms of this Order.

5. All patients who have been given morphia are to have a label 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.

This procedure is to be carried out by the person who actually administered the morphia.

6. Expenditure of any type of morphia is to be entered immediately in the dangerous drugs account, Form A.M.177a.

(The foregoing is the text of A.F.O. 100/1955 altered to meet R.A.N. conditions.)

(4482/1/207)

284.

NAVAL GENERAL SERVICE MEDAL (1915) CONDITIONS OF AWARD FOR SERVICE IN AREAS OF THE SOUTH EAST ASIA COMMAND, FOR MINESWEEPING AND FOR BOMB AND MINE CLEARANCE.

Paragraph 18 of Navy Order 151 of 1951 (as amended by Navy Order 32 of 1952) is to be amended by inserting Terminal date for the Solomon Islands Zone "28th April, 1953".

(3593/2/66)

(This Order will be reprinted for posting on Notice Boards.)

285.

RATINGS - TRAINING OF ARTIFICER DIVERS.

A limited number of Artificers in the Royal Australian Navy will be trained in salvage work, underwater welding and general underwater inspection and repair.

Selection of Candidates.

2. Courses will be restricted to volunteers of the E.R.A., Mechanician and Shipwright Branches who are already able to weld. They must be under 30 years of age on the date they apply and must be medically fit in accordance with Navy Order 36 of 1949.

Training.

3. Training will take place in H.M.A.S. RUSHCUTTER. The course lasts twelve weeks, the first six being devoted to training the Artificers to carry out their duties underwater to depths down to 50 ft. in both standard and self-contained diving gear.

The second half of the course consists of training in underwater welding and cutting.

4. Artificer Divers courses will be promulgated in Navy Orders.

Practice.

5. In addition to the monthly dip, every opportunity should be given to successful candidates to obtain practice in this form of diving. Refresher courses will also be arranged if this is found to be necessary.

Notation on Service Certificates.

6. Ratings who successfully complete the course are to have the notation "Qualified as Artificer Diver" entered on their Service Certificates.

Complements.

7. Initially one Artificer Diver will be included in the complements of -

MELBOURNE
SYDNEY
RUSHCUTTER.

This number may be increased to two if sufficient volunteers are trained. There will be no increase in the number of Artificers borne. When Divers 1 are allowed in the complement of such vessels, Artificer Divers should be in addition to, and not instead of, these divers.

Complement returns are to show the number of Artificer Divers borne.

Annual Diving Return.

8. Forms S.288A are applicable to these ratings.

Pay

9. On completion of training, successful candidates will be eligible for diving pay on the same basis as other Naval Divers, but they will not receive a retaining allowance.

(4002/93/38)

286.

V/S RATINGS - HIGH RATE OF FAILURE IN PRACTICAL SIGNALLING ON COURSE.

The Naval Board are concerned that in recent qualifying courses for Yeoman of Signals and Leading Signalman, held at H.M.A. Signal School, there has been a high percentage of failures in practical flashing and semaphore.

Most ratings who fail have had recent service ashore or in small ships.

2. In an endeavour to reduce this percentage of failures, Commanding Officers, whose attention is drawn to B.R.1792, paragraphs 5.10(a)(iv) and 5.13(a)(iv), are to ensure that, where possible, V/S ratings carry out practical flashing and semaphore exercises in order to maintain a high standard.

3. Leading Signalmen and Signalmen selected for courses are to be examined in practical flashing and semaphore on receipt of the draft note selecting them for a course.

4. Names of candidates who fail to reach the required standard in this examination are to be reported by signal to the Naval Board, info C.S.T. F.N.D., in order that replacements may be drafted if necessary.

5. If circumstances make it impossible for such an examination to be carried out, this should be reported to the Naval Board, info C.S.T. F.N.D.

(4002/55/35)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

287.

AIRCRAFT - PYROTECHNICS - K.F.158 FLOATS, SMOKE AND FLAME 3½ LBS., NO.1, MARK 1 - STORAGE AND TRANSPORT PRECAUTIONS.

A remote possibility exists of spontaneous ignition occurring in Float, Smoke and Flame, 3½ lbs., No.1 Mark 1. It is hoped to introduce modifications shortly to overcome this trouble, but so long as this slight risk exists the following precautions must be observed :-

H.M.A. Ships	Floats are to be stowed away from other explosives in a Weather Deck Magazine.

R.A.N.A.S.	Floats are to be stowed away from other explosives in a R.U. or Explosives Store House.
R.A.N. Armament Depot	All stocks to be stowed in isolation.
Transport to and from shore stations	Floats are only to be transported in service vehicles which contain no other explosives.
Transport to H.M.A. Ships	Floats are not to be stowed in lighters, N.A. vessels, etc., which contain other explosives.

2. Additional defects which affect the performance of the Float exist in lots 14-38 (inclusive). Floats of these lots are being withdrawn from service and dumped.

R.A.N. Armament Depots.

3. The following entry should be made on Sheet 308 of Restriction List (B) :-

Column 1	6
" 2	KF.158 Floats, Smoke and Flame 3½ lbs. No. 1
" 3	V.A.D. lots 14-38 inclusive.
" 4	Withdraw
" 5	Dump
" 6	Navy Order 287 of 1955.

(The foregoing is the text of A.F.O. 333/1955 altered to meet R.A.N. conditions.)

(4443/7/12)

288.

AMMUNITION - FUZES, IGNITERS, PRIMERS, TRACERS AND TUBES - FUZES, DRILL, FRAGILE, MK. N.1.

Fuzes, drill, fragile, Mark N.1, introduced by Admiralty Fleet Order 54/53, are now available for supply on the following scale :-

H.M.A. Ships Mounting	
Q.F. 4.7" guns Q.F. 4.5" guns Q.F. 4" Mark 16* guns (except A/S Frigates (Modified River) and O.M.S.	3 No. Nose portions and 1 No. Body portion allowed per each drill shell or cartridge.
Flinders Naval Depot	72 Body portions and 216 Nose portions.

2. The original fuzes, as supplied, will have the body portion assembled with cement R.D. 1242B, a ring of cement being placed on the flange of the nose portion before assembly. Cement need not be used for any replacements found necessary on board provided the nose portion is screwed hard home. However, if an R.D. Cement is available (e.g., R.D. cement No. 1 or 1A), then this should be used to ensure that the noses do not become loose during drill. Screw threads must be kept clean and free from cement.

3. Requirements should be demanded from the Superintending Armament Supply Officer, Sydney. Any surplus bodies held are to be returned to the Superintending Armament Supply Officer.

4. Navy Order 718/54 is hereby cancelled.

(4442/128/4)

289.

AMMUNITION - PROPELLANT - LANDING - DESTRUCTION - REPORTS.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots 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 specially to Navy Office for instructions.

Propellant Lot or Sub-Lot No.	Propellant Nature and Size.	Nature of Gun Ammunition which may be Involved.
RNC 258	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in.(F.A.); Q.F. 12-pdr. 12-cwt.
RNC 259	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNC 261	SC 122	B.L. 6-in.; Q.F. 4.7-in. (S.L.); Q.F. 4.5-in.
RNC 305XA	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNC 382XB	SC 109	B.L. 6-in.; Q.F. 4.7-in.(S.L.)
RNC 389XB RNC 436XC	SC 061 SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.); Q.F. 12-pdr. 12-cwt.
RNC 2085XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNC 2086XR	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in.(F.A.); Q.F. 12-pdr. 12-cwt.
RNC 2091XR RNC 2097XR RNC 2104XR	SC 103 SC 103 SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.

Propellant Lot or Sub-Lot No.	Propellant Nature and Size.	Nature of Gun Ammunition which may be Involved.
RNC 2297XS RNC 2304XS	SC 122 SC 122	B.L. 6-in.; Q.F. 4.7-in. (S.L.); Q.F. 4.5-in.
RNC 2306XS	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNP 245RXD RNP 1131XH	NF/S 164-048 NF/S 164-048	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4-in.
WA 13645 WA 13865XA	NA 029 NA 042	Q.F. 4-in.

2. Attention is drawn to 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.

(The foregoing is the text of A.F.O. 334/1955 altered to meet R.A.N. conditions.)

(4433/51/223)

290.

FIRED CARTRIDGE CASES - TO BE WASHED BEFORE BEING LANDED.

Attention is again drawn to the instructions contained in paragraph 153 of B.R.932 (1945) that, after removal of primers, fired cartridge cases are to be washed with hot water and soda, thoroughly dried, and treated with mineral jelly, before return to Naval Armament Depots.

2. The object of this treatment is to remove the acid deposited on the metal during firing. If this is left for any time it eats into the metal and leads to cracking of the mouth of the case during reforming operations. Such cracked cases have to be condemned.

3. Fired cases are still being returned to Naval Armament Depots in an unwashed and unlubricated condition, sometimes with corrosion in an advanced stage. Where some attempt to treatment has been made, cases are usually oiled without being washed, which does not prevent corrosion. Instances have also occurred where heavy grease has been used instead of mineral jelly, making the cases unnecessarily difficult to handle and requiring cleaning on receipt. Some ships are also failing to remove primers after firing.

4. Care should also be taken in handling, to prevent damaging fired cases which are to be returned for reforming.

5. The following cases are not "reformed" and therefore do not require treatment prior to return to Naval Armament Depots :-

40 m.m. bofors.
3 pdr.
2 pdr.
20 m.m. and below.

6. Cases that have been washed should be marked with a flash of white paint.

7. Navy Order 69 of 1953 is hereby cancelled.

(4434/56/96)

291.

ALTERATION AND ADDITION ITEMS - MAJESTIC CLASS LIGHT FLEET CARRIER.

The following alteration and addition item is approved to be carried out by Ship's staff in H.M.A.S. SYDNEY :-

Class Item No. 273

Item: To resite the Surgeon's consulting room into the existing medical store and fit up the existing consulting room as a medical store.

Compensating Weight Required - Nil.

References: (i) A.F. 115/1902/141 of 3rd February, 1955.
(ii) SYDNEY's proposed A. & A. letter "E".

(4278/3/604)

292.

NAVAL STORES (GENERAL) (CLASS B, GROUP 8, PART F) - BLOCKS, SNATCH, PATTERN 5223A - ALLOWANCES.

Aircraft Carriers

Approval has been given for the supply of two Pattern 5223A Snatch Blocks to all aircraft carriers operating aircraft. These blocks are required for use with flight deck tractors when hauling arrestor wires clear of the after lift, for routine inspections of main reeving ropes and for renewal of centre spans.

2. The provision of a winch for pulling out wires is being considered and the supply of the blocks will therefore be subject to withdrawal if and when a winch is installed.

3. H.M.A.S. SYDNEY should lodge a demand with the (Superintending) Naval Store Officer, Sydney, as required.

4. The Establishment of Sea Stores for Executive Purposes will be amended accordingly.

(The foregoing is the text of A.F.O. 226/1955 altered to meet R.A.N. conditions.)

(4505/85/41)

293.

NAVAL STORES (GENERAL) (CLASS B, GROUP 12E) - INGOT METALS - TRANSFER TO CLASS B, GROUP 7.

It has been decided to transfer to Class B, Group 7, the ingot metals hitherto dealt with under Class B, Group 12E. The items in question are listed below together with revised Pattern Numbers which have been allocated as shown :-

Old Pattern Number	*Description*	*New Pattern Number*
N 7110	Copper phosphide	7110
N 7111	Ingots, gun metal (Admiralty) new	7111
N 7113	Ingots, gun metal, 2nd quality	7113
N 7116	Metal, white, Babbits	4029
N 7117	Metal, white, special, for propeller stern shaft bearings.	7117

2. The new pattern number 4029 has been allocated to white metal, Babbits, to avoid possible confusion with white metal, special, Pattern 7117, and as a further precaution the ingots will in future be marked on top as follows in addition to the broad arrows :-

Pattern Number	*Marking*
4029	"BAB PATTERN 4029"
7117	"WHITE METAL SPECIAL PATTERN 7117"

3. H.M.A. Ships and Fleet Establishments should adjust their Naval Store Accounts in accordance with B.R.4 (Naval Storekeeping Manual), Article 109(g).

4. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 338/1955 altered to meet R.A.N. conditions.)

(4505/70/115)

294.

NAVAL STORES (GENERAL) (CLASS E, GROUP 6) - SHELLAC - SUPPLY.

Following upon recommendations of the Naval Paint Committee it has been decided that future purchases of Shellac will be restricted to the undermentioned items -

Description.	Specification.	Pattern.
Gum Shellac, Orange	AS.K38	Like 68
Shellac, Buttor	BS.954	Like 4444.

2. The following items have been superseded. No further purchases are to be made, but stocks held at present are to be used up.

Pattern.	Description.
68	Gum, Shellac, Orange
4444	Shellac, Flake
-	Shellac, Button
-	Shellac, White.

(4512/60/175)

295.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - WOOD PRIMER - SUPPLY.

Following upon recommendations of the Naval Paint Committee it has been decided that future purchases of paint for use as a primer on new or unpainted exterior and interior wood surfaces will be made to specification S.A.A. Int. 10A, Type 3, "lead free". This material is a zinc-oxide oil-based paint and will be supplied in white only. It will be known as "Wood Primer" and will be accounted for under Class E, Group 7, as "like pattern 518".

2. The undermentioned items have been superseded in the Royal Australian Navy by the introduction of this new wood primer. The new material is not to be issued until stocks of the superseded items are used up.

Pattern.	Description.	Remarks.
509	Paint, red lead.	When used as wood primers.
518	Paint, white zinc flatting.	
5368	Paint, red lead, non-setting to B.S.1011, Type 2.	
-	Paint, red lead, "Champlead", and other proprietary brands.	

(4512/60/174)

296.

NAVAL STORES (GENERAL) (CLASS E, GROUP 12) - SPONGE, PATTERN 54 - DELETION FROM RATE BOOK.

It has been decided to delete Sponge, Pattern 54, from the Rate Book and Authorised List of Naval Stores. Any remaining stocks of Pattern 54 are to be reclassified as Pattern 5931 and issued as such until exhausted.

2. To facilitate storekeeping and accounting, the denomination applicable to Sponge, Pattern 5931, will be amended to read "Number" instead of "String of twelve".

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 231/1955 altered to meet R.A.N. conditions.)

(4514/21/225)

297.

PRESENTATIONS, RELICS, TROPHIES, ETC. - ACCOUNTING FOR.

Existing instructions for dealing with presentations, relics and trophies in the Royal Australian Navy have been reviewed and consolidated and are promulgated hereunder for the information and guidance of all concerned.

2. Presentations, relics and trophies, including articles of plate, mess gear, table decorations, furniture, pictures, trophies, challenge shields and cups, books, etc., presented to or acquired by H.M.A. Ships, Naval Establishments (including individual messes) and official residences, are to be accounted for as follows and dealt with as "Valuable and Attractive articles" :-

(a) In H.M.A. Ships and Naval Establishments - in separate ledger in the Naval Store Account on Forms A.S. 146. Internal issues should be dealt with on Permanent Loan Lists in the normal manner.

(b) In tenders and services - in the Inventory Account. The tender or service concerned should also maintain a record of all items held on Forms A.S. 146, which should be attached to the tender's or service's copy of the inventory account. The panel headed "description" on the front of Form A.S. 146 and the details on the reverse side of the form, only need be completed, however. Items held by the Flag Officer Commanding H.M. Australian Fleet, should also be dealt with in this manner.

(c) In official residences - in the relevant furniture inventory.

(d) Items normally recorded in Lists of Portable Fittings or Fixture Lists should be taken on charge on Forms A.S. 146 and then written off charge as transferred to the appropriate List of Portable Fittings or Fixture List. Forms A.S. 197 indicating the source of supply are to be raised to include the items in the appropriate List of Portable Fittings or Fixture List.

NOTE:- Items belonging to ships and establishments not in commission and temporarily allocated to other ships, etc., should be taken on charge in the relevant account referred to above.

3. Detailed procedure in regard to accounting for valuable articles purchased by individual messes or from canteen funds for general use is as follows :-

(a) The Supply Officer of H.M.A. Ship or Establishment concerned is to be advised immediately on receipt of any valuable article of a permanent nature purchased from mess funds or from canteen funds.

(b) Forms A.S. 549, showing full particulars of the items purchased, are to be prepared in quadruplicate and signed by the Supply Officer and the President or other Senior Officer of the mess or committee concerned. One copy is to be lodged with the mess or committee, one copy used to take the items on charge in the Naval Store Account, and the remaining copies forwarded to Navy Office with the quarterly return.

(c) All such items should be accounted for in the Naval Store Account as indicated herein, issues on permanent loan being made to the President or other senior member of the mess or committee concerned. Separate loan lists are to be maintained for such items which although recorded in official accounts, are not Government property.

(d) Items purchased in replacement of defective, etc., articles recorded in Lists of Portable Fittings or Fixture Lists are to be taken on charge on Forms A.S. 146 and then written off charge as transferred to the appropriate List of Portable Fittings or Fixture List. Forms A.S. 197, amending the appropriate List of Portable Fittings or Fixture List, are to be raised indicating the source of supply of the replacement items and giving a reference to the voucher covering the disposal of the replaced items.

4. A register of presentations, relics, trophies, etc., held in H.M.A. Ships and Naval Establishments, is kept at Navy Office. Names of donors, and dates of presentation, together with any other details considered necessary, are recorded.

5. At the time each presentation is made a report (pro-forma (a)) is to be forwarded to Navy Office. A return (pro-forma (b)) of presentations, relics, trophies, etc., received, transferred and disposed of during the year is to be forwarded to Navy Office annually on 31st December. If no such articles are received, transferred or disposed of during the year a "nil" return is to be forwarded.

(a) NOTIFICATION OF RECEIPT OF PRESENTATIONS WHEN ACTUALLY RECEIVED.

Date of Presentation.	Description.	Quantity.	Donor	Account in which recorded.	Particulars of conditions attached to presentations.
					In the case of Fleet competition trophies, the rules governing competition and any other details considered necessary should be included in this column.

(b) ANNUAL RETURN OF PRESENTATIONS, RELICS, TROPHIES, ETC., FURNISHED IN ACCORDANCE WITH CONSOLIDATED ORDERS AND REGULATIONS, ARTICLE 396.

(i) The undermentioned presentations, relics, competition trophies, etc., were received during the year ended 31st December -

Date of Receipt	Description	Quantity	Whence received	Account in which recorded	Reference to report of presentation or authority for transfer

(ii) The undermentioned presentations, relics, competition trophies, etc., were transferred or disposed of during the year ended 31st December -

Date of transfer or disposal	Description	Quantity	Donor	Whether transferred or how disposed of	Authority and remarks

Annual Certificate - The articles shown in statement (i) together with those formerly on charge, excluding items shown in statement (ii), have been mustered and found to be correct, and are recorded in the appropriate accounts.

.....
Commanding Officer

Date .....

6. Presentations or trophies are not to be accepted from sources outside the Naval Service without prior approval of the Naval Board, and full particulars of the rank and status of the donor should be furnished when approval is being sought. It should also be clearly stated whether the donor's intention is that the presentation is to become mess property, disposable at the discretion of the mess; alternatively any conditions attached to the presentation must be fully reported.

7. Presentations which are likely to be confused with service items are to be suitably identified, e.g., by manuscript endorsement, rubber stamp or engraving.

8. The disposal of presentations, relics, trophies, etc., should be arranged as follows :-

Description	Disposal
A. Items in which the Naval Board has a definite interest, e.g. presentations to Ships or Establishments under dedication agreement and items of definite historical interest. B. Fleet trophies, e.g., challenge cups and shields for competition among ships of the Fleet. C. Ornamental or crested gun tampion plates supplied from service sources or presented.	These items are not to be transferred or disposed of without prior Naval Board approval. When a ship pays off into reserve, the Commanding Officer is to obtain instructions as to disposal from the appropriate administrative authority. If no instructions have been issued to guide the Administrative authority in such cases, he is to refer the matter for Naval Board directions.
D. Valuable articles purchased by individual messes, or from Canteen Funds for general use but excluding items referred to at F.	The purchased items remain the property of the mess, etc., and the provisions of this order in regard to these items are intended as a protection of ownership of articles purchased by them by providing continuity of responsibility whilst the ship or establishment remains in commission. When worn out or otherwise rendered valueless, items should be taken off charge by a certificate signed by the Commanding Officer. The committee of the mess concerned is, at any time,

NOTE:- Items of little value or of a consumable nature should not be taken on charge in the Naval Store Account as the recording of valuable articles in the official accounts is required entirely to avoid ultimate

	disposal without the full authority of the mess or fund committee concerned.	entitled to dispose of the purchased articles for the benefit of the mess. In such cases full particulars should be furnished in writing by the responsible officer concerned to the Supply Officer, who should write the items off charge and adjust the relevant Permanent Loan List as necessary. The proceeds of items sold on paying off of the ship or establishment concerned are to be devoted to appropriate recognised Naval charities. Any items not disposed of on paying off of the ship or establishment concerned should be dealt with in the same manner as items referred to at A, B and C hereof.
E.	Items presented to messes, etc., including trophies of individual ships or shore establishments, e.g., interpart cups, shields, etc., for competition among the ship's company, but excluding any items referred to at A above.	At the time of presentation, the wishes of the donor in regard to the ultimate disposal of the article on ship paying off should be ascertained and the column of Form A.S. 146 headed "method of ultimate disposal" completed accordingly. Such items are to be regarded as the property of the mess, subject to the general provisions of this order, and may be disposed of in the same manner as items referred to at D hereof, except that, when items are disposed of by sale either during a commission or on paying off the proceeds are to be devoted to appropriate recognised Naval charities.
F.	Amenities of a permanent nature provided from R.A.N. Central Canteen Fund.	Such items are, and remain the property of and are recorded as assets in the books of the R.A.N. Central Canteen Fund. Relevant ledger pages, Forms A.S. 146 and all vouchers concerned should be clearly endorsed that the items are the property of the R.A.N. Central Canteen Fund. No transfers are to be effected without prior approval being sought and obtained from the R.A.N. Central Canteen Committee. On becoming unserviceable the items should be returned to the appropriate Naval Store Depot on Forms A.S. 331 and the fact reported to the Secretary, R.A.N.

		Central Canteen Fund, Navy Office. Survey will be carried out in accordance with the normal procedure for Naval Stores. If the items are found on survey to be beyond economical repair, disposal forms should be prepared and processed in the normal manner, the disposal form being clearly endorsed that the items are the property of the R.A.N. Central Canteen Fund to which proceeds of disposal should be credited. If found on survey to be economically repairable the fact should be reported to the Naval Board, indicating the cost of repair (a copy of the advice being forwarded to the Secretary, R.A.N. Central Canteen Committee) for instructions as to action to be taken. It should be noted that, as the articles are the property of the R.A.N. Central Canteen Fund, no authority exists for cost of repairs being met from Commonwealth funds. Serviceable items remaining when a ship or establishment pays off should be dealt with in the same manner as items referred to at A, B and C hereof, particulars of any action taken being forwarded to the Secretary, R.A.N. Central Canteen Committee.
G.	Autographed photographs, etc., of Her Majesty The Queen, His Royal Highness the Duke of Edinburgh, or other members of the Royal Family and other eminent persons.	See Navy Order 281 of 1955.
H.	Autographed photographs of eminent persons.	To be dealt with as for Items A, B and C hereof.

9. When presentation plate, mess gear, table decorations, etc., are landed from H.M.A. Ships for custody, they will be inspected as to their condition before a receipt is given. Ships to which articles of plate, etc., have been presented, or to which articles of this nature have been issued, are responsible for their proper preservation and for making good, at the expense of the users, any damage which may arise.

10. Care is to be exercised to safeguard articles from damage during transport, e.g., pictures are not to be packed loose in cases, and precautions are to be taken in packing articles liable to damage by moths.

11. The provisions of Appendix XI, Section III to Naval Storekeeping Manual, B.R.4, in regard to insurance of plate, relics, trophies, etc., are applicable generally in the Royal Australian Navy. As the making good of any loss or damage to plate, relics, trophies, etc., presented to individual ships or establishments is the responsibility of the ship or mess concerned, it is considered desirable, although not obligatory, that all such articles, with the exception of those mentioned in paragraph 12 hereunder, should be insured.

12. Relics which have no other than historic value and, by their nature, cannot be replaced, or articles of silver-plate, which are not sterling silver, need not be insured.

13. The general instructions for periodical stocktaking, transfer of stores from one officer to another are contained in Chapter XVI of B.R.4 and are applicable to presentations, relics, trophies, etc. Losses should be dealt with in accordance with the general instructions relating to these items, except in regard to items referred to at paragraphs 8D and E. Losses, whether by theft, accident, or neglect, of items referred to at paragraphs 8A, B, C, F and G should be reported to Navy Office by letter at the time they are discovered, and in the case of items referred to at paragraph 8F, by letter to the Secretary of the R.A.N. Central Canteen Committee also. Losses of items referred to at paragraphs 8D and E may be dealt with under local authority as indicated therein. However, the disposal of such items should be included in the Annual Return referred to at paragraph 5(b)(ii) hereof.

14. Navy Orders 119 of 1946, 164 of 1949, 310, 410 and 434 of 1950, 297 of 1951 and 825 of 1954 are hereby cancelled.

15. The R.A.N. Supplement to B.R.4 and Consolidated Orders and Regulations will be amended as necessary in accordance with the foregoing.

(3583/71/410)

298.

SALE OF STORES.

With reference to Naval Financial Regulations and Instructions, Article 218b(d), the authorised rates for sale of Stores (except oil fuel) are as under -

	Cost
To Departments in Defence Group (Defence, Army, Air, Defence Production, and Supply)	
To Admiralty and New Zealand Navy	Cost plus 11%
To Other Commonwealth Departments	Cost plus 15%
To State Governments, Other Administrations (including foreign Governments)	Cost plus 20%
To Commercial and private interests	Cost plus 25%

NOTES:- (a) Cost means "into Store" cost and is to be assessed as follows :-

(i) Fixed issuing prices, in cases where these have been adopted, e.g., Victualling Stores.

(ii) Stores purchased locally - latest purchase price.

(iii) Stores manufactured in Naval Establishments - manufactured cost.

(iv) Stores purchased overseas - all charges up to delivery in Australia. In cases where Admiralty Rate Book or Overseas invoices are used as the base price, the approved percentage to cover freight, exchange, etc., must be added to obtain cost into Store.

(b) Extra charges to be met by purchaser are -

(i) Cost of special packages and containers.

(ii) Freight, etc., from Store to delivery point.

2. The authorised rates for oil fuel (furnace and automotive) are -

To Departments in Defence Group (Defence, Army, Air, Defence Production, and Supply).	Cost
To Other Commonwealth Departments, Admiralty and Navies of other British Governments.	Cost plus 10%
To Other Administrations (including State and Foreign Governments) Commercial and private interests.	Cost plus 15%

NOTES:- (a) "Cost" of furnace oil shall be as calculated from time to time at Navy Office.

(b) Extra charges to be met by the purchaser -

(i) Cost of special packages and containers.

(ii) Lighterage, etc., from storage point to delivery point.

(c) No sales are to be made to State Governments, Foreign Governments, Commercial or private interests at a lower price than the Commercial rate ruling in the locality or at the nearest port at which stocks are held.

3. Present accounting procedures are to continue. Amendment to Naval Financial Regulations and Instructions will be made as early as practicable.

4. These percentage charges will operate from 1st April, 1955.

(4804/2/16)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

299.

PRECAUTIONS AGAINST COLORADO BEETLE IN FRESH PROVISIONS.

In the event of Colorado Beetle (about ½-in. long with alternating yellow and black stripes on the wing cases) being found among potatoes or vegetables (e.g., from purchases at continental ports) the whole stock of potatoes, etc., should be riddled or sorted by hand to ensure that there are no further beetles present. Leafy vegetables such as lettuce or cabbage are particularly liable to have Colorado beetles in them. The beetle or beetles found should, if practicable, be sent in a suitably sealed container to the nearest Victualling Yard together with a report of discovery and source of supply of the produce concerned.

2. The presence of Colorado beetle does not affect the fitness of potatoes or vegetables for human consumption and condemnations of the produce should not be made merely because of the discovery of a beetle.

3. Special care is necessary with suspect bags, etc. These should be shaken out and thoroughly searched. If this is not practicable, they should be kept apart from other packages and burnt or thrown overboard at least 20 miles from land. On no account are suspect potatoes or vegetables or their containers to be landed unless, in respect of purchases at foreign ports, they can be returned to the vendors.

4. Potato lockers and storage spaces should be carefully cleaned before further supplies of potatoes and vegetables are taken on board.

5. Colorado beetle may fly on to ships in port and may subsequently be found on exposed parts of the ship. If these beetles are found, one should, as in paragraph 1 hereof, be despatched to the nearest Victualling Depot, and the rest destroyed.

6. The Colorado beetle is not found in Australia and the Plant Quarantine Service is endeavouring to prevent its introduction. Plagues of the beetle in other parts of the world have caused widespread damage to vegetable crops before being brought under control.

7. When fresh vegetables are obtained by H.M.A. Ships overseas every precaution is to be taken to ensure that any such vegetables which remain on board on return to Australia are completely free from Colorado beetle and other insect pests.

(The foregoing is the text of A.F.O. 352/1955 altered to meet R.A.N. conditions.)

(4528/1/230)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

300.

A.B.R.4 - ABOLISHED.

A.B.R.4, Australia Station Communication Organisation, is obsolete and should be disposed of in accordance with B.R.1, Establishment and Numerical List of Books of Reference.

2. All relevant information is now contained in Admiralty Fleet Order S.1, Admiralty Fleet Order S.4 and the Australian Fleet Communication Orders.

(4139/112/253)

301.

BOOKS - SHIPS' LIBRARIES - ADDITIONAL TITLES.

Consequent upon changes in the list of books approved for Ships' Libraries, Reference Section, Navy Order 400 of 1954, is to be amended as follows :-

(a) Paragraph 7(c)(i), for "Interpreting the Australian Constitution - Brennan" substitute "The Parliamentary Government of the Commonwealth of Australia - Crisp".

(b) Paragraph 7(c)(i), add "Pears Cyclopaedia".

(c) Paragraph 7(c)(ii). add "Pears Cyclopaedia".

2. Distribution of the additional books will be made without demand.

(4575/52/17)

302.

FORM S.387A - DEVIATION CARD FOR ADMIRALTY GYRO-MAGNETIC-COMPASSES, TYPES 5 AND 6 - INTRODUCTION.

In Admiralty Gyro-Magnetic-Compasses, Types 5 and 6, it is a requirement that a card showing the deviation of the compass under conditions of D.G. both ON and OFF shall be displayed in the holder provided on the D.A.T.E.C. unit.

2. Each D.A.T.E.C. is issued with one of these cards already in place, and subsequent requirements should be met by supplies of Form S.387A, which is hereby introduced and should be demanded by ships concerned from (Superintending) Naval Store Officer, Sydney.

(The foregoing is the text of A.F.O. 2220/1954 altered to meet R.A.N. conditions.)

(3526/12/1211)

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C.N.Os. 303-325/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
16th May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0076

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SECTION 1 - ADMINISTRATIVE AND GENERAL

303.

BOOM DEFENCE MATTERS.

With effect 1st April, 1955, the Boom Defence Branch at Navy Office has been merged into the Directorate of Naval Ordnance and Underwater Weapons.

2. Correspondence on routine and technical matters, previously addressed to the Director of Boom Defence are, in future, to be addressed to the Director of Naval Ordnance and Underwater Weapons.

(3031/13/232)

304.

CEREMONIAL - NATIONAL ANNIVERSARIES AND FESTIVALS.

Attention is drawn to Admiralty Fleet Order 452/1955 which sets out the important anniversaries and festivals celebrated in the United Kingdom and other countries of the Commonwealth, and known foreign national anniversaries and festivals, in which H.M.A. Ships present may be requested to participate.

(2344/2/106)

SECTION 2 - PERSONNEL

305.

INSTRUCTIONAL FILMS AND FILM STRIPS - A519 - "PROTECTION IN ATOMIC WARFARE" (PART 2) - DISTRIBUTION.

Copies of Part 2 of the new film A.519 "Protection in Atomic Warfare" entitled "Collective Protection Measures" are being obtained and distribution will be made without demand by the S.N.S.O., Sydney, on the following scale :-

H.M.A. Ships and Establishments.		No. of Copies.
R.A.N. Film Library, Sydney.		1
Flinders Naval Depot.		1
H.M.A.S. PENGUIN (for Defence School)		1
H.M.A.S. HUON	For Reserve Training	1
H.M.A.S. LEEUWIN		1
H.M.A.S. LONSDALE		1
H.M.A.S. LONSDALE II		1
H.M.A.S. MORETON		1
H.M.A.S. RUSHCUTTER		1
H.M.A.S. TORRENS		1
Light Fleet Carriers		1
Daring Class Ships		1
Destroyer and Frigate Leaders		1

2. This film is complementary to Part 1. It describes in narrative form, the collective protection measures required in a cruiser to minimise damage and casualties from an atomic explosion at sea. Running time 25 minutes. One Spool.

3. The film is classified "Restricted".

4. A Training Guide for use in conjunction with the film will be distributed on the same scale as the film.

(The foregoing is the text of A.F.O. 80/1955 altered to meet R.A.N. conditions.)

(4518/61/468)

306.

INSTRUCTIONAL FILMS AND FILM STRIPS - A564 - "THE OIL SERVO UNIT, MARK 5 (AUTO. R.P.40 SYSTEM)" (PARTS 1-3) - DISTRIBUTION.

Copies of the new Film A564 "The Oil Servo Unit, Mark 5 (Auto R.P.40 System)" (Parts 1-3) are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments.	No. of Copies.
Flinders Naval Depot (For Gunnery School)	1
H.M.A.S. KUTTABUL (For G.I.C.)	1
R.A.N. Film Library, Sydney	1

2. This film describes the construction and layout of the Oil Servo Unit, Mark 5, and explains its operation in the R.P.40 Series Gun Auto Systems under dynamic conditions. Details of the three parts are as follows :-

Title.	Running Time.	No. of Spools.
Part 1 General Description	13 Minutes	1
Part 2 Dynamic Conditions	11 Minutes	1
Part 3 Subsidiary Features	15 Minutes	1

NOTE:- Part 2 is divided into 2 sections as follows :-

Section A deals with steady speed and steadily increasing speed inputs.

Section B covers suddenly applied speed and finite displacement inputs.

Although these 2 sections are supplied on 1 spool for convenience, it is recommended that they be shown separately.

3. Navy Order 854 of 1954, is hereby cancelled.

(4518/61/470)

307.

KITS OF WOMEN'S ROYAL AUSTRALIAN NAVAL SERVICE RATINGS DRAFTED TO DARWIN.

The compulsory kits of W.R.A.N.S. ratings drafted to Darwin are, in future, to comprise the articles detailed in the following Schedule.

2. To avoid loss, damage or deterioration of items not required by ratings whilst serving in Darwin, the balance of kit is to be deposited in a Baggage Store.

3. Ratings are to deposit excess articles of kit in H.M.A.S. LONSDALE, where, if necessary, a loan kit bag will be issued to each rating for temporary stowage of such articles. Attention is drawn to the provisions of Navy Order 114 of 1950 regarding the baggage store procedure.

4. Establishments are to ensure that all W.R.A.N.S. ratings on draft to Darwin are fully conversant with the provisions of this Order.

(4716/1/210)

SCHEDULE

ARTICLES REQUIRED AT DARWIN - W.R.A.N.S. RATINGS.

ARTICLE	CHIEF PETTY OFFICERS AND PETTY OFFICERS	OTHER RATINGS
Badges, hat	2	-
Bags, shoulder	1	1
Caps, white	-	2
Cases, suit, large	1	1
Cases, attache, leather	1	1
Collars, white	3	3
Covers, cap, plastic	-	1
Dresses, white	3	3
Flannels, cotton	2	2
Gloves, cotton, white	2	2
Gloves, leather, brown	1	1
Hats, tricorne	1	-
Hats, tricorne, covers for	2	-
Hats, white, fur felt	1	-
Jackets, cardigan	1	1
Jackets, diagonal serge	1	1
Raincoats	1	1

ARTICLE	CHIEF PETTY OFFICERS AND PETTY OFFICERS	OTHER RATINGS
Ribbons, cap	-	2
Shirts, blue working	2	2
Shirts, white, double cuffs	1	-
Shirts, white, single cuffs	-	1
Shirts, white, P.T.	1	1
Shorts, blue, P.T.	1	1
Shoes, black	2	2
Shoes, white, leather sole	1	1
Shoes, gymnastic	1	1
Skirts, diagonal serge	1	1
Skirts, blue, drill	3	3
Socks, white, ankle	2	2
Socks, blue, ankle	1	1
Stockings, beige, nylon	2	2
Stockings, black, nylon	1	1
Tie, black	1	1
Brushware, housewife, and under-clothing	As desired.	

Additional Items for -

Cooks -

Aprons	4 No.
Caps	2 No.
Shoes, galley	1 Pr.

Sick Berth Attendants -

Dresses, blue	4 No.
Caps, white, SBA.	4 No.
Aprons, white	3 No.

Stewardesses -

Jackets, white drill	1 No.
Shoes, galley	1 Pr.

308.

PREVENTION OF TETANUS IN THE SERVICE.

When paragraph 3 of Navy Order 197 of 1950 (Vaccination and Inoculation) has been complied with, the individual is then actively immunized against tetanus, and if he becomes injured on the playing field or wounded in battle, in the majority of cases all he will require as a prophylactic measure against tetanus will be a further 1.0 ml. of tetanus toxoid given subcutaneously.

2. It should be emphasised that persons receiving even small insignificant looking injuries, abrasions, etc., should always be given an injection of 1 ml. of tetanus toxoid, if they have been actively immunized.

3. If, however, an immunized person becomes severely injured or suffers multiple wounds it may be necessary to give anti-toxic serum as well as the additional dose of Formal Toxoid. This problem must be left to the discretion of the medical officer concerned.

4. The above procedure is in keeping with the current practice and has many advantages over the older method of giving anti-toxic serum alone. Some are as follows :-

(a) It closely resembles that adopted by the American Armed Forces during World war II. Although the incidence of tetanus in the British Forces was very small indeed, that in the American Forces was even less.

(b) In the liquid state, the only form available during World War II, anti-toxic serum is more unstable than toxoid. It requires special cold storage and this presents a considerable problem when on active service. Toxoid, on the other hand, can be kept in a cool dark place, if refrigeration is impracticable.

(c) Experimental evidence suggests that active immunization is superior to passive immunization in the prevention of tetanus.

(d) The administration of anti-toxic sera is accompanied by such possible complications as serum sickness, acute anaphylaxis, etc.

5. Personnel who have not been actively immunized will require anti-toxic sera treatment, if they become injured or wounded. Dosage will depend on circumstances, etc., and will be decided by the medical officer treating the case.

6. Full records of all such immunizations should be kept in Form F. Med. 4. This is important.

(The foregoing is the text of A.F.O. 469/1955 altered to meet R.A.N. conditions.)

(4018/51/31)

309.

TOOL KITS - SUPPLY TO RATINGS.

With reference to paragraph 2 of Navy Order 493 of 1953, the Admiralty scales of allowances of tool kits set out in Appendix 32 to B.R.4, referred to therein, do not provide for Plumbers, Blacksmiths or Painters, consequent on absorption of these ratings in the R.N. in the Shipwright Artificer Branch (A.F.O.'s 3929 and 3930/1948 are relevant).

2. Approval has, therefore, been given to the issue of tool kits to R.A.N. Plumbers, Blacksmiths and Painters on the scales set out in the Appendix hereto. The kits, which have been allocated Types R.A.N. 1, R.A.N. 2 and R.A.N. 3 respectively, should be issued and accounted for, etc., in accordance with the provisions of Navy Order quoted in paragraph 1 hereof.

(3996/1/51)

APPENDIX

TOOL KIT, TYPE R.A.N. 1.

PLUMBERS

Class and Group	Pattern No.	Description	Quantity
E.4		Chests, Tool, 26" x 14" x 14".	1 No.
B.11	155	Bevel Steel 6".	1 No.
	373	Chisel, Cold ¼".	1 No.
	376	Chisel, Cold ⅜".	1 No.
	385	Chisel, Cold 1".	1 No.
	482	Compass, Millwright, 8".	1 No.
	574	Dividers, Spring, Split Nut, 6".	1 No.
	648	Drill, Stock, Hand. 0-½".	1 No.
	1190	Hammers, Claw, 22 ozs.	1 No.
	1200	Hammers, Crosspein, ¾ lb.	1 No.
	1201	Hammers, Ballpein, 1 lb.	1 No.
	1202	Hammers, Ballpein, 1½ lb.	1 No.
	1474	Irons, Soldering, 16 oz.	1 No.
	1475	Irons, Soldering, 28 oz.	1 No.
	1531	Knives, Trammel.	1 No.
	1837	Pliers, Gas, 9".	1 No.
	1850	Pliers, 8".	1 No.
	1853	Pliers, Snipenose, 8".	1 No.
	1873	Punch, Centre, 4".	1 No.
	2027	Punch, Wad, ¼".	1 No.
	2028	Punch, Wad, ⅜".	1 No.
	2030	Punch, Wad, ½".	1 No.
	2032	Punch, Wad, ⅝".	1 No.
	2034	Punch, Wad, ¾".	1 No.
	2036	Punch, Wad, 1".	1 No.
	2040	Punch, Wad, 1½".	1 No.
	2137	Rule, Steel, 2'.	1 No.
	2173	Saw, Hack Frame, Adjustable.	1 No.

Class and Group	Pattern No.	Description	Quantity
	2252	Screwdriver 8" x 7/16" point.	1 No.
	2282	Screwdriver 6½" x 5/16" point.	1 No.
	2284	Screwdriver 12" x 7/16" point.	1 No.
	2311	Scriber, Fitters.	1 No.
	2345	Shears, Tinmans, Snip, Bent, 10".	1 No.
	2346	Shears, Tinmans, Snip, Straight, 14".	1 No.
	2546	Square, Steel, 6".	1 No.
	2908	Tools, Tinsmiths, ⅛".	1 No.
	2910	Tools, Tinsmiths, ¼".	1 No.
	2911	Tools, Tinsmiths, 5/16".	1 No.
	2912	Tools, Tinsmiths, ⅜".	1 No.
	2961	Vice, Hand, 4".	1 No.
	3020	Wrenches, Pipe, 6".	1 No.
	3021	Wrenches, Pipe, 9".	1 No.
	3022	Wrenches, Stillson, 10".	1 No.
	3023	Wrenches, Stillson, 14".	1 No.
	7586	Callipers, Comb. Int. & Ext., 6".	1 No.
	-	Drill, Star, for Plugging Walls.	1 No.
	-	Pliers, Multigrip, Large.	1 No.
	-	Punch, Pricker Type.	1 No.
	-	Snaps and Set-ups, Comb. ¼" x ⅛".	1 No.
	-	Snaps and Set-ups, Comb. 3/16" x ⅛".	1 No.
	-	Snaps and Set-ups, Comb. ⅜" x ¼".	1 No.
	-	Spanners, Adjustable, Crescent, 6".	1 No.
	-	Spanners, Adjustable, Crescent, 12".	1 No.
E.12	436	Mallets, Boxwood.	1 No.
		Dresser, Boxwood, for Leadwork.	1 No.

TOOL KIT, TYPE R.A.N. 2.

BLACKSMITHS

Class and Group	Pattern No.	Description	Quantity
E.4		Chest, Tool, 26" x 14" x 14".	1 No.
B.11	155	Bevel, Steel, 6".	1 No.
	333	Calliper, External, 12".	1 No.
	339	Calliper, Internal, 12".	1 No.
	608	Drill Stock, Hand 0-½".	1 No.
	1199	Hammers, Ballpein, ¾ lb.	1 No.
	1203	Hammers, Ballpein, 2 lb.	1 No.
	1850	Pliers, 8".	1 No.
	2126	Rule, Brass, 2', folding.	1 No.
	2173	Saw, Hack, Frame, Adjustable.	1 No.
	2284	Screwdriver, 12" x 7/16" point.	1 No.
	2311	Scriber, Fitters.	1 No.
	2545	Square, Smiths, 24" x 12".	1 No.
	-	Pliers, Multigrip, Large.	1 No.
	-	Spanners, Adjustable, Crescent, 6".	1 No.
	-	Spanners, Adjustable, Crescent, 12".	1 No.

TOOL KIT, TYPE R.A.N. 3.

PAINTERS

Class and Group	Pattern No.	Description	Quantity
E.4		Chest, Tool, 26" x 14" x 14".	1 No.
B.11	570	Diamond, Glaziers.	1 No.
	1190	Hammer, Claw.	1 No.
	1391	Hooks, Shave, Handled, Heart Shape.	1 No.
	1516A	Knife, Flex. Stripping.	1 No.
	1519	Knife, Hacking.	1 No.
	1526	Knife, Pallette.	1 No.
	1527	Knife, Putty.	1 No.
	1694	Pincers, Carpenters, 8".	1 No.
	2111	Reel, Carpenters Line, 2¼" x 2".	1 No.
	-	Knife, Gilders.	1 No.
	-	Rule, Boxwood, Folding, 3'.	1 No.
	-	Squares, "T", 8" Butt, 24" Blade.	1 No.
	-	Squares, Set, 45 Deg., 12".	1 No.
D.5	C.1612	Line, Chalk.	1 No.
E.11	C. 265	Brushes, Dusting.	1 No.
E.12	-	Sticks, Mohl.	1 No.
	-	Cushions, Gilders.	1 No.
	-	Mops, Domed, Gilders.	1 No.

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

310.

RADAR - TYPES 277P/Q AND 293P/Q - S-BAND TEST EQUIPMENT - REPORTS.

H.M.A. Ships and Establishments concerned.

In order to assess the efficiency of the S-Band Test Equipment introduced by A.F.O. 255/53 (*Radar - Types 277P/Q and 293P/Q - Introduction of New Test Equipment*), ships fitted with that equipment are to forward a report of its performance and usefulness.

2. The report should cover the following points :-

(a) Radar sets with which the test equipment is fitted.

(b) Any increase in performance of the Radar due to the use of the test equipment.

(c) Remarks on the rejection rate of mixer crystals. This may have increased due to the higher standard of performance made possible by the new performance measuring facilities.

(d) Any difficulties experienced in using the test equipment and general remarks on its suitability or otherwise for use at sea.

3. Instructions for using the test equipment are provided in B.R. 1620(3) "Addendum No. 1 to B.R. 1620 - Handbook for Type 277/293".

(The foregoing is the text of A.F.O. 1528/1954 altered to meet R.A.N. conditions.)

(4519/31/552)

311.

MACHINERY - CONDENSERS AND HEAT EXCHANGERS - CHEMICAL DESCALING OF THE SEA WATER SIDE.

The chemical descaling of scaled tubes is now approved for both cupro nickel and aluminium brass tubes on the sea water side of all condensers and heat exchangers.

2. Two descaling fluids are approved, Clensol P and Condenflu, and these may be demanded under Pattern Nos. 4167 and 10551 respectively. Although either fluid may be used according to instructions which have been issued to Refitting Authorities care must be taken that supplies are not mixed and steps are being taken to ensure that different makers' supplies are readily identifiable.

3. Attention is drawn to the danger to material which could result from acid being spilled during the process. Should such an incident occur, immediate action is to be taken to hose down the affected parts thoroughly, and to pump out, where necessary, until all traces of acid have been removed.

4. When condenser performance at full power shows that descaling is necessary, a proposal to descale main condensers chemically is to be forwarded with the report of Annual Full Power Trial on Form A.S. 346 (Trials of Main Machinery at Sea), particular attention being paid to the correct recording of all readings required by Form A.S. 346 (revised - March, 1952), so that an accurate analysis of condenser performance may be made and a decision reached accordingly. In exceptional cases where the performance at the last full power trial shows that chemical descaling is necessary, proposals are to be forwarded forthwith by ships concerned.

5. The Engineering Manual (B.R.16) will be amended in due course.

(The foregoing is the text of A.F.O. 3042/1954 altered to meet R.A.N. conditions.)

(3758/11/11)

312.

AMMUNITION - H.M. SHIPS - EXPLOSIVES LANDED ON DEPOSIT DURING PERIODS IN HAND FOR REFITS.

From the date of this Order, the explosive stores disembarked from a ship during refitting, or for other reasons, are only to be kept on deposit when it is anticipated that they will be re-embarked within the following periods :-

Battleships, Aircraft Carriers, Cruisers, Fast Minelayers, "Darings", Destroyers, Frigates, Depot and Repair Ships.	4 Calendar months.
All other Ships	2 Calendar months.

2. If whilst such stores are lodged on deposit, it is found that the refit will not be completed in time to enable embarkation to take place within the prescribed period, a short extension may be permitted subject to the approval of the Senior Naval Officer present.

3. N.M. and E.R.'s will be amended.

(The foregoing is the text of A.F.O. 275/1955 altered to meet R.A.N. conditions.)

(4433/1/743)

313.

AMMUNITION - PYROTECHNICS - GENERATORS, SMOKE, Y.4 - PRECAUTIONS WHEN USING.

Generators, Smoke, Y.4, are liable to emit burning particles with considerable violence, and should not, therefore, be ignited indiscriminately, or near combustible material.

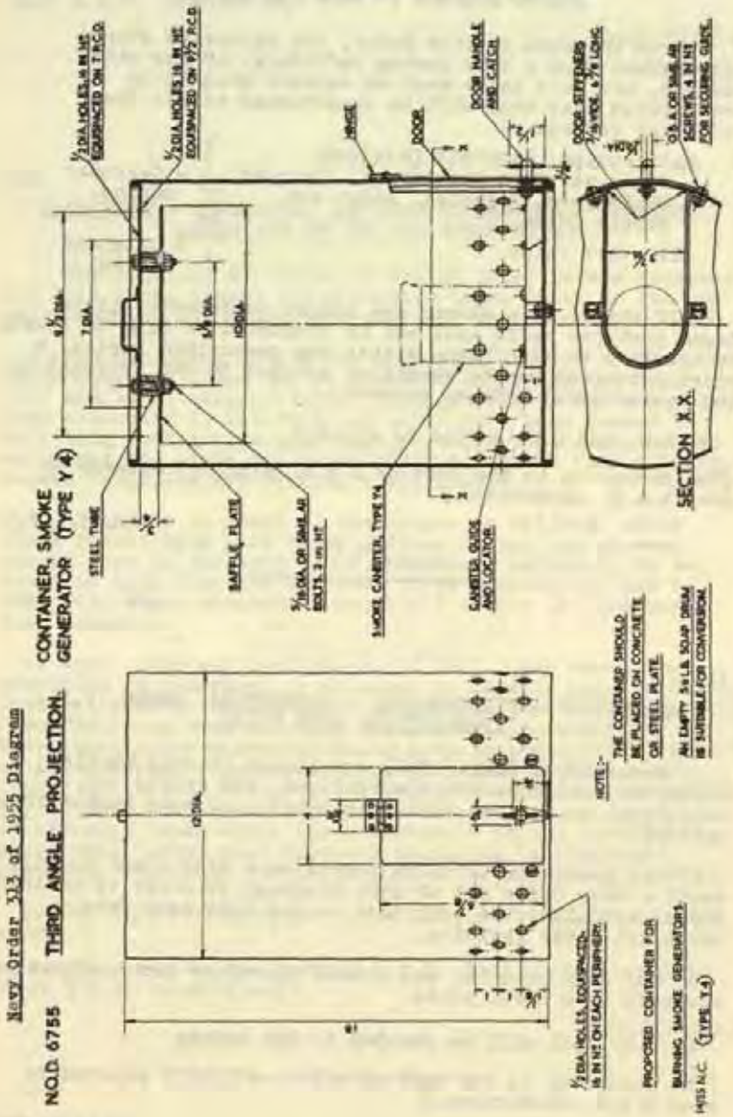
2. The generator is to be placed in a drum (made by ship's staff - Navy Order 313 of 1955 Diagram) in order to contain these particles, the trap door on the side away from personnel under training.

3. The drum gets hot and should therefore stand either on concrete or a steel plate.

4. B.R. 1331 will be amended in due course.

(The foregoing is the text of A.F.O. 483/1955 altered to meet R.A.N. conditions.)

(4433/91/805)



314.

A/S WEAPONS - DEPTH CHARGES - INERT FILLED, FITTED WITH PRIMERS AND PISTOLS - ANNUAL PRACTICE ALLOWANCE.

In order to add realism to depth charge loading and firing drill in peacetime, it has been decided that all ships fitted to drop patterns of depth charges should be authorised to expend two patterns annually of inert filled depth charges. A pattern of inert filled depth charges should normally be fired immediately before or after a live pattern in order to exercise the reloading drill.

2. Ships may, therefore, carry one pattern of inert filled depth charges if this can be done in addition to the normal peacetime outfit of live depth charges. If not, the inert filled depth charges should be drawn from armament depots as required.

3. It has been found by trial that the explosion of primers fitted in inert depth charges can be heard in the firing ship, both by ear and on asdic, at speeds up to 18 knots and at depths down to 500 ft. It has also been found that inert depth charges sink at 7 ft. per second.

4. Therefore in order to provide training in fitting primers and pistols and also in depth setting, outfit pistols and primers may be fitted to inert depth charges when they are fired for practice.

(The foregoing is the text of A.F.O. 2474/1954 altered to meet R.A.N. conditions.)

(4433/73/164)

315.

BURNERS, BUNSEN, PATTERN 10299 - WITHDRAWAL OF ALLOWANCES.

It has been decided that the allowance of one Bunsen burner to aircraft carriers, for use when cutting glass tubing, shall be withdrawn as a blowlamp or oxy-acetylene torch can be used in lieu.

2. Commanding Officers of ships concerned are to arrange for Bunsen burners to be returned to the nearest Yard or Depot.

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 279/1955 altered to meet R.A.N. conditions.)

(4505/90/151)

316.

NAVAL STORES (AIR) - GRID PROTRACTOR (STORES REF. 6B/654) - INTRODUCTION.

The following permanent item is hereby introduced :-

Description.	Ref. No.
Protractor, grid (formerly known as "Hunt Protractor")	6B/654.

2. The Grid Protractor is suitable for operation in all latitudes with air charts in use in the Royal Australian Navy. It is intended eventually to supersede the Douglas Protractor, Ref. 6B/47, which may, however, continue to be used until stocks are exhausted.

3. Allowances of navigational protractors (Ref. 6B/654, or Ref. 6B/47 until stocks are exhausted) are as follows :-

S.M.E.	Carriers			Air Stations
	Ground Equipment.	Stocks		Class "A"
		1/25	26/50	
(a)	(b)	2	4	20 (c) (d)

(a) One per single-seater aircraft and two per multi-seater aircraft.

(b) Two per briefing room, one per operations room, one per aircraft direction room.

(c) Additional allowances of one for each instructor and pupil borne at Operational Flying School, Observer School, and Naval Air Anti-Submarine School. If required an additional 10 per cent of gross holding may also be held as spares.

(d) Includes two per briefing room, one per operation room, and one per aircraft direction room.

4. The Air Store Establishment (A.P.(N) 377 and A.P.(N) 378) will be amended.

(The foregoing is the text of A.F.O. 2854/1954 altered to meet R.A.N. conditions.)

(4403/15/363)

317.

NAVAL STORES (GENERAL) (CLASS E, GROUP 6) - SPIRIT - SOLUBLE POWDERS FOR TIMBER STAINING - SUPPLY.

Following upon recommendations of the Naval Paint Committee, it has been decided that future purchases of spirit-soluble powders for timber staining will be confined to the undermentioned items. These items will be purchased to commercial quality and will be accounted for in Class E, Group 6, with the pattern numbers shown.

Pattern	Description
24A	Dragon's Blood, powder.
142	Bismark Brown, powder.
143	Spirit Black, powder.

2. Spirit Black, pattern 143, was formerly accounted for in the Royal Australian Navy under the proprietary name "Nigrosene". Stocks of "Nigrosene" are to be accounted for as pattern 143 in future.

3. Dragon's Blood, pattern 24A, has superseded the proprietary ready mixed stainer, "Blood Red Spirit"; no further purchases of latter will be made, but stocks are to be used up.

(4512/60/118)

318.

NAVAL STORES (GENERAL) (CLASS E, GROUP 7) - DRIERS FOR PAINTS - SUPPLY.

Future purchases of driers for paints will be made to British Standard 332. The item provided will be liquid driers, pattern 773.

2. The following items will be superseded but present stocks are to be used up. Separate instructions have been issued regarding stocks held at Naval Store Depots.

Pattern	Description
25B	Driers, Terebine.
689	Driers, paste.

(4512/71/90)

319.

NAVAL STORES (GENERAL) (CLASS F, GROUP 1C, PART 1) - ELECTRIC CABLE DRUMS - SPECIFICATION FOR MANUFACTURE AND THEIR IDENTIFICATION.

It has been decided that, in the interests of Joint Services Standardisation, the electric cable drums in service shall be manufactured in accordance with the Defence Specification for the use of Government Departments, DEF7, and to the requirements of Navy Office Electrical Specification No. 848, except drums, Admiralty Patterns 542426, 642831, 743242 and 753047, used for electric cables for special underwater services, which will continue to be manufactured in accordance with Drawing No. D.E.E. C.50747.

2. Of the sizes included in the Specification DEF7, the following have been adopted for use :-

Joint Service Catalogue Number.	Diam. of Flange.	Diam. of Barrel.	Width Between Flanges.	Thickness of Flange.	Thickness of Barrel.	Superseded Admiralty Pattern Drum.
8130-101903	24"	12"	12"	2"	1"	241212
8130-101904	27"	12"	12"	2"	1"	271212
8130-101906	30"	16"	16"	2"	1"	301616
8130-101907	33"	16"	16"	2"	1"	331616
8130-101908	36"	20"	24"	2½"	1½"	362024
8130-101910	42"	24"	24"	2½"	1½"	422424
8130-101911	48"	24"	24"	2½"	1½"	482424
8130-101912	54"	27"	27"	2½"	1½"	542727
8130-101914	60"	36"	33"	3"	1¾"	603633
8130-101916	72"	42"	27"	3"	1¾"	724227
8130-101917	72"	42"	36"	3"	1¾"	724236
8130-101919	84"	54"	36"	3"	1¾"	845436
8130-101921	96"	62"	48"	4"	2"	966248

3. The Joint Service drums imported from the United Kingdom will bear the markings "Admiralty" followed by the letters J.S. and the last six digits of the Joint Service Catalogue number, e.g., "Admiralty J.S. 101908" on the drum flanges.

4. The Rate Book and Authorized List of Naval Stores (B.R. 810) and the Storehouse Manual (B.R. 1692) will be amended.

(The foregoing is the text of A.F.O. 3183/1954 altered to meet R.A.N. conditions.)

(4518/13/320.

320.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B) - ELECTRIC HAND LAMPS, PATTERN 17208 - ALLOWANCE - BOOM DEFENCE VESSELS.

Four electric hand lamps, Pattern 17208, are to be allowed to each boom defence vessel for use in the engine room, boiler room and oil fuel tanks in lieu of engine room lamps, Pattern 68, (Class B, Group 9) at present allowed for this purpose.

2. In addition each ship of the class is to demand 2 in No. Pattern 2136A stowage boxes to be used for the stowage of 2 in No. hand lamps in a position convenient to the oil tight manholes of the oil fuel tanks in the boiler room.

3. Demands for the electric lamps and boxes on the above scale should be forwarded to the Superintending Naval and Air Store Officer, Sydney, quoting this Order as authority and upon receipt of the equipment the Pattern 68 oil lamps are to be returned to Stores.

4. B.R. 371 - Establishment of Sea Stores for Boom Defence Vessels - will be amended.

(The foregoing is the text of A.F.O. 112/1955 altered to meet R.A.N. conditions.)

(4518/24/81)

321.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2B, PART 3) - FUSELINKS, H.R.C., FOR LOW POWER CIRCUITS - INTRODUCTION.

The ranges of Joint-Service H.R.C. fuselinks of miniature body size (J.S. Refs. Z.590107 to Z.590113) and of No. 1 body size (J.S. Refs. Z.590114 to Z.590121) have been extended to include fuselinks of 10 to 20 amp. ratings respectively for use in Naval low power, radar and wireless services. These two new fuselinks, which are classified "Consumable" for ships' accounting purposes and are to be dealt with under Class F, Group 2B, Part 3 of the Rate Book and Authorised List of Naval Stores, have not yet been accepted as Joint-Service standards and accordingly have been allocated pattern numbers as follows :-

Description	Pattern No.
Fuselink, H.R.C., midget body size, 10 amp.	18521
Fuselink, H.R.C., No. 1 body size, 20 amp.	18522

2. These fuselinks have a reduced breaking capacity and are not to be used on main supply equipment.

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 116/1955 altered to meet R.A.N. conditions.)

(4518/26/124)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

322.

FORM S.228 - OUTBREAKS OF FIRE - REPORTS.

All outbreaks of fire in H.M.A. Ships and Shore Establishments, including attendance at "outside" fires, and false alarms "with good intent" are to be reported on Form S.228, and rendered to the Administrative Authority, who is to report them to the Naval Board.

2. H.M.A. Ships should complete the form as far as applicable. For ships in commission refitting or berthed alongside, the form should be completed by the Senior Dockyard Fire Brigade Officer present and countersigned by the Commanding Officer. In the case of fire originating in electrical or radio equipment cross reference should be made to the Form A.S. 1183 - Defective Electrical Material Report - rendered.

3. H.M.A. Ships in commission when refitting or berthed alongside dockyards should, in the event of a fire occurring, call the Dockyard Fire Brigade immediately whether their services appear to be required or not.

4. Heads of Departments concerned should complete the form in respect of losses, damage and cost of repairs, the Officer-in-Charge of Works, or his representative being consulted regarding damage to buildings.

5. The Senior Civil Electrical Engineer or the Electrical Officer should be consulted in all cases of fires of electrical origin occurring in shore establishments and in H.M.A. Ships respectively. The officer's certified remarks as to the cause and/or condition of apparatus and fittings should be included in Section 7 of the Form S.228.

6. Reports of fire involving aircraft should continue to be forwarded in accordance with I.F.A.A., Article 615, Part III.

(The foregoing is the text of A.F.O. 2219/1954 altered to meet R.A.N. conditions.)

(3526/12/1302)

323.

INSTRUCTIONS FOR THE FLEET AIR ARM - AMENDMENT.

"Instructions for the Fleet Air Arm" is to be amended as follows :-

Article 117(a). - Add: "In addition to the above either a helicopter or an aircraft fitted with "G" dropping apparatus is to be available for instant use."

(3712/50/92)

SECTION 6 - SHORE ESTABLISHMENTS

324.

MARRIED QUARTERS IN TROPICAL AREAS - WAIVER OF PERCENTAGE CHARGES ON FURNITURE AND MESS GEAR.

The prescribed percentage charges on official furniture supplied to married quarters at Darwin, New Guinea and Manus Island, will be waived in circumstances in which the quantity of furniture owned by the member and stored at departmental expense in Australia is such as would normally be required by a comparable civilian household.

2. The removal to married quarters of essential supplementary items such as bedding, radio or radiogram and records, musicial instruments, electrical household appliances, pressure cooker, children's furniture comprising high chair, low chair, playground and similar articles, toys, sewing machine, books, ornaments and prams, will not debar a member from waiver of furniture rental, i.e., the supplementary items should not be regarded as furniture which is required to be stored in accordance with paragraph 1.

3. Payment of the prescribed percentage charge on a departmental refrigerator supplied to the quarters will, however, not be waived unless the member owns a refrigerator which is also stored at departmental expense.

4. A member who draws mess gear in accordance with the authorised scale may apply for waiver of the percentage charges on the mess gear where the normal requirements of kitchen equipment and utensils are stored at departmental expense. In view of this concession, members should as far as possible, limit the transfer of kitchen equipment to essential items not included in the authorised scale of mess gear for married quarters in tropical areas, vide Appendix "B" to this Order.

5. The authority for endorsement of the official furniture and/or mess gear inventories as to waiver of charges will be a certificate in the terms of paragraphs 1, 3 or 4 to be furnished by the Naval Authority in the area of the member's domicile prior to transfer to the tropical area, and who was responsible for storage arrangements. The certificate is to be furnished (together with the required copies as in the case of the application form, vide paragraph 6 hereunder) to the Naval Authority for the area to which the member is proceeding.

6. In order to ensure that these provisions are brought to the notice of all personnel concerned, the form "Application for Waiver of Percentage Charges on Furniture and Mess Gear supplied to Departmental Married Quarters", set out in Appendix "A" to this Order, should be produced locally by Naval Officers-in-Charge, North East Australian Area, and North West Australian Area, by the roneo or similar process for issue to personnel at, or prior to the commencement of each tenancy. Personnel who consider they are eligible for waiver of percentage charges in accordance with the above, should complete the form -

(a) original only - where mess gear only is involved,

(b) in duplicate - where furniture only is involved,

(c) in triplicate - where both furniture and mess gear are involved,

and sign all copies.

7. If the required certificate in accordance with paragraph 5 has been received at the Establishment in the tropical area, it should be attached to the application form completed by the member and dealt with as indicated in paragraph 8. If the certificate has not been received, the copies of the application form should be forwarded to the Naval Authority for the area of the member's domicile prior to transfer to the tropical area, for certification and return.

8. Certificates and/or application forms which have been duly certified, should be distributed by Naval Officers-in-Charge, North East Australian Area and North West Australian Area, as follows and action as requisite taken :-

(a) Original	-	If furniture is involved - To be placed in the Original (Navy Office) copy of the relevant furniture inventory (Forms A.D. 508 Series). If only mess gear is involved - To be attached to the inventory of mess gear.
(b) Duplicate	-	To be attached to the duplicate copy of the furniture inventory (Forms A.D. 508 Series) held by the Establishment during the tenancy and utilised as the closing inventory at termination of the tenancy.
(c) Triplicate	-	To be attached to the inventory of mess gear.

9. Where waiver of charges on the official furniture is approved, the appropriate certificate on the front sheets of the furniture inventory (Form A.D. 508, No. 1) should be clearly endorsed accordingly before transmission to Navy Office.

10. Cases where members occupying furnished married quarters in tropical areas store some of their furniture but not sufficient to constitute the quantity which would normally be required by a comparable civilian household, should be submitted to Navy Office for determination of the extent, if any, to which furniture rentals may be waived.

11. This Order shall operate with effect from 1st April, 1955.

12. Navy Order 47 of 1954 is hereby cancelled.

(3021/51/34)

APPENDIX A

APPLICATION FOR WAIVER OF PAYMENT OF PERCENTAGE CHARGES ON FURNITURE AND MESS GEAR SUPPLIED TO DEPARTMENTAL MARRIED QUARTERS. * 1.

Residence No. .....

Establishment .....

Name and Rank of Rating and Number of Occupant .....

.....

Date of Occupancy .....

I hereby apply for exemption from payment of Percentage Charges on furniture and/or mess gear supplied to the abovementioned married quarters now occupied by me and supply the following particulars in support of my application.

I possess private household furniture and/or mess gear in another Command .....

Such furniture comprises (1 room, 2 rooms, 4 rooms, etc.)

.....

Storage charges are being paid by the Department through

.....

A refrigerator is / is not included in the furniture stored on my behalf at departmental expense .....

My furniture and/or mess gear is at present located at .....

.....

/ / 5.

.....
(Signature of Member)

I certify that the particulars re furniture, mess gear and refrigerator shown above have been verified, and the furniture and/or mess gear is such as would normally be required by a comparable civilian household. Storage charges are being borne by the Department of the Navy in this Command. * 2.

.....
(Naval Officer-in-Charge)

.....
(Area)

/ / 5.

The Supply Officer,
Establishment .....

Application of normal furniture and/or mess gear
Waiver percentage charges approved.

.....
(Commanding Officer)

.....
(Establishment)

/ / 5.

NOTES:- * 1 Original only required in respect of mess gear. To be prepared in duplicate in the case of furniture only. To be prepared in triplicate where both furniture and mess gear are involved.

* 2 Where an unqualified certificate cannot be given the matter should be specially represented to Navy Office.

APPENDIX B

SCALE OF ISSUE OF MESS GEAR TO PERSONNEL OCCUPYING EARRIED QUARTERS IN TROPICAL AREAS.

Vocab. Nos.	Item	Scale	
52046	Basins, pudding, aluminium, 2 pints	2	
52053	Basins, sugar, aluminium, without stand	2	
52094	Boards, meat	1	
52096	Boards, paste	1	
-	Castors, pepper, plastic	1	
-	Castors, salt, plastic	1	
52225	Colanders, aluminium, small	1	
51221	Corkscrews	1	
51252	Cups, egg, footless	4	
52348	Dishes, butter, small, without cover	2	
52349	Dishes, butter, small, cover for	2	
52366	Dishes, meat, enamel, 12"	2	
52359	Dishes, meat, aluminium No. 3	2	
52383	Dishes, pie, aluminium, 10"	1	
52385	Dishes, pie, aluminium, 8½"	1	
51628	Jars, salt, aluminium	3	(for food canisters)
52640	Jugs, aluminium, 2 quart	1	
52642	Jugs, aluminium, 1 quart	1	
52786	Kettles, tea, aluminium, 2 quart	1	
52924	Ladles, soup, N.S.	1	
53082	Machine, mincing, small, hand	1	

Vocab. Nos.	Item	Scale	
51684	Openers, can	1	
53301	Pans, frying, medium, 10½"	1	
53341	Pans, stew, aluminium, 4 quart, with cover	1	
53350	Pans, stew, aluminium, 2 quart, with cover	1	
53351	Pans, stew, aluminium, 1 quart, with cover	2	
53352	Pans, stew, aluminium, 1 pint, with cover	1	
53436	Pans, washing, tin	1	
51699	Pins, rolling	1	
53462	Platters, bread	1	
53473	Pots, coffee, aluminium, 4 pint	1	
51777	Pots, mustard, composition, small	1	
51891	Spoons, iron, small	1	
51919	Spoons, wood, 14"	1	
51895	Spoons, mustard, composition	1	
-	Strainers, gravy, domestic	1	
53754	Tins, baking, bread, 2-lbs.	1	(for use as cake tin)
53817	Trays, round, japanned, 12"	1	
53820	Trays, tea, japanned, 20"	1	
53894	Tubs, washing, oval, with foot, 6 gallon	1	

Earthenware and Glassware.

51238	Cups, earthenware	6	
51526	Jars, preserve, glass	1	
51557	Jugs, milk, china	1	
51564	Jugs, water, glass, 1 quart	1	
51714	Plates, dinner, earthenware	6	
51729	Plates, pudding, earthenware	6	
51738	Plates, soup, earthenware	6	
51800	Pots, tea, earthenware, 3½ pint	1	(53566 - Pots, tea, aluminium, 2 quart, may be issued in lieu)
51806	Pots, tea, earthenware, 1 pint	1	
51842	Saucers, tea	6	
51978	Tumblers, table, ½ pint	6	

Cutlery.

51430	Forks, carving, horn handled	1	
51434	Forks, table, small, N.S.	12	
52822	Knives, bread, saw-edged	1	
51586	Knives, carving, horn handled	1	
52862	Knives, table, medium, stainless, N.S. handled	12	
51883	Spoons, dessert, N.S.	6	
51915	Spoons, table, large, N.S.	4	
51917	Spoons, tea, N.S.	6	
51944	Steels, table	1	

325.

MOTOR TRANSPORT - PAINTING OF MOTOR VEHICLES.

The approved colours for motor transport are as follows :-

(a) Cars allocated to Flag Officers and Commodores.	-	Black
(b) Fire engines and vehicles employed solely for fire fighting.	-	Signal red (Colour 537 of B.S.381C)
(c) Runway controller's van.	-	Black and yellow squares 12" by 12"
(d) Vehicles (other than (b) and (c) above), ambulances at Naval Air Stations and agricultural machinery employed regularly in an aerodrome movement area. For the purpose of this Order, movement area is defined as the area bounded on runway aerodromes by the inner edge of the perimeter track, or on grass aerodromes by the landing boundary markings.	-	Golden yellow (Colour 356 of B.S.381C)
(e) All other vehicles.	-	Smoke grey (Colour 692 of B.S.381C)
(f) External bright parts are not to be painted.		
(g) Exterior of roofs of coaches used in tropical and semi-tropical climates.	-	white

2. Special markings to be painted on vehicles other than cars are as follows :-

(a) H.M.A. Ships and Establishments.

Ship's badges are to be painted on each door of the driving seat or cab of vehicles together with the vehicle serial number if such is allocated by the ship or establishment.

(b) Dockyard Departments.

The letters "R.A.N.", an abbreviation indicating the department concerned, and the vehicle serial number if such is allocated by the department are to be painted on each door of the driving seat or cab of all vehicles.

(c) Naval Air Squadrons.

Squadron badges may be painted on each door of the driving seat or cab of vehicles allocated to Fleet Air Arm Squadrons.

(d) Ambulances.

A red cross on a circular white background is to be painted on the following surfaces :-

Body side panels.

Roof of body.

Roof of driver's cab.

Doors at the rear of vehicles, a cross being placed on each door if there are two doors.

The red cross must not overlap windows, but it may include ventilators, door fasteners, hinges or other minor obstructions.
The white background is to take the form of the largest circle which it is possible to inscribe on the unobstructed surface on which it is painted.
The background must not overlap doors or windows, but it may include roof ventilators.
The width of the arms of the red cross to be superimposed on the background is to be two-sevenths of the diameter of the circle, the overall size of the red cross is to be six-sevenths of the diameter of the background.
The colour of the red cross is to be signal red (colour 537 of B.S.381C).
The words "Royal Australian Navy" are to be painted in black under the red cross on each body side panel.
Vehicles fitted for occasional use as ambulances are not to be marked as above.

(e) Refuellers at Naval Air Stations.

(i) Containing Aviation Gasoline.

To be painted yellow with the following marks in red lettering :-

At delivery hose position	AVGAS 100/130
On side of tank	AVGAS
At rear of tank	AVGAS 100/130.

(ii) Containing Aviation Turbine Fuel.

To be painted yellow with 6" wide black bands diagonally across the vehicle with the following marks in black lettering :-

At delivery hose position	AVTUR 100
On side of tank	AVTUR
At rear of tank	AVTUR.

3. The existing paintwork on motor transport vehicles is not to be altered until re-painting is necessary. When "touching-up" only is required, the original colour is to be restored.

4. A table of the materials to be used on motor transport vehicles is given in the Appendix to this Order. The enamels and undercoats listed will be suitable for application by brushing either as supplied or when reduced not more than 5% by volume with mineral turpentine and for application by spraying when reduced not more than 20% by volume with mineral turpentine.

5. Navy Order 457 of 1952 is hereby cancelled.

(4737/4/458)

APPENDIX

All Naval motor vehicles, when purchased, are finished either with cellulose lacquer or high gloss enamel. For patching and re-coating, it is necessary to maintain stocks of both types of paints in the necessary colours.

As no satisfactory specification exists for cellulose lacquers, proprietary products are to continue to be used.

For enamels the following products are to be used :-

Material.		Outline of Uses.
Description.	Pattern Number.	
Enamel, Marine Exterior Finishing, to Specification S.A.A. Int. 227 -		
White	Like 4940	Coach roofs. Ambulance marking. Lettering.
Black	Like 5340	Cars allocated to Flag Officers and Commodores. Runway controller's van. Lettering.
Golden yellow (Colour 356 of B.S.381C)	Like 3551	Vehicles regularly employed in the landing area at Naval Air Stations.
Enamel, Exterior Finishing, to Specification S.A.A. Int. 53A -		
Signal red (Colour 537 of B.S.381C)	Like 3557	Fire fighting vehicles. Ambulance marking.
Smoke grey (Colour 692 of B.S.381C)	-	Vehicles generally, as authorised in text of Navy Order.

Material.		Outline of Uses.
Description.	Pattern Number.	
Undercoat for Exterior Enamels Specification S.A.A. Int. 226 -		
White	Like 5341	Undercoat for white marine exterior finishing enamel.
French grey (Colour 630 of B.S.381C)	Like 5342	Undercoat for all other enamels.
Turpentine, mineral	78	Thinner for all enamels and undercoats.

Wherever possible, preference is to be given to the use of enamels, as these are standard products in use in the Royal Australian Navy.

Where painting work is done by contract, the use of enamels should be specified where it is possible.

For matching enamels, the range of colours shown in Navy Order 596 of 1954 can be used for tinting the colour shown in the above table.

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W. M. HOUSTON, Government Printer, Melbourne.

C.N.Os. 326-341/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
24th May, 1954.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0078

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No. Subject

SECTION 1 - ADMINISTRATIVE AND GENERAL

326.

AIR STATIONS - ELECTRICITY SUPPLIES TO PERMANENT GROUND COMMUNICATIONS AND RADAR INSTALLATIONS.

This Order is issued to clarify and bring up to date the policy concerning the provision of electricity supplied for permanent ground communication and radar facilities at R.A.N. Establishments.

2. Provision and installation of the necessary electricity supply arrangements are the responsibility of the Department of Works after authorisation by the Naval Board.

3. For the purposes of this Order, electricity supplies at an air establishment may be broadly divided into three categories defined as follows :-

(a) Main Supply - The main electricity supply is normally obtained from the local Electricity Supply Authority. Occasionally when such a supply cannot readily be obtained, generating plant of sufficient capacity is provided to meet the full requirement of the establishment.

(b) Standby Supply - Standby supply is provided by generating plant installed in the establishment and connected to the station distribution system, so as to provide restricted electrical services throughout the establishment for a limited period in the event of failure of the main supply. A short delay will occur between failure of the main supply and provision of a standby supply, but in certain circumstances (see paragraph 5) arrangements will be made to reduce this delay to an acceptable period to meet safety requirements.

(c) Emergency Supply - An emergency supply is provided for each essential communication facility in order to provide an electrical supply quickly when the main supply fails for any reason, and is derived from generating plant installed in or near the building concerned. Such a plant is generally started automatically (but in some cases manually) when the main supply fails.

4. Main Supplies - Wherever appropriate, all permanent communication facilities associated with the establishment are supplied with electricity from the station main distribution system. Where it would not be economical, due to remote siting, to do this, a separate supply from the local electricity authority or from self-contained generating plant is arranged. When separate generating plant is provided, there are duplicate sets, each with an output sufficient to meet all the requirements of the installation.

5. Standby Supplies - Generally, with the undermentioned exception, the standby plant is not used for the communication facilities. In the event of failure of the main supply, the electrical requirements for these are met by emergency generating plant referred to in paragraph 6. At Naval Air Stations fitted with airfield lighting, special arrangements are made during night flying operations

or flying in conditions of low-visibility for the standby generator(s) to be running, to enable the supply to be quickly restored to all associated equipments in the event of a failure of the mains.

6. Emergency Supplies - Generating plant of suitable capacity is installed in or near buildings housing essential communication facilities. These buildings are -

(a) Control building.

(b) Protected communication building.

(c) All DF huts.

(d) Communication receiver building.

(e) Communication transmitter building.

(f) Radar buildings.

To ensure continuity of supply to certain essential communication services and provide limited lighting in the buildings concerned (as may be determined by Director of the Naval Electrical Branch), auto-start electric generators are provided. There are two sizes of auto-start units in use at present, viz. 3 k.V.A. and 10 k.V.A. The larger size is only provided for Control Towers at certain Air Stations. Emergency supplies to other radio and radar installations are provided from manually operated gasoline or diesel engine-driven generators of larger capacity.

7. Control Building - Generally a 3 k.V.A. auto-start unit (A.S.F.E.G.) is fitted either in, or adjacent to, the control building, and connected so as to provide power in an emergency for the following :-

(a) Transmitter/Receiver, Type 86 M.S., its standby set and associated loudspeaker.

(NOTE:- Both above sets are for local airfield control channels.)

(b) Both bays in the air traffic control room.

(c) The two bays in the central receiving room fitted for local HF reception.

(d) The radio remote control system and its associated loudspeakers with amplifiers where fitted.

(e) A minimum number of low-wattage lamps, fitted over the A.T.C. desk, the two bays in the A.T.C. room, and over the desk in the air watch position.

(f) Remote display console in the control building at stations fitted with VHF/DF outfit FV.10.

(g) G.P.O./Ediswan loudspeaking telephones provided for DF and runway control van.

(h) "Dictograph" type "Command Intercom" outfit in the control tower.

In some instances the larger 10 k.V.A. size auto-start diesel electric generating set is fitted and the following additional items may then be connected :-

(i) 2 No. Type AN/GRC32 transceivers where fitted.

(ii) Automatic fixer service control centre equipment.

8. Protected communication building (or administration block if the facilities mentioned are fitted there).

An A.S.P.E.G. unit is installed and power from it is to be restricted to providing a supply to the following :-

(a) Two receiver bays and one Type 610 F3. transmitter in one of the bays.

(b) One 4 or 8 channel VF equipment and not more than four teleprinters.

(c) Minimum essential lighting in the wireless room, main signal office, telephone switchboard room, and teleprinter room.

9. DF Sites - An A.S.P.E.G. unit is installed at all DF sites to supply the DF outfit and essential lighting in the DF room and A.S.P.E.G. room. Heating circuits are not to be connected to the emergency supply. Normally the generator is housed in the rest hut or an extension to it, and should be not less than 200 yards from the DF aerials. An exception is VHF/DF, Type FV.10, where the A.S.P.E.G. unit is installed in an extension of the DF hut itself.

Where two DF sites are close to one another, and it is convenient, only one A.S.P.E.G. unit may be installed to serve both outfits.

If a DF outfit is installed in the control building consideration is given to its connection to the emergency supply, each such case being considered on its merits.

10. Communication Receiver Sites - An A.S.P.E.G. unit is fitted at remote receiver sites, and connected to give emergency supply to not more than -

(a) 3 VHF receivers.

(b) 1 HF receiver.

(c) Minimum essential lighting.

(d) Remote control system.

11. Communication Transmitter Site - Remote transmitter sites each have a manually started 15 to 20kW. diesel driven generator, installed in the engine room to provide an emergency supply for all services, except heating.

12. Radar Sites - Normally, radar installations such as G.C.I. (A.W.A.S.15, etc.) and Type 277, each have one 20 k.V.A. manually started diesel driven generator installed to provide an emergency supply, but in the event of other radar outfits being installed consideration is given to modification of the emergency supply arrangements to suit the particular requirement.

13. General Information -

(a) Auto-Start Units - To prevent overloading of these units only the essential items of equipment and lighting authorised above are to be connected in the emergency circuit: this specifically excludes all electric heating. To prevent the possibility of "Feedback" into the mains from an auto-start unit, the emergency supply is to be taken from the automatic switchboard, and care exercised to ensure that no paralleling takes place between the supplies to apparatus required in an emergency, and any other equipment. Routine

arrangements are to be made at radio sites fitted with auto-start units for the selector switch to be set at "OFF" when the building is shut down, in order that the unit may not run unnecessarily.

(b) Periodical Tests of Emergency Generators - All emergency generators are to be tested by station staff at least once every week, loaded and unloaded, for as long as may be necessary to check operation of the set and any automatic switchgear fitted. A record is to be kept of such tests for examination when required.

(c) Heating of Emergency Generator Rooms - The room housing the emergency plant is to be heated to maintain the temperature at a minimum of 40° F.

(d) The provisions of Navy Order 56 of 1952 are relevant.

(The foregoing is the text of A.F.O. 2131/1954 altered to meet R.A.N. conditions.)

(3722/1/19)

327.

BOOM WORKING VESSEL KIMBLA - LAUNCHING OF.

Boom Working Vessel, constructed at the shipyards of Messrs. Walker Ltd., Maryborough, Queensland, was named KIMBLA and launched on 23rd March, 1955.

(4257/5/76)

328.

INVENTIONS AND SUGGESTIONS.

Between the years 1939 and 1945, invitations were extended to all serving officers and men to forward ideas and suggestions which might assist in the prosecution of the war. Such ideas and suggestions received varied from proposals for major operations to minor *ruses de guerre*, and from entirely new weapons of war to improvements in the smallest details of existing material.

2. In peace time, as in war, any ingenious and thoughtful suggestion relating to the equipment or fighting practices of the Royal Australian Navy is welcomed, and the Naval Board trust that all officers and men and civilian personnel will forward suggestions which appear to have some value to the Armed Forces, and administrative authorities should give every encouragement to this end. Notions which may appear fanciful should not be excluded if they contain the germ of an idea which might be put to good account. All are welcome and will be carefully examined by experts.

3. Suggestions should be forwarded through the normal service channels and may, if convenient, be in manuscript. To avoid postal delay, they may be forwarded by the originator's immediate administrative authority at his discretion and, if desired, without comment.

4. Authors of inventions which are adopted and used may be eligible for awards under Article 5302, Q.R. and A.I., or Article 54A, Home Dockyard Regulations, and, in the case of Naval and Marine personnel, for grants from the *Herbert Lott Naval Trust Fund* (Article 5303, Q.R. and A.I.).

5. Originators of suggestions should constantly bear in mind the necessity for caution in discussing their ideas outside Service circles. The more original or valuable an idea, the more important it is that it should not become known to a potential enemy.

6. In addition to bringing the foregoing invitations to the notice of all concerned Commanding Officers of ships and Heads of Establishments are invited to assist in the preliminary examination of ideas and suggestions submitted to them for transmission to the Naval Board. Proverbially, two heads are better than one; and a proposal which not only appeals to its originator but convinces his shipmates or colleagues, is more likely to prove valuable than one which has never been scrutinized by an impartial and friendly critic. In fact, experience in research shows that the lone worker rarely achieves a definitive result and that progress is normally secured only after discussion and criticism of ideas by a number of people.

7. It is suggested, therefore, that whenever practicable, ideas should be discussed and if necessary elaborated before being forwarded. Such discussion should be sympathetic and informed and should have for its purpose the elaboration and evaluation of ideas rather than destructive criticism alone. To avoid possible misunderstanding later, it is important that a careful record should be kept of the inventor's original suggestion and of the authorship and precise details of any elaborations embodied therein locally. Ideas and suggestions should invariably be forwarded to the Naval Board, if the originator so wishes.

8. The above instructions do not apply to inventions, ideas and suggestions relating to Service material which are sometimes received by Naval Authorities from inventors outside the Service and are to be referred to the Naval Board.

(The foregoing is the text of A.F.O. 468/1955 altered to meet R.A.N. conditions.)

(3630/1/6)

SECTION 2 - PERSONNEL

329.

INSTRUCTIONAL FILMS AND FILM STRIPS - SA609, "RADIO COMMUNICATION ORGANIZATION" (PARTS 1-2) - DISTRIBUTION.

Copies of the new film strip SA.609, "Radio Communication Organization" (Parts 1-2), are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Ships and Establishments.	No. of Copies.
Carriers	1 each
Cruisers and Daring Class Ships	1 each
10th Destroyer Flotilla	1
1st Frigate Flotilla	1
Flinders Naval Depot (for Signal School)	2
R.A.N. Air Station, Nowra	1
R.A.N. Air Station, Nowra (for A.J.A.S. School)	1
H.M.A.S. HUON	1
H.M.A.S. LEEUWIN	1
H.M.A.S. LONSDALE	1
H.M.A.S. LONSDALE II	1
H.M.A.S. MORETON	1
H.M.A.S. PENGUIN	1
H.M.A.S. RUSHCUTTER	1
H.M.A.S. TORRENS	1

2. Details of the strips are as follows :-

Part 1 - World Wide and Station Communication Organization	39 frames
Part 2 - Tactical Radio Communication Organization	46 frames

This strip is intended as a primary visual aid in Radio Communication Organization lectures for all types of classes in Signal Schools and at Signal Training Centres, and for training classes and pre-advancement course training at sea.

3. The strip is classified RESTRICTED.

4. A Training Guide for use in conjunction with the strips will be distributed on the same scale.

(The foregoing is the text of A.F.O. 148/1955 altered to meet R.A.N. conditions.)

(4518/61/473)

R.A.N. CENTRAL CANTEEN FUND.

Consequent upon the issue of Statutory Rule No. 129 of 1954 (Navy (Canteens) Regulations), the R.A.N. Central Canteen Fund was closed as at 23rd December, 1954, and the following revenue account for the period 1st July - 23rd December, 1954, and balance sheet as at 23rd December, 1954, are promulgated for information :-

REVENUE ACCOUNT

	£ s. d.		£ s. d.
To Australian Army Canteen Service Rebates	65. 7. 2	By Repairs to Billiard Tables	78.16. 0
Levy on rentals of Canteen Tenants	97. 6. 2	Stationery and Postage	3.15.11
Levy on Sales in Service System Canteens including Chief Petty Officers and Petty Officers' Messes 13,552.18. 9		Insurance on Canteen Stores	92.10.10
Less Cheque Returned 29.18. 5	13,523. 0. 4	Grants for Purchase of Equipment -	
Insurance Rebates	33. 8. 4	Air Station, Nowra 500. 0. 0	
Donation from H.M.A.S. CULGOA	3. 5.10	Flinders Naval Depot 121. 9. 0	
Interest on Commonwealth Bonds	265. 1. 8	Less Refunds 2.10. 0	118.19. 0
		H.M.A.S. TARANGAU	210. 0. 0 828.19. 0
		Contributions -	
		Inter-Service Sports Fund, Flinders Naval Depot 300. 0. 0	
		Recruits Sports Fund Flinders Naval Depot 150.15. 0	450.15. 0
		Less refund from Flinders Naval Depot on prior donation for Sports Fund	155.14. 4 295. 0. 8
		Donations -	
		R.A.N. Relief Trust Fund	5,000. 0. 0
		White Ensign Club	300. 0. 0 5,300. 0. 0
		Freight on Films	653. 0. 4
		Net Surplus	6,735. 6. 9
	£13,987. 9. 6		£13,987. 9. 6

BALANCE SHEET AS AT 23RD DECEMBER, 1954.
(All amounts adjusted to nearest (£))

	£ s. d.		£ s. d.
Accumulated Funds as at 1st July, 1954	33,539. 0. 0	Fixed Assets -	
Net Surplus for period ended 23rd December, 1954	6,735. 0. 0	(Amenities provided for various establishments - Billiard Tables, Wireless Sets, Hairdressing, Bootmaking Equipment)	1,710. 0. 0
		Current Assets -	
		Loans to be repaid	17,750. 0. 0
		Balance on Hand R.A.N. Recreation Film Account	146. 0. 0
		Cash at Bank In Hand	4,889. 0. 0
		Investments -	
		Commonwealth Treasury Bonds (at cost)	15,779. 0. 0
	£40,274. 0. 0		£40,274. 0. 0

The Accounts of the Fund have been audited by the firm of Martin, Goode, Morris and Toner and the undermentioned certificate given -

"I certify that I have audited the books and accounts of the R.A.N. Central Canteen Fund for period 1st July, 1954, to 23rd December, 1954, and in my 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. I have received all the information and explanations that I have required.

(Sgd.) C.T. GOODE

Commander (S) R.A.N.R."

On 23rd December, 1954, all cash, property, etc., of the R.A.N. Central Canteen Fund was transferred to the R.A.N. Central Canteens Fund, in accordance with Statutory Rule No. 129 of 1954.

(4814/12/21)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

331.

BOMBARDMENT - CHANGE OF NAME TO NAVAL GUNFIRE SUPPORT - NEW TERMS AND EXPRESSIONS.

With the introduction of A.T.P.4 - **Allied Spotting** Instructions for Naval Gunfire Support **in the** Royal Navy its anticipated introduction in the Royal Australian Navy the expression Bombardment has been superseded by Naval Gunfire Support.

2. The new expression is already in use in connection with Communication frequencies and exercises, viz. -

(a) *Communications.* (*See* C.B.4510(50).)

Naval Gunfire Support Ground Spotting Net (NGSGSN).
Naval Gunfire Support Airborne Spotting Net (NGSASN).
Naval Gunfire Support Airborne Spotting Common Net (NGSASCN).
Naval Gunfire Support Control Net Primary (NGSCNP).
Naval Gunfire Support Control Net Secondary (NGSCNS).

(b) *Exercises.* (*See* B.R.2009.)

Naval Gunfire Support Communication Exercise (NGSCX).
Naval Gunfire Support Wireless Check (NGSWC).
Naval Gunfire Support Firing Practice (NGSFP).

3. The following terms are to be used in future to supersede the current terms shown alongside them :-

Naval Gunfire Support Forward Observer (NGSFO).	Forward Observer Bombardment (FOB).
Naval Gunfire Support Staff Officer (NGSSO).	Staff Officer Bombardment (SOB).
Naval Gunfire Support Liaison Officer (NGSLO).	Bombardment Liaison Officer (BLO).
Naval Gunfire Support Senior Liaison Officer (NGSSLO).	Senior Bombardment Liaison Officer (SBLO).
Naval Gunfire Support Chief Liaison Officer (NGSCLO).	Chief Bombardment Liaison Officer (CBLO).
Naval Gunfire Support Commander (NGSC).	Commander Naval Bombardment (CNB).
Naval Gunfire Support Control Headquarters (NGSCHQ).	Bombardment Control Headquarters (BCHQ).

4. Relevant publications will be amended in due course.

(The foregoing is the text of A.F.O. 106/1955 altered to meet R.A.N. conditions.)

(3384/14/2)

332.

FIRE CONTROL - MAGSLIP TRANSMISSION SYSTEMS - SPECIFICATION OF ROTATION/CONNECTION CONVENTIONS AND HOUSING REQUIREMENTS FOR MAGSLIP ELEMENTS.

In view of the increasing complexity of modern fire control and allied apparatus, it has been decided to apply standard rotation/connection conventions for magslip elements incorporated in such apparatus to secure simple "line to line" connections in the associated ship wiring and thus avoid unnecessary installation difficulties.

Rotation/Connection Convention

2. (a) In all new designs, arrangements are to be made wherever practicable for clockwise rotation of the rotors of all magslip elements (including receiver indicators), viewed from the hub end, for increasing values of the transmission, except in the case of resetting transmitters for normal hunter linkage chains. The latter have been arranged for counter-clockwise rotation for straight "line to line" connections in accordance with the existing conventions specified on Navy Order 332 Diagram (1) (Drawing D.T.M. 2826 R/3).

(b) In all new designs and in all current manufacture to existing designs where, due to mechanical requirements, application of these conventions is not possible or convenient, arrangements are to be made for "double terminal marking" on terminals in the apparatus, of which the magslips form part to provide the necessary reversals of the electrical connections to maintain "line to line" connections in the associated ship wiring.

NOTE:- The term "increasing value of transmission" is intended to cover the following typical cases :-

(i) Increasing right training, right deflection, etc.

(ii) Increasing elevation, increasing range, etc.

(iii) Increasing speed, etc.

in accordance with current practice. When doubt exists as to the interpretation of the term, the department responsible for the design is to be consulted.

3. The following diagrams, which illustrate the convention and the necessary connection reversals to meet the various magslip rotations, should be used for guidance in the preparation of wiring diagrams :-

(a) Navy Order 332 Diagram (1) (*Drawing* D.T.M. 2826R/3) - Hunter linkage system (2 and 3 machine links). This drawing was prepared for design guidance when magslip elements were first introduced and provides for reversal of electrical connections to suit prescribed mechanical conditions generally in accordance with the convention specified in paragraph 2 above. There is no need to revise details of apparatus which has been arranged in accordance with this drawing.

(b) Navy Order 332 Diagram (2) (*Drawing* D.E.E. 12430R/2) - Hunter linkage system (including follow-through elements).
Drawing D.E.E. 12430R/1 was prepared to amplify drawing D.T.M. 2826R/3 to include the use of follow-through elements.

(c) Navy Order 332 Diagram (3) (*Drawing* D.E.E. 12431R/1) - Magslip power control (error voltage systems).
This drawing was prepared for guidance in arranging magslip chains for "error voltage" systems, including follow-through elements. The information is generally applicable to simple circuits which do not include follow-through elements.

(d) Navy Order 332 Diagram (4) (*Drawing* D.E.E. 14066) - Magslip indication.
This drawing was prepared for guidance in arranging magslip indicator systems.

It should be noted that in each drawing "Case 1" is the basic diagram, and the additional diagrams are for guidance where rigid application of the convention is impracticable due to mechanical requirements.

4. Where "follow-through" elements are provided it is essential to ensure that the "input" from the initiating transmitter(s) be connected to the *stator* terminals (1T, 2T, 3T) and the "output" to succeeding elements be taken from the rotor terminals (1R, 2R, 3R) as shown in the drawings referred to above. Failure to meet these requirements will result in reversed rotations and render it impossible to secure optimum performance of the magslip chain on account of volt-drop considerations. Double terminal markings are to be provided to ensure the correct sequence of connection for these elements, and where necessary, arrangements are to be made for the inclusion of the suffixes "T" and "R" in the line markings for ship cables.

5. Where the application of the rotation/connection conventions would require the double reversal of inter-connections between adjacent magslips in one piece of apparatus, straight connections may be substituted, provided the essential requirements of direct "line to line" connection of ship wiring are not impaired. Where the "adjacent" magslips form parts of separate instruments, however, "double terminal markings" are to be provided and the conventions specified in paragraph 2 rigidly applied.

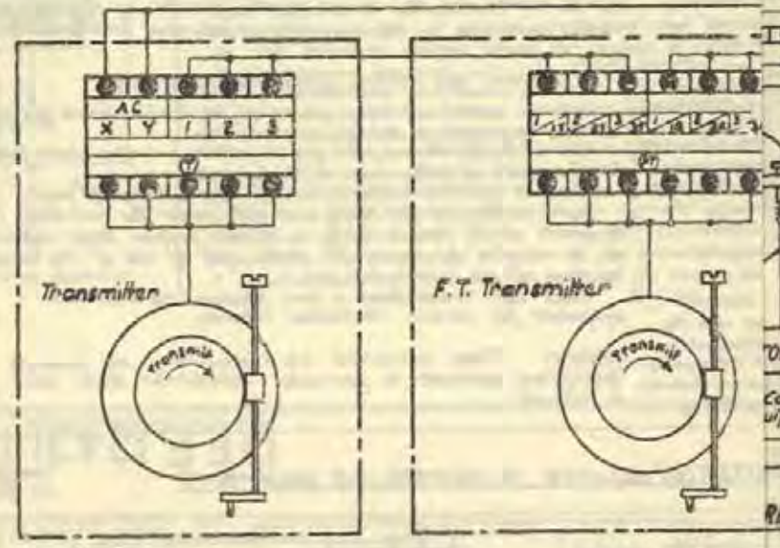
6. Diagrams of internal connections provided with apparatus, and generally fitted inside terminal covers, are to include complete particulars of the magslip elements concerned (i.e., Pattern No., etc.), together with an indication of the direction of rotation of the rotor hub for increasing values of signal. In complex assemblies arrangements should be made, wherever possible, to engrave the pattern numbers of the various magslips required on or near the particular magslip housings.

7. During the preparation of designs it is recommended that all schematic diagrams shall include rotation particulars of the magslip elements, so that full consideration may be given to the provision of separate terminal blocks when mechanical requirements necessitate "double terminal marking" of the magslip connections.

MAGSLIP TRANSMI

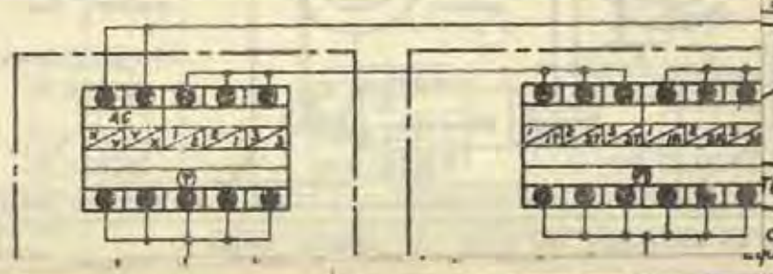
DIAGRAM OF CONNECTIONS.

CASE 1 — Basic Diagram.



The basic diagram provides for direct line-to-line
Clockwise rotation for increasing values of the trans

CASE 2 — For reverse rotation of the Transmitter



(b) Navy Order 332 Diagram (2) (*Drawing* D.E.E. 12430R/2) - Hunter linkage system (including follow-through elements).
Drawing D.E.E. 12430R/1 was prepared to amplify drawing D.T.M. 2826R/3 to include the use of follow-through elements.

(c) Navy Order 332 Diagram (3) (*Drawing* D.E.E. 12431R/1) - Magslip power control (error voltage systems).
This drawing was prepared for guidance in arranging magslip chains for "error voltage" systems, including follow-through elements. The information is generally applicable to simple circuits which do not include follow-through elements.

(d) Navy Order 332 Diagram (4) (*Drawing* D.E.E. 14066) - Magslip indication.
This drawing was prepared for guidance in arranging magslip indicator systems.

It should be noted that in each drawing "Case 1" is the basic diagram, and the additional diagrams are for guidance where rigid application of the convention is impracticable due to mechanical requirements.

4. Where "follow-through" elements are provided it is essential to ensure that the "input" from the initiating transmitter(s) be connected to the stator terminals (1T, 2T, 3T) and the "output" to succeeding elements be taken from the rotor terminals (1R, 2R, 3R) as shown in the drawings referred to above. Failure to meet these requirements will result in reversed rotations and render it impossible to secure optimum performance of the magslip chain on account of volt-drop considerations. Double terminal markings are to be provided to ensure the correct sequence of connection for these elements, and where necessary, arrangements are to be made for the inclusion of the suffixes "T" and "R" in the line markings for ship cables.

5. Where the application of the rotation/connection conventions would require the double reversal of inter-connections between adjacent magslips in one piece of apparatus, straight connections may be substituted, provided the essential requirements of direct "line to line" connection of ship wiring are not impaired. Where the "adjacent" magslips form parts of separate instruments, however, "double terminal markings" are to be provided and the conventions specified in paragraph 2 rigidly applied.

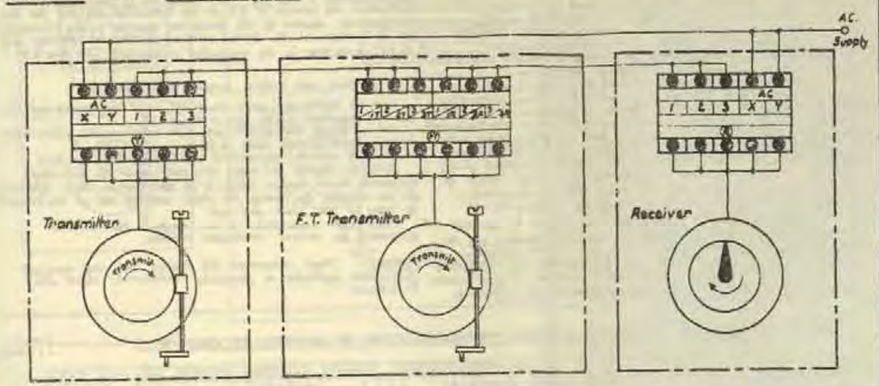
6. Diagrams of internal connections provided with apparatus, and generally fitted inside terminal covers, are to include complete particulars of the magslip elements concerned (i.e., Pattern No., etc.), together with an indication of the direction of rotation of the rotor hub for increasing values of signal. In complex assemblies arrangements should be made, wherever possible, to engrave the pattern numbers of the various magslips required on or near the particular magslip housings.

7. During the preparation of designs it is recommended that all schematic diagrams shall include rotation particulars of the magslip elements, so that full consideration may be given to the provision of separate terminal blocks when mechanical requirements necessitate "double terminal marking" of the magslip connections.

MAGSLIP TRANSMISSION – INDICATOR SYSTEMS.

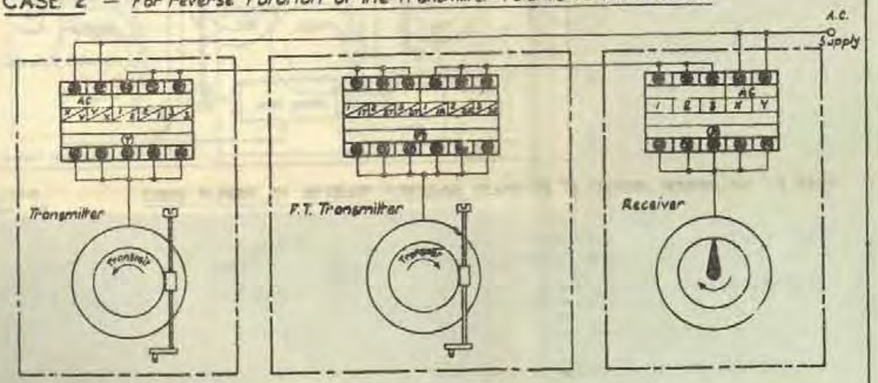
DIAGRAM OF CONNECTIONS.

CASE 1 — *Basic Diagram.*



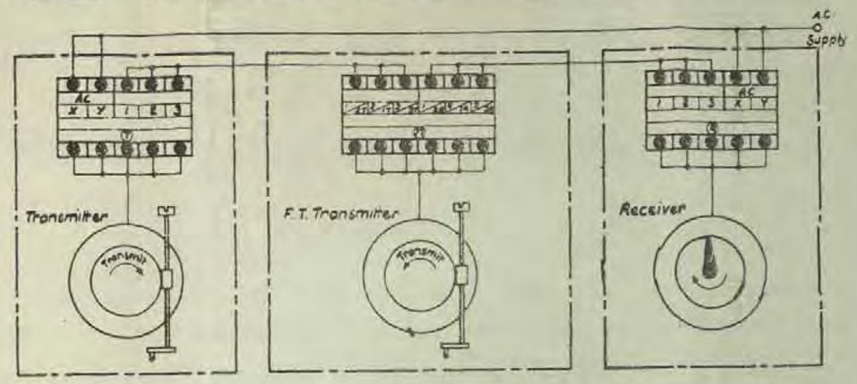
The basic diagram provides for direct line-to-line connection of the magslip elements. Clockwise rotation for increasing values of the transmitted signal.

CASE 2 — *For reverse rotation of the Transmitter relative to the Receiver.*



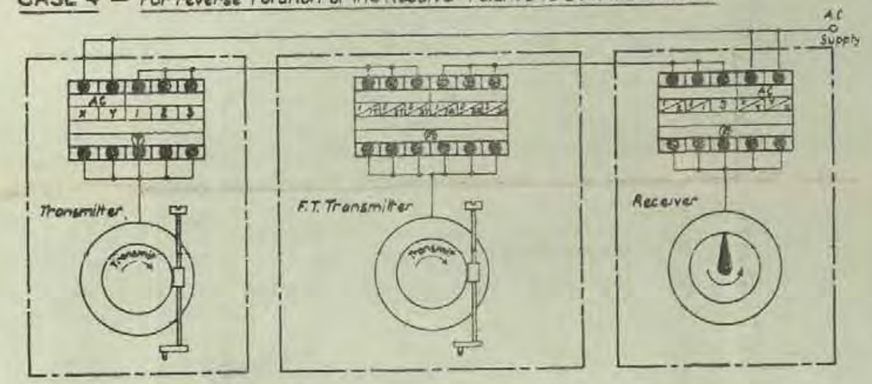
For reverse rotation of the Transmitter - reverse connections 1 & 2 (Stator) and X & Y (Rotor)

CASE 3 — *For reverse rotation of the F.T. Transmitter relative to the Receiver.*



For reverse rotation of the F.T. Transmitter - reverse connections 1T & 2T (Stator) and 1R & 2R (Rotor)

CASE 4 — *For reverse rotation of the Receiver relative to both Transmitters.*



For reverse rotation of the Receiver - reverse connections 1 & 2 (Stator) and X & Y (Rotor)

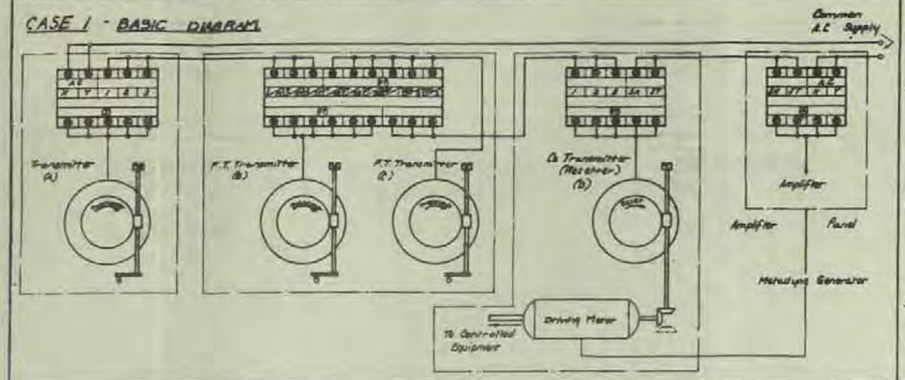
15/55(4) N.C.

N.T.B. 4.

D.E.E. 14066.

MAGSLIP POWER CONTROL — ERROR VOLTAGE SYSTEM
DIAGRAMS OF CONNECTIONS & LINING-UP INSTRUCTIONS FOR MAGSLIP CHAINS.

CASE 1 - BASIC DIAGRAM



NOTES.

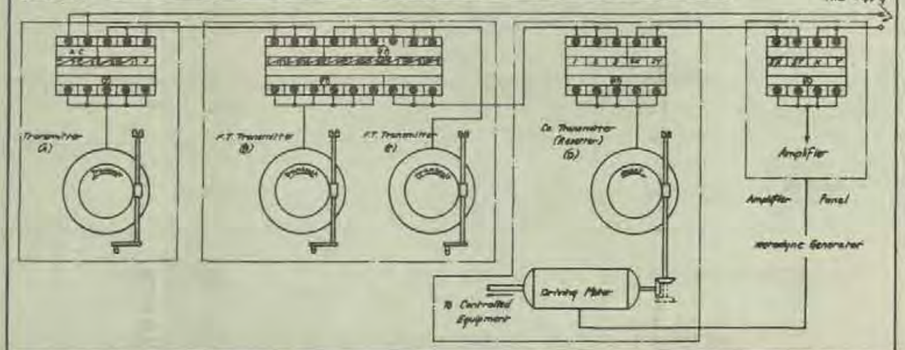
1. This drawing indicates the connections for predetermined mechanical conditions for Magslip elements operating on the Error Voltage System of power control to facilitate the preparation of correct diagrams of connections for installation purposes.
2. The BASIC DIAGRAM provides for direct line-to-line connection of Magslip elements with a uniform direction of rotation of couplings, shown clockwise to convention, for increasing quantities of bearings and a given direction of rotation of the controlled equipment. The only connection changes allowed for reversal of rotation of a Magslip element compared with this BASIC DIAGRAM are:-
   (i) for Transmitters - Reverse connections to 1 & 2 (rotor) and X & Y (rotor)
   (ii) for F.T. Transmitters - Reverse connections to 1T & 2T (rotor) and 1R & 2R (rotor)
   (iii) for Co. Transmitters - Reverse connections to 1 & 2 (rotor)
   (iv) for Controlled Equipment - Reverse connections to S1 & S2 (rotor of Co. Transmitter) and double "reversal" markings are shown for such connection changes and to suit terminal markings provided on the elements. CASES 2, 3 and 4 provide for the reversal of rotation relative to the controlled equipment of a Transmitter, F.T. Transmitter and Co. Transmitter respectively. CASE 5 provides for the reversal of rotation of the controlled equipment. A "Metadyne" power equipment has been included for convenience.
3. The drawing provides for the mechanical connection of the controlled equipment to the Co. Transmitter element for resetting in accordance with the usual practice when design requirements provide for the mechanical connection of the controlled equipment to a Transmitter or F.T. Transmitter. The resetting use of these elements necessitates, for prescribed directions of rotation, (i) the reversal of X & Y and 1 & 2 for a transmitter used for resetting or (ii) the reversal of 1T & 2T and 1R & 2R for a F.T. Transmitter used for resetting and (iii) the reversal of 1 & 2 for the Co. Transmitter used for displacement.
4. Where these conventions require the double reversal of rotor connections between adjacent Magslips in a chain, "straight" connections may be substituted if design conditions permit. For example, in a 2-element chain in which the Transmitter is used for resetting and the Co. Transmitter for displacement the reversal of 1 & 2 for the Transmitter and 1 & 2 for the Co. Transmitter required by the convention specified in Para. 3 (i) and (iii) can be omitted and the correct operation secured by reversing only the X & Y connections to the transmitter in accordance with Para. 3 (i).

FITTING AND TYPICAL LINING-UP CONDITIONS

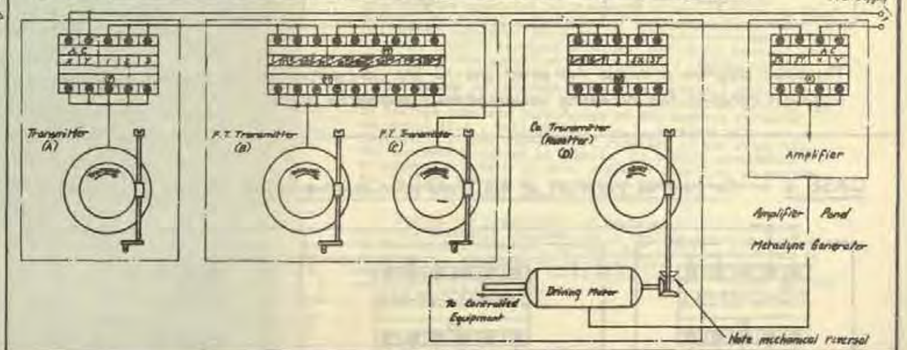
1. With A.C. Supplies and motor power 'off', set all transmissions and the controlled equipment to the zero or datum line.
2. Mesh all Magslip elements with pegs in position, arranging pinions (where fitted) in centre of stator racks as far as possible.
3. Check all electrical connections and remove lining-up pegs.
4. Switch on Magslip A.C. supply and motor power. The controlled equipment should remain steady in its zero position. Slight deflections can be remedied by turning the stator body of one of the Transmitters by means of the pinion and rack.
5. Check each transmission in turn against the controlled equipment for correct mechanical rotation.

CAUTION These instructions are typical only and separate instructions applicable to particular installations should also be followed.

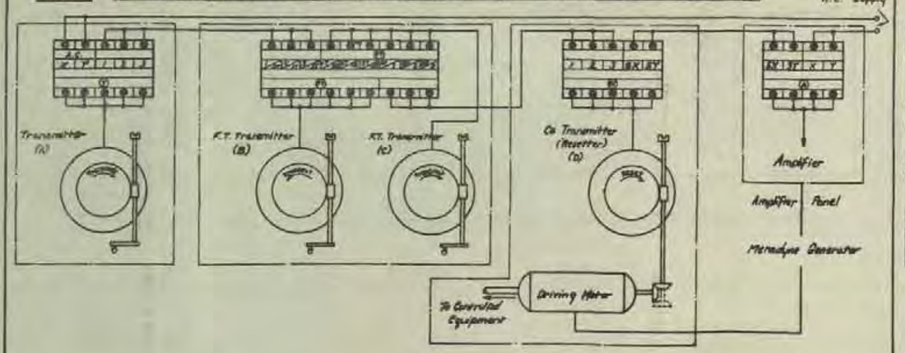
CASE 2 - FOR REVERSE ROTATION OF TRANSMITTER (A) RELATIVE TO CONTROLLED EQUIPMENT.



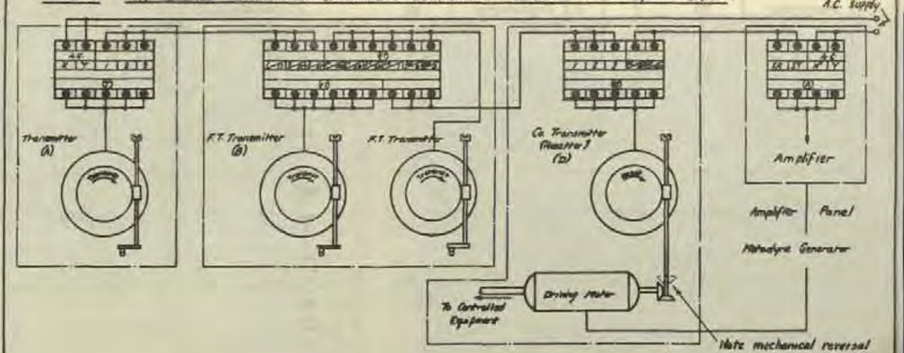
CASE 4 FOR REVERSE ROTATION OF Co. TRANSMITTER (D) RELATIVE TO CONTROLLED EQUIPMENT.



CASE 3 - FOR REVERSE ROTATION OF F.T. TRANSMITTER (B) RELATIVE TO CONTROLLED EQUIPMENT.



CASE 5 - FOR REVERSE ROTATION OF CONTROLLED EQUIPMENT RELATIVE TO MAGSLIP CHAIN.



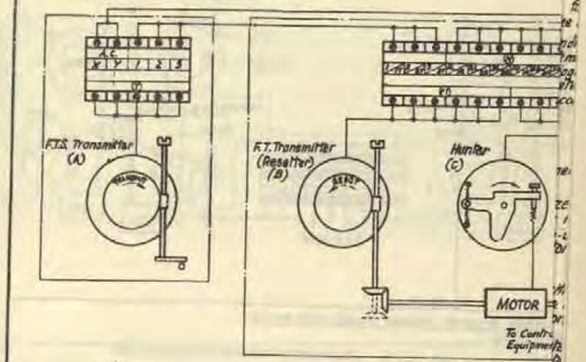
15/55(3) N.C.

D.E.E. 12431 R 1

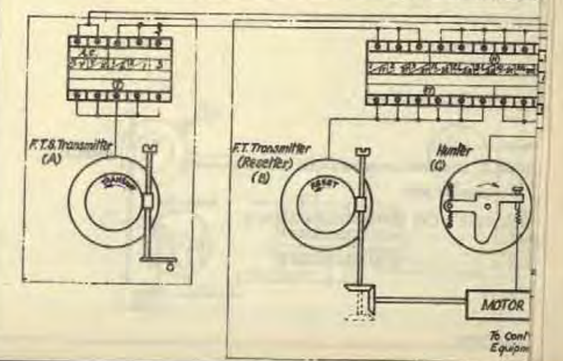
N.78-3

MAGSLIP POWER CONTROL.
DIAGRAMS OF CONNECTIONS & FOR MAGSLIP CHAINS.

CASE 1. - BASIC DIAGRAM

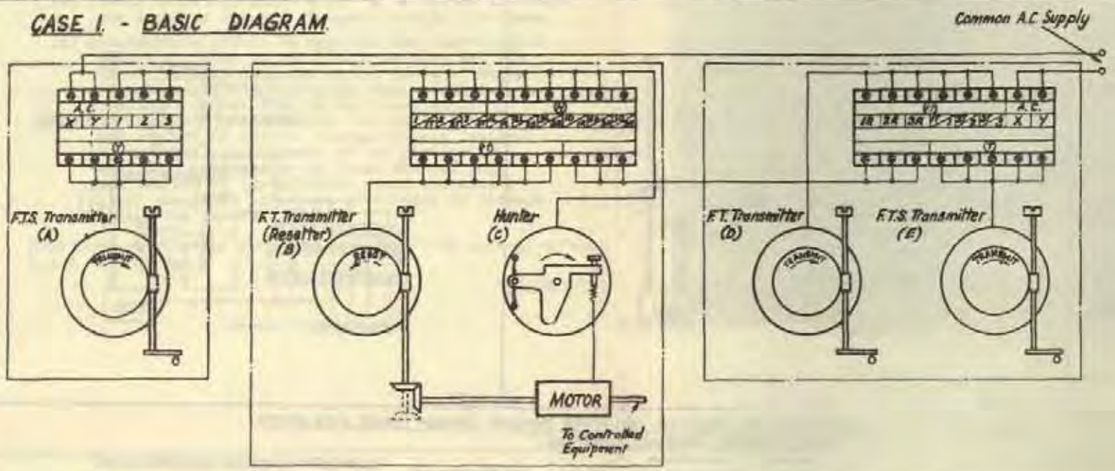


CASE 2 - FOR REVERSE ROTATION OF F.T.S. TRANSMITTER (A) RELA



MAGSLIP POWER CONTROL. HUNTER LINKAGE SYSTEM. DIAGRAMS OF CONNECTIONS & LINING-UP INSTRUCTIONS FOR MAGSLIP CHAINS.

CASE 1. - BASIC DIAGRAM.

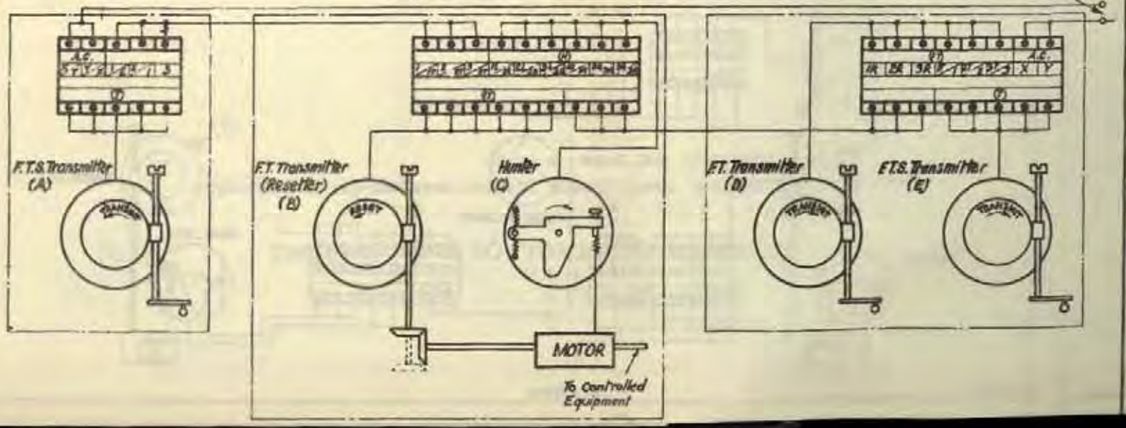


1. The arrangement of connections to suit predetermined m
Magslip chains for Magslip power control of Fire Control S
2. Drawing D.E.E.8830/1 indicates the arrangement of
chains including F.T. Transmitters to provide for the
with Drawing D.T.M. 2826/53 provides sufficient
any Hunter Linkage System. Standard line-to-line
double "Terminal markings" arranged as shown to su
reversals. The only connection changes allowed for rev
(i) for Transmitters and F.T.S. Transmitters - reverse con
(ii) for F.T. Transmitters, - reverse con
(iii) for Hunters, - reverse con
these double reversals being necessary to preserve the c

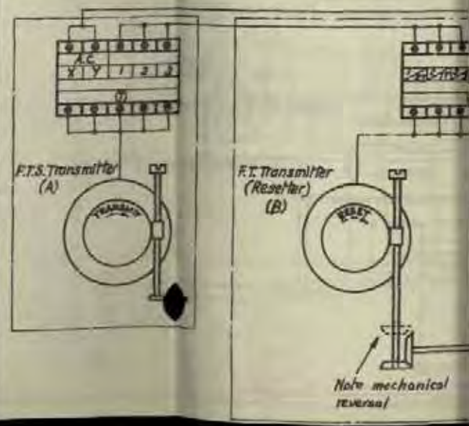
FITTING

1. With A.C. supplies and motor power "off" set all transm
2. Mesh all Magslip transmitters with pegs in position, o
3. Set up Hunter with the operating arm horizontal an
4. With motor power only "on" adjust the Hunter ar
arm gently in each direction. Restore the control
5. check all electrical connections with the diagram
6. Switch on the Magslip A.C. supply. The controlled equ
rectified by turning the stator body of one of
7. check each transmission in turn against the contro
8. The foregoing instructions apply generally to all o
motors of contact operation. The Transmitter or Re
arm in a central position with Magslip supply on

CASE 2 - FOR REVERSE ROTATION OF F.T.S. TRANSMITTER (A) RELATIVE TO HUNTER (C)

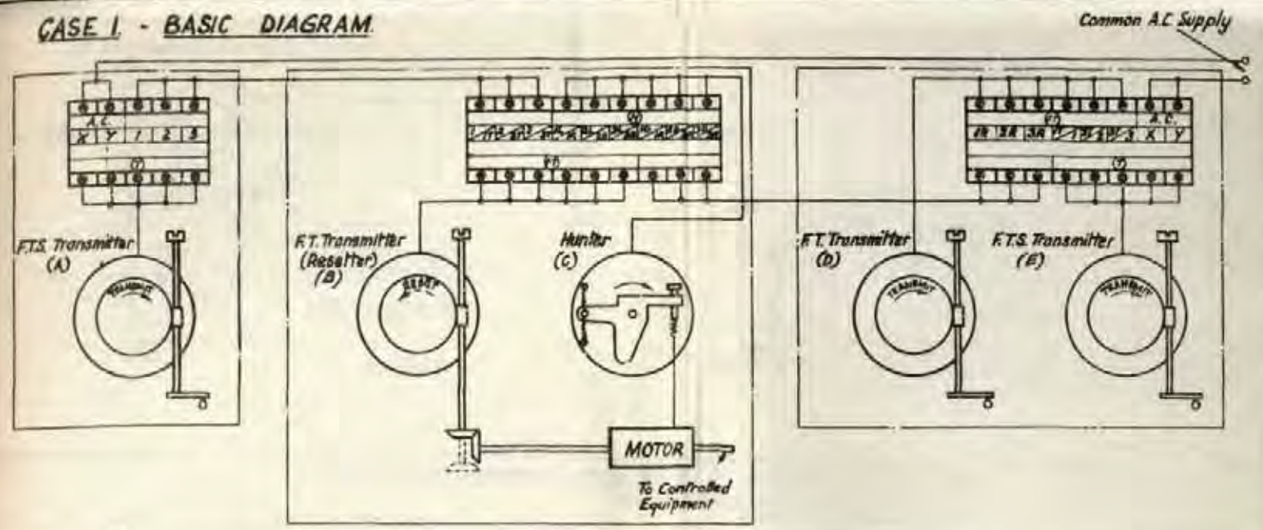


CASE 3 - FOR REVERSE ROTATION OF F.T. TRANSM



MAGSLIP POWER CONTROL. HUNTER LINKAGE SYSTEM. DIAGRAMS OF CONNECTIONS & LINING-UP INSTRUCTIONS FOR MAGSLIP CHAINS.

CASE 1. - BASIC DIAGRAM.



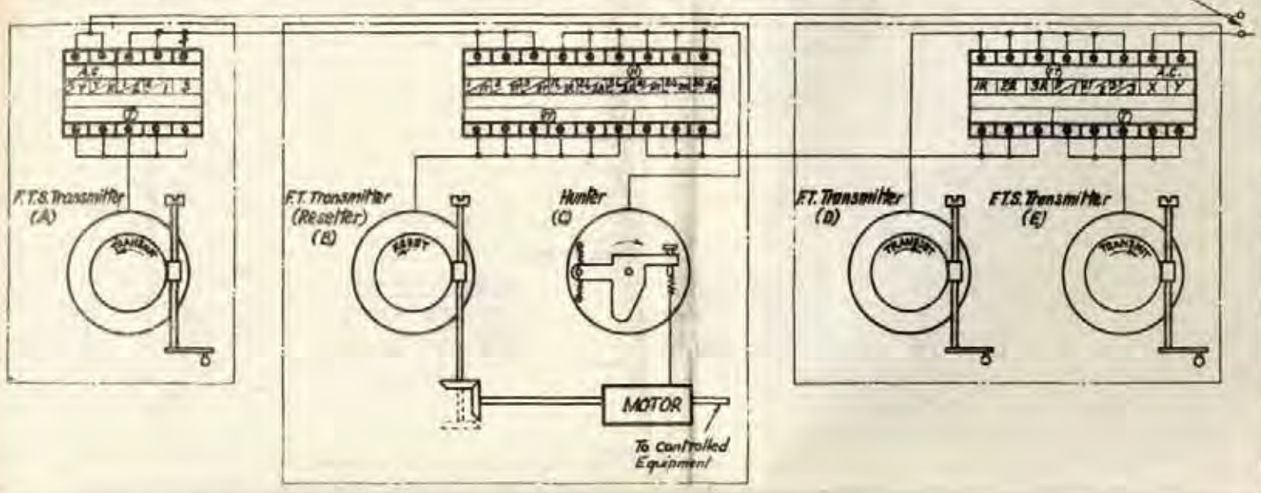
NOTES

1. The arrangement of connections to suit predetermined mechanical conditions and lining-up instructions for 2 or 3 element Magslip chains for Magslip power control of Fire Control systems is specified on Drawing D.T.M. 2826/R3 [See also B.R. 268(27)].
2. Drawing D.E.E. 12430/1 indicates the arrangement of connections to suit predetermined mechanical conditions for 5 element Magslip chains including F.T. Transmitters to provide for the injection of additional signals in the system. This drawing in conjunction with Drawing D.T.M. 2826/R3 provides sufficient information for the preparation of correct diagrams of connections for any Hunter Linkage System. Standard line-to-line connections should always be provided between terminal blocks and double "terminal markings" arranged as shown to suit terminal markings of the elements and for connection changes for rotation reversals. The only connection changes allowed for reversal of rotation of a Magslip are:-
   (i) for Transmitters and F.T.S Transmitters - reverse connections to 1 & 2 (stator) and X & Y (rotor)
   (ii) for F.T. Transmitters. - reverse connections to 1T & 2T (stator) and 1R & 2R (rotor)
   (iii) for Hunters. - reverse connections to 1L & 2L (stator) and 1D & 2D (rotor),
   these double reversals being necessary to preserve the conventional lining-up positions of Magslip elements.

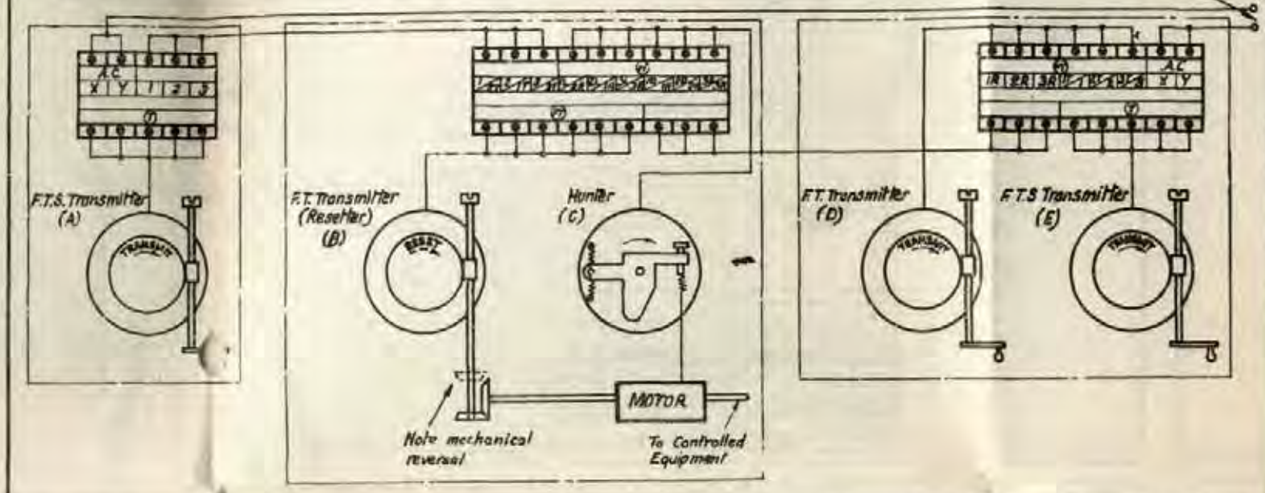
FITTING AND LINING-UP CONDITIONS

1. With A.C. supplies and motor power "off" set all transmissions and the controlled equipment to the zero or datum line.
2. Mesh all Magslip transmitters with pegs in position, arranging pinions (where fitted) in centre of stator racks as far as possible.
3. Set up Hunter with the operating arm horizontal and fit sensitive Valve attachment. Remove lining-up pegs.
4. With motor power only "on" adjust the Hunter arm screw on the sensitive valve stem until motor stops. Check by deflecting the arm gently in each direction. Restore the controlled equipment to the zero or datum line.
5. check all electrical connections with the diagram
6. Switch on the Magslip A.C. supply. The controlled equipment should remain steady in its zero position. slight deflections can be rectified by turning the stator body of one of the Transmitters by means of the pinion & rack.
7. check each transmission in turn against the controlled equipment for correct mechanical rotation.
8. The foregoing instructions apply generally to all oil motor controls with spring-centred Hunters. For "free" Hunters for oil motors of contact operation the Transmitter or Resetter. Stator should if necessary be adjusted to position the Hunter arm in a central position with Magslip supply only "on", before applying power to the system.

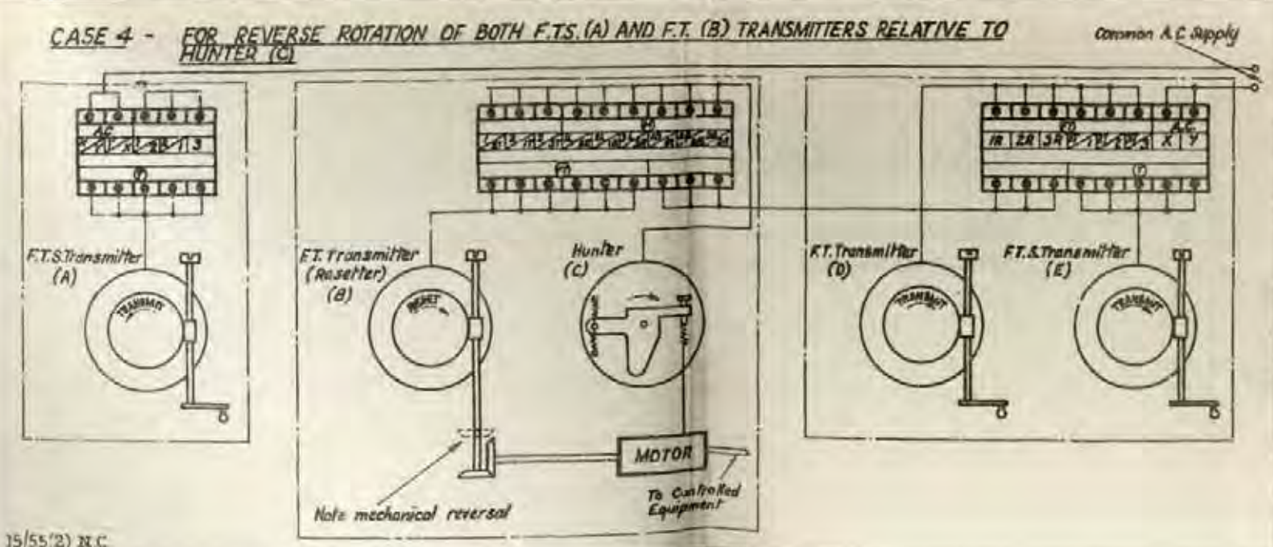
CASE 2 - FOR REVERSE ROTATION OF F.T.S. TRANSMITTER (A) RELATIVE TO HUNTER (C)



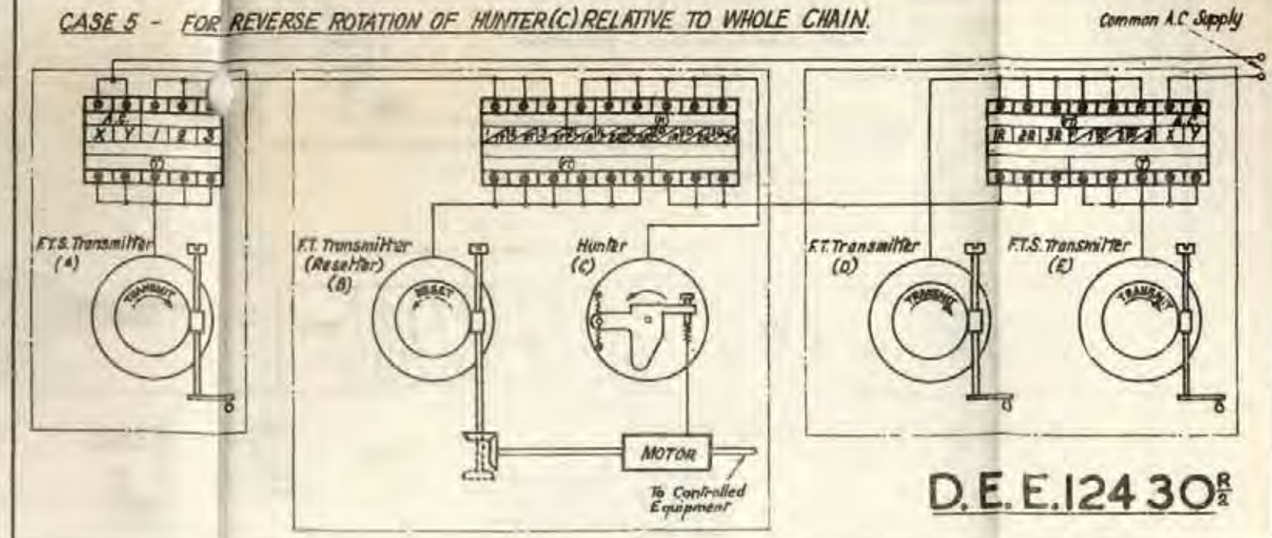
CASE 3 - FOR REVERSE ROTATION OF F.T. TRANSMITTER (B) RELATIVE TO HUNTER (C)



CASE 4 - FOR REVERSE ROTATION OF BOTH F.T.S. (A) AND F.T. (B) TRANSMITTERS RELATIVE TO HUNTER (C)



CASE 5 - FOR REVERSE ROTATION OF HUNTER (C) RELATIVE TO WHOLE CHAIN.



D.E.E. 12430/R2

Navy Order 332 of 1955 Diagram (1).

LINING - UP INSTRUCTIONS

Lining-up despite Power transmissions

Wiring between instruments must be checked completely through before proceeding as follows

All rotational directions are as looking on the spindle end of the machine.

References thus :- (1) or (2) indicate proper sequence of adjustments.

(0) indicates that no adjustment should be applied

Lining-up adjustments for one motor controlled from one or more positions by 2 or 3 Element chain or chains - Cases Nos 1-9 inclusive & 12.

1. A.C. Off. Motor Power Off.
2. Set hand or sensitive drive(s) to lining up mark.
3. Set power drive to lining-up mark.
4. Mesh transmitter(s) with lining-up peg in place.
5. Mesh resetter, if any, with lining-up peg in place.
6. Remove lining-up pegs.
7. Set up spring loaded hunter with arm horizontal.
8. Motor Power On.
9. Adjust screw (1) until stray motor stops or relay is in balance.
10. Check connections according to diagram.
11. A.C. On. Approximate coincidence should be obtained and correct rotation of power side for all positions of C.O.S., if any.
12. To obtain exact coincidence for each position of the C.O.S. adjust pinion (2) of the corresponding control transmitter. Resetter pinion (0) needs no adjustment.

Lining-up adjustments for more than one motor controlled from one common transmitter through C.O.S. Case 10.

Note:- A common transmitter can, in general, control several automatics follow in 3 Element chains only.

1. A.C. Off. Motor Power Off.
2. Set hand or sensitive drive(s) to lining-up mark.
3. Set power drives to lining-up mark.
4. Mesh transmitter with lining-up peg in place.
5. Mesh resetters with lining-up peg in place.
6. Remove lining-up pegs.
7. Set up each spring loaded hunter with arm horizontal.
8. Motor Power On.
9. Adjust each screw (1) until the corresponding motor stops or the relay is in balance.
10. Check connections according to diagram.
11. A.C. On. Approximate coincidence should be obtained and correct rotation of each power side for all positions of C.O.S.
12. To obtain exact coincidence for each position of the C.O.S. adjust pinion (2) of the corresponding resetter. Transmitter pinion (0) needs no adjustment.

Case II. This is as case 10, but one motor can also be controlled from an individual transmitter.

Lining-up procedure :- As for case 10 operations 1-12 inclusive.

13. Adjust pinion (3) of individual transmitter to obtain exact coincidence.

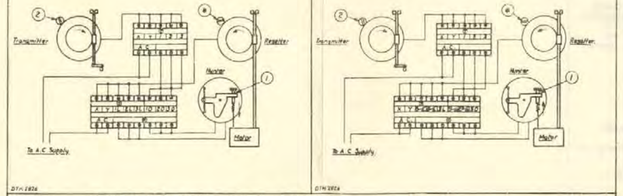
DTM 2826

CASE 1 — PREDETERMINED MECHANICAL CONDITIONS :-

3 ELEMENT CHAIN

(a) Transmitter is turned clockwise.
(b) In order to make motor follow correctly, hunter must be offset clockwise
(c) In following correctly, motor turns resetter anti-clockwise

CASE 1A — The same connections apply when each of the above directions of rotation is reversed.



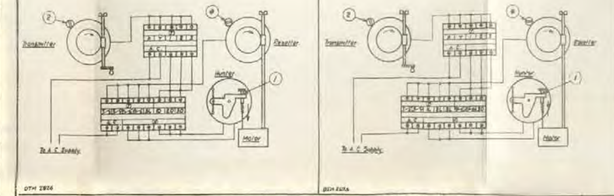
DTM 2826

CASE 2 — PREDETERMINED MECHANICAL CONDITIONS :-

3 ELEMENT CHAIN

(a) Transmitter is turned anticlockwise
(b) In order to make motor follow correctly, hunter must be offset anti-clockwise
(c) In following correctly, motor turns resetter anti-clockwise

CASE 2A — The same connections apply when each of the above directions of rotation is reversed



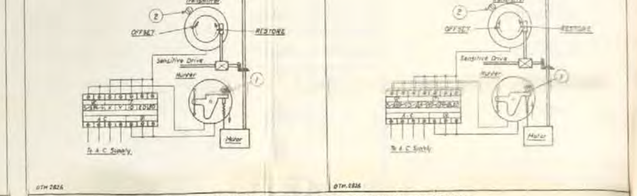
DTM 2826

CASE 3 — PREDETERMINED MECHANICAL CONDITIONS :-

3 ELEMENT CHAIN

(a) Transmitter is turned clockwise
(b) In order to make motor follow correctly, hunter must be offset anticlockwise
(c) In following correctly, motor turns resetter clockwise

CASE 3A — The same connections apply when each of the above directions of rotation is reversed.



DTM 2826

CASE 4 — PREDETERMINED MECHANICAL CONDITIONS :-

3 ELEMENT CHAIN

(a) Transmitter is turned anticlockwise
(b) In order to make motor follow correctly, hunter must be offset anti-clockwise
(c) In following correctly, motor turns resetter clockwise.

CASE 4A — The same connections apply when each of the above directions of rotation is reversed

DTM 2826

CASE 5 — PREDETERMINED MECHANICAL CONDITIONS :-

2 ELEMENT CHAIN

(a) Transmitter is offset clockwise
(b) In order to make motor follow correctly, hunter must be offset clockwise
(c) In following correctly, motor restores transmitter anti-clockwise.

CASE 5A — The same connections apply when each of the above directions of rotation is reversed

DTM 2826

CASE 6 — PREDETERMINED MECHANICAL CONDITIONS :-

2 ELEMENT CHAIN

(a) Transmitter is offset anti-clockwise
(b) In order to make motor follow correctly, hunter must be offset anti-clockwise
(c) In following correctly, motor restores transmitter anti-clockwise
The same connections apply when each of the above directions of rotation is reversed.

CASE 6A

DTM 2826

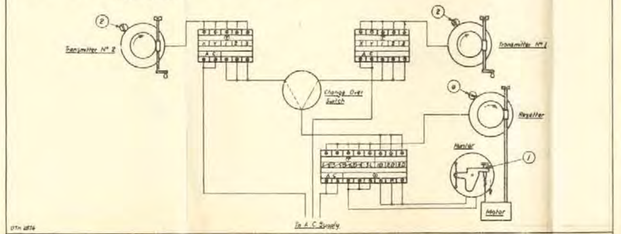
CASE 7 — TWO TRANSMITTERS OPERATING THROUGH CHANGE OVER SWITCH

PREDETERMINED MECHANICAL CONDITIONS :-

Transmitter No 1 is turned clockwise
Transmitter No 2 is turned clockwise — To produce the same effect
In order to make motor follow correctly, hunter must be offset clockwise
In following correctly motor turns resetter clockwise

For other mechanical conditions of hunter and resetter refer to cases 1-4 also

CASE 7A — The same connections apply when each of the above directions of rotation is reversed.



DTM 2826

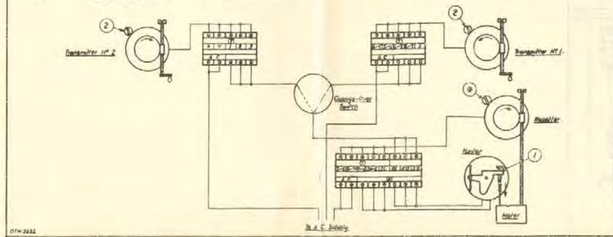
CASE 8 — TWO TRANSMITTERS OPERATING THROUGH CHANGE OVER SWITCH

PREDETERMINED MECHANICAL CONDITIONS :-

Transmitter No 1 is turned anti-clockwise — To produce the same effect
Transmitter No 2 is turned clockwise
In order to make motor follow correctly, hunter must be offset clockwise
In following correctly, motor turns resetter clockwise

For other mechanical considerations of hunter and resetter refer to cases 1-4 also

CASE 8A — The same connections apply when each of the above directions of rotation is reversed

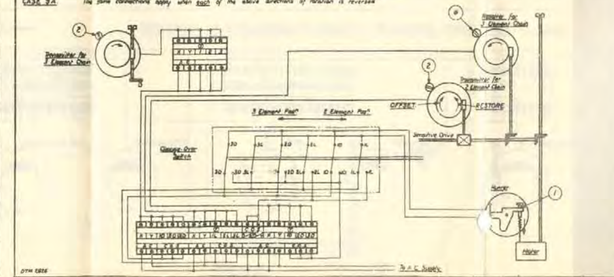


DTM 2826

CASE 9 — 2 OR 3 ELEMENT CHAIN OPERATING THROUGH CHANGE - OVER SWITCH. (SEE ALSO CASE 12)

Conditions for 3 or 2 Element position as Case 1 or Case 2

CASE 9A — The same connections apply when each of the above directions of rotation is reversed



DTM 2826

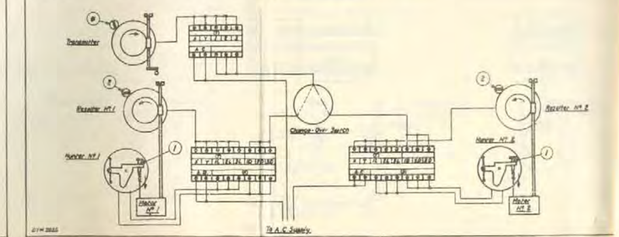
CASE 10 — ONE TRANSMITTER OPERATING TWO POWER SYSTEMS THROUGH CHANGE OVER SWITCH

PREDETERMINED MECHANICAL CONDITIONS :-

Transmitter is turned clockwise
In order to make motors follow correctly, hunters must be offset clockwise
In following correctly, motors turn resetters anti-clockwise

For other mechanical conditions refer to cases 1-4 also

CASE 10A — The same connections apply when each of the above directions of rotation is reversed



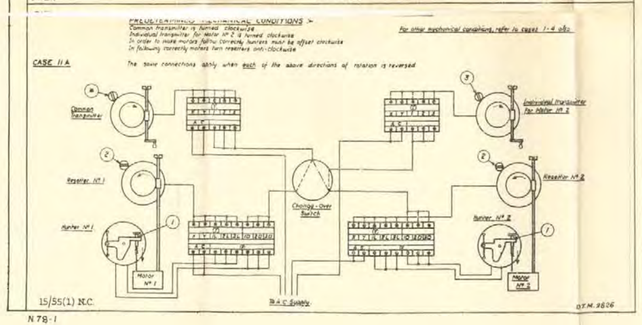
DTM 2826

CASE 11 — PREDETERMINED MECHANICAL CONDITIONS :-

Common transmitter is turned clockwise
Individual transmitter for Motor No 2 is turned clockwise
In order to make motors follow correctly hunters must be offset clockwise
In following correctly motors turn resetters anti-clockwise

For other mechanical conditions, refer to cases 1-4 also

CASE 11A — The same connections apply when each of the above directions of rotation is reversed.



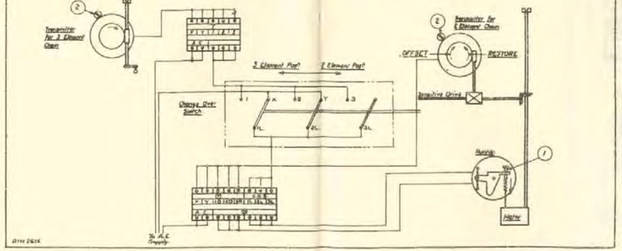
15/55(1) N.C.

DTM 2826

CASE 12 — 2 OR 3 ELEMENT CHAIN OPERATING THROUGH CHANGE OVER SWITCH (SEE ALSO CASE 9)

Conditions for 3 or 2 Element position as Case 1 or Case 2

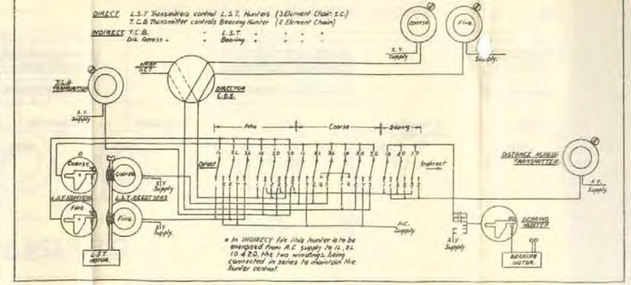
CASE 12A — The same connections apply when each of the above directions of rotation is reversed



DTM 2826

CASE 13 — 2 & 3 ELEMENT CHAINS WITH SECTOR CONTROL OPERATING THROUGH DIRECT-INDIRECT CHANGE-OVER-SWITCH

DIRECT L.S.T. Transmitters control L.S.T. Hunters (3 Element Chain S.C.)
T.C.B. Transmitter controls Bearing Hunter (2 Element Chain)
INDIRECT T.C.B. " L.S.T. " " " "
Bearing " Bearing " " " "



* In INDIRECT for this hunter to be energised from A.C. supply its 1, 2, 10 & 20, the two windings being connected in series to change the hunter control.

MAGSLIP POWER CONTROL OF F. C. SYSTEMS.

DIAGRAMS OF INTERNAL CONNECTIONS & TERMINAL MARKINGS FOR PREDETERMINED MECHANICAL CONDITIONS. AND LINING-UP NOTES.

N 78-1

Lining-up Magslip Power Transmission

Wiring between instruments must be checked com
proceeding as follows
All rotational directions are as looking on the sh

References thus :- (1) or (2) indicate proper sag
(*) indicates that no adjust

Lining-up adjustments for one motor controlled by 2 or 3 Element chain or chains - Cases N

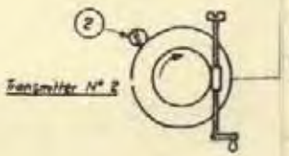
1. *A.C. Off. Motor Power Off.*
2. *Set hand or sensitive drive(s) to lining-up m*
3. *Set power drive to lining-up mark.*
4. *Mesh transmitter(s) with lining-up peg in pla*
5. *Mesh resetter, if any, with lining-up peg in*
6. *Remove lining-up pegs.*
7. *Set up spring loaded hunter with arm ho*
8. *Motor Power On.*
9. *Adjust screw (1) until either motor stops or*
10. *Check connections according to diagram.*
11. *A.C. On Approximate coincidence should be rotation of power side for all positions*
12. *To obtain exact coincidence for each posi pinion (2) of the corresponding control*
    Resetter pinion (*) needs no adjustme

DTM 2826

CASE 7 — TWO TRANSMITTERS PREDETERMINED

Transmitter No 1 is turned
Transmitter No 2 is turned
In order to make motor follo
In following correctly mak

CASE 7A — *The same connections apply when rotation is reversed*



DTM 2826

Housing Requirements

8. Particular attention should be given in all designs of equipment to ensure that magslip elements are adequately housed. Guidance drawings for this purpose are given in A.R:L. Drawing B/2999/6, copies of which may be obtained from the Secretary, Navy Office, on application, when a specific requirement exists.

9. Two points, however, require emphasis -

(a) Stator adjusting pinions are to be fitted wherever the types of magslip elements provide for these.

(b) Arrangements are to be made for the provision of adequate access to the lining-up slot and hub of all magslip elements on the basis of using normal (straight) lining-up pegs wherever possible. Where this is not practicable, arrangements must be made for the insertion and removal of special lining-up pegs designed to meet the requirements of the particular equipment, and supply of these special pegs for the use of installation staff and ship's staff should be arranged, preferably by stowage within the apparatus.

(The foregoing is the text of A.F.O. 487/1955 altered to meet R.A.N. conditions.)

(4430/1/24)

333.

AZIMUTH CIRCLE, M.N. TYPE - ALLOWANCE FOR MAGNETIC COMPASS OBSERVATIONS.

In order to assist observations for magnetic variation at sea, the Admiralty have authorised an allowance of a (Kelvin) M.N. Type Azimuth Circle for the magnetic compass, Pattern 0195A, in addition to the standard Azimuth Circle, Pattern 1950, for surveying ships and other selected vessels vide Admiralty Fleet Order 2916/1954.

2. It is not intended, however, that the allowance be applicable in the Royal Australian Navy and since the relevant Admiralty Establishments of Sea Stores, which are normally automatically applicable in the R.A.N., will be amended to include the allowance, all concerned should note the relevant amendment, when received, accordingly.

(4518/36/324)

334.

A/S WEAPONS - SQUID - CARTRIDGES A/S 1900 GRAINS, MARK 23.

A instance recently occurred where the cup sealing in a Cartridge A/S filled 1900 grains Mark 23 was not inserted to the stipulated distance called for by the design. This caused the cup to stand proud on the Adapter Squid Practice thus preventing the cartridge from entering the container far enough for the breech block to be closed.

2. R.A.N. Armament Depots have been instructed to arrange for outfits to be exchanged as sufficient cartridges are examined or become available from manufacture.

(The foregoing is the text of A.F.O. 222/1955 altered to meet R.A.N. conditions.)

(4433/72/131)

335.

A.B.C.D. - RESPIRATORS, ANTI-GAS - POLICY AS TO TYPE AND SCALE OF SUPPLY.

Two types of respirator, 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 (see paragraph 5). Both types will continue in service until replaced by a new respirator which is being designed to give a greater degree of comfort.

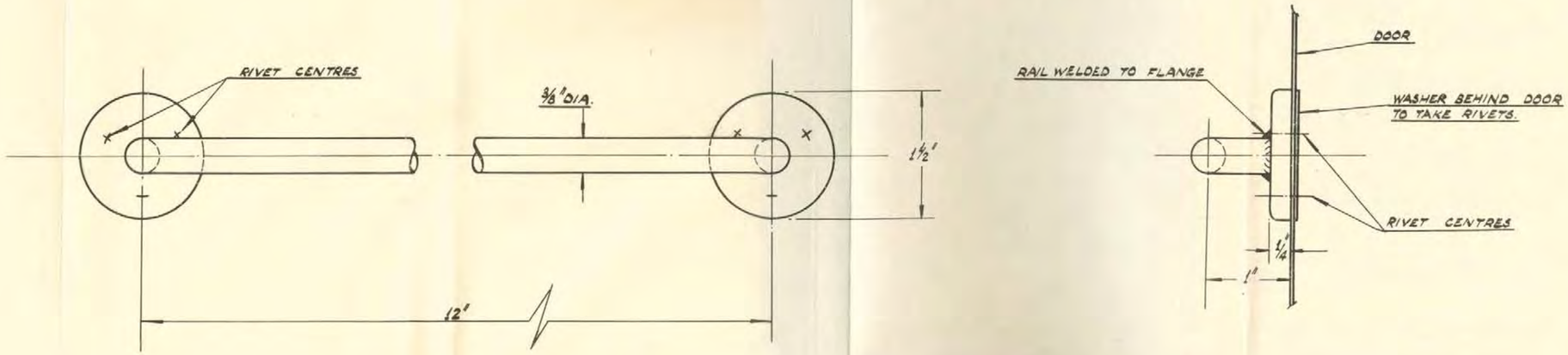
2. The normal issue in the Royal Australian Navy will be the G.S. respirator but stocks of the Light Type are available for issue in accordance with Confidential Navy Order 48 of 1953 for the use of Officers and Ratings whose action duties necessitate clear speech.

UNCLASSIFED		
NAVY OFFICE MELBOURNE		
DRG. Nº. 0/2764		
DATE. 8 - 3 - 54.		
TRACING Nº. 1		COPY Nº.
DRAWN	M.C.	APPROVED.
TRACED	D.B.D.	
CHECKED	G.C.L.	9/3/55 for C. of C.

TOWEL RAIL FOR TYPE 'C' KIT LOCKERS

SCALE :- FULL SIZE.

MATERIAL :- ALUMINIUM ALLOY.



NOTES:-
TO BE SECURED BY 3 IN Nº 3/16" RIVETS IN EACH FLANGE.
RAIL TO BE POSITIONED AS NEAR TO TOP OF DOOR AS POSSIBLE.

3. The disinfection and exchange of respirators are to be arranged within the local A.B.C.D. school, or if this is not possible, on board.

4. The pattern of Light type respirator which has been adopted as standard for general use is -

Respirator, Anti-gas, Light Type, Normal, Small and Large.

This has the container Mark 2 on the left cheek and a holder valve L3 or L5 which incorporates a speech device. This speech device enables speech to be carried on with minimum loss of clarity.

5. It is important that Light type respirators are used primarily by personnel whose duties require them to speak into telephones, microphones or voice pipes, e.g., communication numbers, quartermasters and telephone switchboard operators. This includes civilian telephone operators in shore establishments.

(The foregoing is the text of A.F.O. 413/1955 altered to meet R.A.N. conditions.)

(4428/67/78)

336.

FURNITURE - KIT LOCKERS, TYPE "C" - ADDITION OF TOWEL RAIL.

Approval has been given for external towel rails to be fitted on the doors of all Type "C" Kit Lockers at present in service in H.M.A. Ships. One rail is to be fitted to either the left or right hand door of the locker, as convenient.

2. The rails should be made by a Dockyard and fitted by the Ship's staff. Navy Order 336 of 1955 Diagram shows a suitable arrangement.

3. Commanding Officers of ships affected should insert an item in their next defect list to cover this work.

(The foregoing is the text of A.F.O. 1350/1954 altered to meet R.A.N. conditions.)

(4355/1/29)

337.

NAVAL STORES (GENERAL) (CLASS F, GROUP 1C, PART 2) - PORTABLE FUSEBOARDS, PATTERN 25044 - INCREASE IN ALLOWANCES.

In order to improve flexibility in restoring electric power supplies, the allowance for Damage Control purposes of portable fuseboards, Pattern 25044 to H.M.A. River Class Frigates has been increased from two to three.

2. Supply to Ships in Commission concerned will be effected by the (Superintending) Naval Store Officer, Sydney, without demand. Dormant demands for Ships in Reserve will be prepared by the storing yard concerned.

3. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 340/1955 altered to meet R.A.N. conditions.)

(4518/14/115)

338.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2A, PART 1) - BRUSHES, CARBON PATTERN 104 - INTRODUCTION.

H.M.A. Ships and Establishments.

Investigation has shown that Brushes, Carbon, laminated, Pattern 2110, supplied as spares for small motors, Patterns 830, 831 and 11042, require minor modification before fitting. It has been decided, therefore, to introduce a new brush which will be suitable for use on a wider range of small motors including the foregoing, to supersede Pattern 2110.

2. The full description of the brush, which will be dealt with as a consumable item of Naval Stores, under Class F, Group 2A, Part 1, is as follows :-

Pattern No.	
104	Brush, carbon, laminated, for small motors, Patterns 830, 831, 10940, 10940A, 10957, 11042, 11049 and 11049A.

3. Existing stocks of brushes, Pattern 2110, are to be used until expended for motors, Patterns 11042, 830 and 831, only.

4. The relevant publications will be amended

(The foregoing is the text of A.F.O. 421/1955 altered to meet R.A.N. conditions.)

(4518/20/196)

339.

NAVAL STORES - UNIT, LENS AND CONE, 20 IN. FOR F.24 CAMERAS - ALLOWANCES.

It has been decided that each survey ship shall be allowed a Unit, Lens and Cone 20-in. Ref. 14A/4119, for use with the F.24 camera, when photographing objects from a considerable distance.

2. Supply of the above items to H.M.A. Ships WARREGO and BARCOO will be effected by the (Superintending) Naval and Air Store Officer, Sydney, without demand when stocks become available.

3. The Establishment of Sea Stores for Photographic Purposes - B.R.386 - will be amended.

(The foregoing is the text of A.F.O. 415/1955 altered to meet R.A.N. conditions.)

(4518/50/250)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

340.

MEDICAL STORES - NON SCALE ITEMS OR EXCESS OF SCALE QUANTITIES.

The scales of medical stores laid down for use in the Royal Australian Navy are not intended to be exhaustive, particularly in regard to the Service Afloat Scales. They are intended as a basic outfit of equipment and medicaments in general use, of sufficient scope to enable the average Medical Officer to treat the ailments and injuries commonly encountered in his practice. They are not inflexible and are amended as necessary by removal or addition of items when evidence of requirement, or of current trends, shows this to be desirable. There are many factors involved in amending the scales and it is not economically possible or desirable to include all current items. It will be seen, therefore, that irregular methods of obtaining medical stores are likely to suppress evidence that amendments of scales are necessary.

2. It is the duty of each Medical Officer when serving afloat, to ensure that he is carrying adequate medical stores according to the appropriate scale, taking into consideration the employment of the ship, and the availability of further Service supplies.

3. When a ship is about to proceed to an area where there is no Service medical store depot, the Medical Officer should, in his own interest, demand such medical stores as he considers necessary, before leaving for the area. Where no Medical Officer is borne the Commanding Officer is to seek the advice of the nearest Naval Medical authority on this aspect. The present R.A.N. scales are based on an average 6 monthly expenditure.

4. The scale of medical stores for R.A.N. hospitals is considerably greater in range and quantity than those for the Service Afloat for obvious reasons, but many items available to civilian practitioners are not carried as scale items even in R.A.N. hospitals.

5. In the event of non-scale items, or excess of scale quantities, being required in order to treat patients who have been ordered treatment by Consultants or Specialists, or in order to meet special circumstances not covered by items on the R.A.N. scales of medical stores, the Senior Medical Officer of the Ship or Establishment or Commanding Officer may anticipate approval of the supply of such special items in the quantities ordered by the Consultant or Specialist, or necessary to meet the circumstances, provided the need is -

(a) Lifesaving.

(b) Urgent.

(c) Essential for the recovery of the patient.

(In all other instances prior approval of the Director of Naval Medical Services is to be obtained, a copy of the request being sent to the Medical and Dental Store Officer concurrently.) Supply is to be arranged according to the following order of availability, modified where urgency needs immediate procurement :-

(i) R.A.N. Medical Store.

(ii) Another R.A.N. Ship or Establishment, in the vicinity.

(iii) Medical Store of other Services.

(iv) Local purchase, ensuring that usual discount for Government supplies is allowed.

6. In order that the Director of Naval Medical Services may consider the items procured under the above conditions, a monthly report of non-scale procurements of medical stores is to be made to the Director of Naval Medical Services by the Medical Officer-in-Charge, only if purchases have been made. The report is to give full details of each item of stores and the diagnosis of the case for which it is required.

7. Navy Order 389 of 1953 is hereby cancelled.

(The foregoing is the text of A.F.O. 176/1955 altered to meet R.A.N. conditions.)

(4481/2/24)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

341.

CIVIL DEFENCE MANUAL OF FIRST AID.

The abovementioned book, which has been distributed to all Establishments is to be held on charge against the possible introduction of Civil Defence in Australia, of which due notice will be given.

2. Any Establishment not yet in receipt of a copy is to place a demand with the (Superintending) Naval and Air Store Officer, Sydney.

(4139/42/164)

Photo-lithographed, by Authority:
W. M. HOUSTON, Government Printer, Melbourne.

C.N.Os. 342-354/55

RESTRICTED

(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
26th May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

TABLE OF CONTENTS

SECTION 2 - PERSONNEL

342.

Kits - Kit Lists for Chief Petty Officers and Petty Officers.

The maintenance of Kits Lists, Forms S.98 and S.98A, in accordance with Q.R. and A.I., Article 3128 (2) is no longer necessary for Chief Petty Officers and confirmed Petty Officers and is to be discontinued.

2. Q.R. and A.I. will be amended.

(The foregoing is the unaltered text of A.F.O. 262/1955)

(4716/1/215)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

343.

Radar - Types 262/M/P - Observation of Fall of Shot in Surface Fire.

Trial has shown that it is possible to see the splashes of 4-in. and 4·5-in. shell on Type 262 out to the maximum range of the set. To make use of this facility it is necessary to superimpose a simple graduated range scale on the ranging tube of Type 262.

2. Ships in which C.R.B.F. Directors control 4-in. and larger guns are, therefore, to construct and fit across the ranging tube just below the trace a suitable celluloid scale. The scale should be graduated from 0 to 7,000 yards in 250-yard steps.

3. In the trial there was no noticeable difference between the size of splash echoes from H.E. and SU practice shell.

(The foregoing is the unaltered text of A.F.O. 476/1955)

(4519/31/649)

344.

Wireless - Receiver Outfits CAY, CAZ, CDW and CDY - Modified Receivers B40 A.P.57140D and B41 A.P.57141C - Introduction.

Existing patterns of Receivers B40 and B41 are fitted with valves which are not in the joint-service list of approved valves and which will become difficult to obtain in the future.

2. With the introduction of Radio Teletype (R.A.T.T.), it has become necessary to provide Receivers B40 with certain additional features to facilitate the operation of R.A.T.T. circuits.

3. Receivers B40 and B41 are therefore being modified and will be known as Receiver B40 A.P. 57140D and Receiver B41 A.P. 57141C respectively.

4. *Receiver B40 A.P. 57140D.*—(*a*) The new receiver A.P. 57140D will include the following modifications :—

(i) Provision of a fine tuning control for R.A.T.T. operation.

(ii) Two additional positions on the system switch for R.A.T.T. operation.

(iii) The use of valves which are on the current joint-service list of approved valves.

(*b*) The receiver will be adapted for Common Aerial Working, and will also be suitable for use in place of Receivers A.P. 57140B and 57140C.

5. *Receiver B41 A.P. 57141C.*—The new receiver A.P. 57141C, will utilise only those valves which are on the current joint-service list of approved valves. The external appearance of the receiver will remain unchanged, and will be suitable for use in place of Receiver A.P. 57141B.

6. *Publications.*—(*a*) *Establishment Lists.*—Amendments to E935 for Receiver Outfits CDW and CDY and E1101 for Receiver Outfits CAY and CAZ will be issued for the modified Receivers B40 and B41.

(*b*) *Installation Specification.*—Addendum "A" to Specification B649/R1 is being issued.

(*c*) *Handbooks.*—New editions of the handbooks are being prepared and it is anticipated that they will become available at the end of 1955.

(The foregoing is the unaltered text of A.F.O. 409/1955)

(4519/11/985)

345.

Guns - Q.F., 4.5-in., Mark 5 - Modification to Bracket, Control, Air Blast and Introduction of Funnel, Filling, Air Blast Control Oil Reservoir.

The following modification is approved :—

Gun	Q.F., 4·5-in., Mark 5.
Part affected	BP 092 BRACKET, control, air blast, left gun assembly. BP 105 BRACKET, control, air blast, right gun assembly.
Purpose	To prevent grit entering the reservoir of the air blast control bracket, through the 0·1-in. vent hole.
Nature of modification	Cover, air blast control bracket (BP 470) to be drilled and tapped for V.3 steel plug. Fit plug with screw (BP 541) and lock washer (BP 468) and drill vent hole in plug after assembly in cover.
Drawing	N.O.D. 3175/72.
New parts required	BP 541 SCREW, CH. hd., air blast control bracket cover. (6 BA × ·2-in., long B.S. 57 : 44.) BP 468 WASHER, shakeproof. Type 12 (6 BA nominal dia.). Plug (V.3 Steel) to be provided locally.
By whom to be done	R.N. Armament depots.
When to be done	As soon as possible.

2. Spare BP 092 and BP 105 BRACKETS on board H.M. ships are to be modified concurrently.

3. To prevent the entry of grit and other foreign matter with the oil when filling the reservoirs of the air blast valve bracket, a funnel fitted with a gauze strainer has been introduced and will be supplied on the basis of 1 per mounting. The funnel is designated as follows :—

AT 076 FUNNEL, filling, air blast control oil reservoir.

4. Schedule of Modifications, Part 1.

Gun—Q.F., 4·5-in., Mark 5 and Accessories.

Add Serial No. 22.

(The foregoing is the unaltered text of A.F.O. 411/1955)

(4428/26/123)

346.

Anti-Submarine - Asdic Type 147F - Hydraulic System Failures.

Instances have occurred of erratic operation of the electro-hydraulic system of Type 147F. The three main causes are incorrect setting of the pressure relief valve, incorrect setting of the diaphragm valve and bad adjustment of the diaphragm switch.

2. In all ships where this trouble is experienced the following procedure is to be carried out :—

(*a*) Connect a high pressure gauge (0–1,000 p.s.i.) to the pressure relief valve either at the end plug position or at the alternative inlet port A indicated on Plate 11D of B.R. 1667(2). This will be used to indicate the setting of the relief valve.

(*b*) Connect a low pressure gauge (0–50 p.s.i.) to the alternative outlet port B on the pressure relief valve. This will be used to indicate the setting of the diaphragm valve.

(*c*) Check that the diaphragm switch has been adjusted in accordance with Chapter VII–64 of B.R. 1667(2).

(*d*) Switch the gear to "Raise" or "Lower" and observe the pressure gauges at the end of its travel. The high pressure gauge should indicate the setting of the pressure relief valve and if this is correctly adjusted the low pressure gauge will indicate the operating pressure of the diaphragm switch. The pressure relief valve should operate at 400–450 p.s.i. and this can be adjusted by means of the adjusting screw and lock nut at the right hand end of the relief valve.

The diaphragm valve should operate at 25–30 p.s.i. It should not normally require adjustment but adjusting nut G shown on Plate 11D of B.R. 1667(2) is provided for this purpose. If difficulty is experienced it may be more convenient to fit a new diaphragm valve complete with switch.

(*e*) On satisfactory checking of the requirements of (*d*) above it may be necessary to adjust the diaphragm switch whilst the gear is being operated, to obtain consistent performance.

3. B.R. 1667(2), Advance Information on Servicing Instructions for Asdic Set Type 147F, is being amended.

(The foregoing is the unaltered text of A.F.O. 489/1955)

(4518/11/237)

347.

Naval Stores (General) (Class B, Group 2b) - Stainless Steel Bar to B.S.S. 970/EN.57 - Introduction in lieu of 13 per cent. Chromium Steel Bar.

The Stainless Steel Bar, 18 per cent. Chromium, 2 per cent. Nickel, to B.S.S. 970/EN. 57 shown in the Appendix to this Order will be added to the Rate Book and Authorised List of Naval Stores under Class B, Group 2b, Schedule 157, for steam valve spindles etc., in replacement of 13 per cent. Chromium Steel Bar, Pattern numbers 34000 to 34017 inclusive which will be marked "O".

2. No further purchase of 13 per cent. Chromium Steel Bar will be made but this material should continue to be demanded for suitable services until stocks are exhausted.

(The foregoing is the unaltered text of A.F.O. 347/1955)

(4505/21/58)

APPENDIX

Bar, Stainless Steel, 18 per cent. Chromium, 2 per cent. Nickel, to B.S.S. 970/EN.57, Round.

Pattern No.	*Diameter*	*Weight per ft.* lb.	*Denom.*
34020	5/16-in.	0·094	Ft.
34021	⅜-in.	0·167	Ft.
34022	7/16-in.	0·261	Ft.
34023	½-in.	0·376	Ft.
34024	⅝-in.	0·668	Ft.
34025	¾-in.	1·043	Ft.
34026	⅞-in.	1·502	Ft.
34027	1-in.	2·670	Ft.
34028	1⅛-in.	4·172	Ft.
34029	1¼-in.	6·008	Ft.
34030	1½-in.	8·178	Ft.
34031	2-in.	10·681	Ft.
34032	2½-in.	13·52	Ft.
34033	2¾-in.	16·69	Ft.
34034	2⅞-in.	20·19	Ft.
34035	3-in.	24·03	Ft.
34036	3½-in.	32·71	Ft.
34037	4-in.	42·73	Ft.

348.

Naval Stores (General) (Class B, Group 2d) - Stud Bolts, Studs, Nuts and Washers for High Temperature and Pressure Steam Systems.

The stud bolts, studs, nuts and washers shown in the Appendix are being added to the Rate Book for Naval Stores under Class B, Group 2d (Schedule 92B) for all steam services working at temperatures above 750° F. and below 900° F.

2. The use of washers, mild steel, case hardened, introduced for chrome molybdenum stud bolts has been extended to hardening up high pressure pipe joints of steam systems of 300 lbs./sq. in. and above and of water systems of 500 lbs./sq. in. and above.

(The foregoing is the unaltered text of A.F.O. 232/1955)

(4505/23/70)

APPENDIX

Pattern No.	Description

Schedule 92B.

Stud Bolts, Studs and Nuts (Specn. E-in-C Fa5) (for high temperature and pressure steam services operating above 750° and below 900° Fahrenheit).

Stud Bolts, Chrome Molybdenum (En.20T) B.S.F. thread.

	Diameter in.	*Length of thread at each end inclusive of chamfer in.*	*Plain length in.*	*Gauge length in.*
32610	¼	1	1¼	3¼
32621	⅜	1¼	1½	4
32622			1¾	4¼
32623			2	4½
32624			2¼	4¾
32625			2½	5
32626			2¾	5¼
32627			3	5½
32628			3½	5¾
32629			3¾	6¼
32630	½	1¼	2½	5½
32631			2¾	5¾
32632	⅝	1¾	2½	6
32633			2¾	6¼
32634			3	6½
32635	¾	1¾	3½	7¼
32636	1¼	2¼	4	8½
32637			4¾	9
32638	1½	2½	4½	9
32639			5¼	9¾
32640	1¾	2½	5¾	10¾
32641	1½	2¾	5¾	11½
32642			6¼	12
32643			6¾	12¼

Studs, Chrome Molybdenum (En.20T) B.S.F. thread.

	Diameter in.	*Length overall in.*
32720	5/16	2
32725	⅜	2
32726		2½
32727		2¾
32728		3½
32729		3¾
32734	7/16	2½
32739	½	2¾
32740		2½
32741		2¾
32742		3
32743		4
32748	⅝	2¾
32749		3
32750		3½
32751		3¾
32752		4
32757	¾	3½
32758		3¾
32759	⅞	3¾
32760		4
32765	1	4
32766		4½
32767		4¾
32772	1¼	4¾
32777	1½	5¾

Nuts, Carbon Molybdenum Electro plated with copper Hexagonal B.S.F. thread.

	Nominal diameter in.
32658	5/16
32659	⅜
32660	7/16
32661	½
32662	⅝
32663	¾
32664	1
32665	1¼
32666	1½
32667	1¾
32668	1¾

Pattern No.	Description
	Washers, Mild Steel, Case Hardened (Specn. E-in-C Fa5) (for use with bolting materials for high pressure piping sytems).
	Nominal diameter
	in.
32678	$\frac{3}{8}$
32679	$\frac{7}{16}$
32680	$\frac{1}{2}$
32681	$\frac{9}{16}$
32682	$\frac{5}{8}$
32683	$\frac{3}{4}$
32684	1
32685	$1\frac{1}{8}$
32686	$1\frac{1}{4}$
32687	$1\frac{3}{8}$
32688	$1\frac{1}{2}$

349.

Naval Stores (General) (Class B, Group 3) - R.U. Locker for Detonators - Introduction.

Aluminium-alloy R.U. Locker, Pattern 30016, has been added to the Rate Book for Naval Stores for storage of detonators (4 boxes) in destroyers, frigates, etc., where a light-weight locker is necessary.

2. This locker will supersede the steel R.U. locker for detonators, Pattern 7171A, which should be marked "O".

(The foregoing is the unaltered text of A.F.O. 170/1955)

(4505/30/129)

350.

Naval Stores (General) (Class E, Group 2C) - Neoprene Type Synthetic Rubber Discs for 2-in. Firemain Hydrant Valves - Introduction.

Arrangements are being made for Neoprene Type Synthetic Rubber Discs for 2-in. Firemain Hydrant Valves to be added to the Rate Book and Authorised List of Naval Stores (B.R. 810) to meet additional requirements for discs for this type of valve. The dimensions of the disc are : internal diameter $\frac{1}{2}$-in., external diameter 3-in., thickness $\frac{1}{8}$-in. Pattern number 6334, under Class E, Group 2C, has been allocated.

2. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 3335/1954)

(4512/20/138)

351.

Naval Stores (General) (Class F, Group 1C, Part 5) - Electric Drilling Machines - Reduction of the Number of Types in the Rate Book and Authorised List of Naval Stores.

It has been decided to reduce the number of different types of Electric Drilling Machines of which stocks are at present held. The types detailed in Appendix A to this Order are obsolescent and will be deleted from the Rate Book and Authorised List of Naval Stores.

2. No further purchases will be made under these descriptions.

3. As indicated in paragraph 1, this action is being taken to reduce the number of different types of Electric Drilling Machines in use in H.M. Naval Service and thus simplify storekeeping and store accounting. Future requirements of the types made obsolescent are not, therefore, to be obtained by local purchase when stocks are exhausted, except in very exceptional circumstances which should be reported to the Admiralty accompanied by full reasons for the necessity for supply and an estimate of the future scale and duration of requirements.

4. Future purchases and stockholding for H.M. ships, Fleet and Air Establishments will be confined to the patterns detailed in Appendix B. Pattern numbers will no longer be given to each different contractors' make. The pattern numbers will, therefore, relate to a size, type and voltage.

5. H.M. dockyards and depots will not be restricted to the range referred to in paragraph 4. Each requirement should be premeditated and purchase will be arranged by (Superintending) Naval Store Officers separately.

6. Spares for Electric Drilling Machines will no longer be stocked and items of spares held should be returned to the nearest (Superintending) Naval Store Officer. Each machine as it becomes defective should be returned to the nearest (Superintending) Naval Store Officer and replacement demanded.

7. A separate Admiralty Fleet Order will be issued at a later date concerning the rationalisation of bench stands for use with portable drills.

8. Existing stocks of machines in store at dockyards and store depots should be surveyed with a view to classification and taking on charge under the pattern numbers detailed in Appendix B. Any machines of like voltage which can be utilized in lieu should be issued first. Stocks of $\frac{1}{2}$-in. machines should be used in lieu of $\frac{3}{8}$-in. machines, Patterns 33099 and 33100 until exhausted.

9. The Rate Book and Authorised List of Naval Stores and the relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 3339/1954)

(4518/17/175)

APPENDIX A

Machines, Drilling, Electric :—

$\frac{1}{4}$-in.	200/220 volt A.C./D.C.	$\frac{3}{8}$-in.	230/250 volt A.C./D.C.
$\frac{1}{4}$-in.	230/250 volt A.C./D.C.	$\frac{3}{8}$-in.	110/120 volt A.C./D.C.
$\frac{1}{4}$-in.	110/120 volt A.C./D.C.	$\frac{1}{2}$-in.	200/220 volt A.C./D.C.
$\frac{1}{4}$-in.	Sioux, all angle A.C./D.C.	$\frac{1}{2}$-in.	230/250 volt A.C./D.C.
		$\frac{1}{2}$-in.	110/120 volt A.C./D.C.
$\frac{3}{8}$-in.	200/220 volt A.C./D.C.	$\frac{1}{2}$-in.	200/220 volt A.C./D.C.
$\frac{3}{8}$-in.	230/250 volt A.C./D.C.	$\frac{1}{2}$-in.	230/250 volt A.C./D.C.
$\frac{3}{8}$-in.	110/120 volt A.C./D.C.	$\frac{1}{2}$-in.	110/120 volt A.C./D.C.
$\frac{1}{2}$-in.	200/220 volt A.C./D.C.	$\frac{1}{2}$-in. to $\frac{1}{2}$-in.	220/250 volt A.C./D.C.
$\frac{1}{2}$-in.	230/250 volt A.C./D.C.	$\frac{1}{2}$-in.	200/220 volt A.C./D.C.
$\frac{1}{2}$-in.	110/120 volt A.C./D.C.	$\frac{1}{2}$-in.	230/250 volt A.C./D.C.
$\frac{1}{2}$-in.	200/220 volt A.C./D.C.	$\frac{1}{2}$-in.	110/120 volt A.C./D.C.
$\frac{1}{2}$-in.	230/250 volt A.C./D.C.	1-in.	200/220 volt A.C./D.C.
$\frac{1}{2}$-in.	110/120 volt A.C./D.C.	1-in.	230/250 volt A.C./D.C.
$\frac{5}{8}$-in.	200/220 volt A.C./D.C.	1-in.	110/120 volt A.C./D.C.

APPENDIX B

Pattern	*Description*
	Machines, Drilling, Electric :—
33091	¼-in., light type, 220/250 volt, A.C./D.C., chuck model.
33092	¼-in., light type, 100/115 volt, A.C./D.C., chuck model.
33093	¼-in., heavy duty 220/250 volt, A.C./D.C., chuck model.
33094	¼-in., heavy duty 100/115 volt, A.C./D.C., chuck model.
33095	½-in., heavy duty 220/250 volt, A.C./D.C., chuck model.
33096	½-in., heavy duty 100/115 volt, A.C./D.C., chuck model.
33097	½-in., heavy duty 220/250 volt, A.C./D.C., morse taper shank.
33098	½-in., heavy duty 100/115 volt, A.C./D.C., morse taper shank.
33099	¾-in., heavy duty 220/250 volt, A.C./D.C., morse taper shank.
33100	¾-in., heavy duty 100/115 volt, A.C./D.C., morse taper shank.
33101	1-in., heavy duty 220/250 volt, A.C./D.C., morse taper shank.

352.

Naval Stores (General) (Class F, Group 2A, Part 3) - Automatic Emergency Lanterns - Issue "less relays".

H.M. Ships (excluding Submarines) and Shore Establishments concerned

Automatic Emergency Lanterns, Patterns 16012, 16012A, 16025 and 16258 are basically the same, but each contains a relay of a different voltage which determines the pattern number of the lantern. In view of difficulties which have been experienced in meeting demands for certain lanterns, it has been decided that, in future, the lanterns shall be purchased and supplied " less relays ".

A new pattern number has been allocated to the " bare " lantern which has been added to the Rate Book and Authorised List of Naval Store under Class F, Group 2A, Part 3 as follows :—

Pattern	*Description*	*Ships' Accounting Classification*
16457	Automatic Emergency Lantern (less relay)	Permanent

Stocks of the separate relays will continue to be maintained under existing pattern numbers but they are to be demanded and supplied as separate items of Permanent Sea Stores when stocks of lanterns, Patterns 16012, 16012A, 16025 and 16258 have been expended.

2. The following lanterns will be marked " O " in the Rate Book from which they will be deleted in due course :—

Pattern	*Description*
16012	Automatic Emergency Lantern, 220v. D.C.
16012A	Automatic Emergency Lantern, 110v. D.C.
16025	Automatic Emergency Lantern, 230v. A.C.
16258	Automatic Emergency Lantern, 115v. A.C.

3. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 349/1955)

(4518/22/252)

SECTION 4 - DENTAL STORES, MEDICAL STORES - VICTUALLING STORES

353.

Medical - Disinfection and Disinfestation Procedure.

As the result of recent advances in knowledge in the methods of spread of infectious diseases and the discovery of powerful insecticides, the following procedure of disinfection and disinfestation to be adopted on the occurrence of a case of infectious disease and for personnel infected with lice or pediculi or suffering from scabies, is outlined as a guide to Medical Officers.

Disinfection

2. *Accommodation.*—In quarters in which a case of infectious disease has occurred, stripping of the cabin or mess, and fumigation by gassing methods are not normally necessary. All that is required is thorough ventilation of the space, and washing of the floor and other surfaces with soap and hot water. Disinfectant should be added in cases of cholera, smallpox, pneumonic plague, pulmonary tuberculosis and typhus.

3. Following cases of typhus, relapsing fever or trench fever, the space should be sprayed with liquid insecticide in addition.

4. *Bedding and clothing.*—In all cases of infectious disease, clothing and bedding should be well laundered. Steam disinfection must always be carried out, prior to laundering, in the case of typhus fever, relapsing fever, cholera, smallpox, streptococcal infections, plague, diphtheria, enteric group, dysentery, pulmonary tuberculosis and glanders. Disinfection should be done if laundering is not possible or when disinfection is insisted upon before acceptance by a public laundry. The bedding and clothing of immediate contacts of infectious disease need only be disinfected if the Medical Officer thinks this advisable.

5. No routine periodical disinfection of blankets is necessary. These should be shaken exposed to air and sun at frequent intervals, as circumstances permit.

6. Boots and other articles, uniform caps, etc., which would be spoilt if subjected to steam disinfection, should be treated by spraying with a formalin solution, and exposed to the air to dry.

Disinfestation

7. Clothing of infested persons should be dealt with by dusting with D.D.T. insecticide powder. Blankets and spare clothing can be dusted before being laundered.

8. The need for provision of disinfectors in ships and establishments has been greatly reduced. Where disinfectors are not installed, recourse should be made to local civil authorities. When this is not possible, disinfection prior to laundering can be carried out by steeping in a solution of disinfecting fluid.

(The foregoing is the unaltered text of A.F.O. 429/1955)

(4018/1/42)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

354.

Form S.1552 Radar - Type 277/293 - Switching Drill Guide - Amendment.

In order to conform with recent modifications to radar switching procedures, the following amendments are to be made to Form S.1552 (switching drill guide for Types 277/293).

Line 6. *Delete* " and modulation ", and *insert* " and magnetron ".

Line 6. *Delete* " 30 minutes ", and *insert* " 2 minutes. (If set has not been used for 48 hours—15 minutes) ".

Line 7. *Delete* " on completion—as follows ", and *insert* " on completion, or after 15 minutes wait if necessary, proceed as follows ".

Line 21. *Delete* " 30 minutes " and *insert* " 2 minutes ".

Add note at bottom. (This drill is intended as a general guide. Ships should amplify where necessary to suit local circumstances.)

(The foregoing is the unaltered text of A.F.O. 295/1955)

(3526/12/1330)

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C.N.O. 355/55

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
27th May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

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BOOKS - DISTRIBUTION OF NON-ACCOUNTABLE PUBLICATIONS AND AMENDMENTS DURING MARCH, 1955.

The undermentioned non-accountable publications and amendments to A.P.'s, B.R.'s, etc., have been distributed to Ships and Services during March, 1955. Navy Order 110 of 1954 is relevant.

(4139/3/102)

MAGAZINES, PAMPHLETS, ETC.

Title.	Date.
Aeroplane	10th December, 1954.
Aeroplane	17th December, 1954.
Aeroplane	24th December, 1954.
Aeroplane	31st December, 1954.
Aeroplane	7th January, 1955.
Aeroplane	14th January, 1955.
Aeroplane	21st January, 1955.
Aeroplane	28th January, 1955.
Flight	10th December, 1954.
Flight	17th December, 1954.
Flight	24th December, 1954.
Flight	7th January, 1955.
Flight	14th January, 1955.
Journal of the Royal Naval Medical Services, Volume XL No. 4.	Autumn, 1954.
Joint Services Recognition Journal, Volume 9 No. 11.	November, 1954.
Joint Services Recognition Journal, Volume 9 No. 12.	December, 1954.
List of Propellant Lots, Amendment 17.	
Livewire, Volume 6 No. 3.	Christmas, 1954.
N.A.M.A.N. N.1377-N.1388.	January, 1955.
N.A.M.A.N. N.1389-N.1401.	28th February, 1955.
United Nations Review, Volume 1 No. 7.	January, 1955.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	A.L. or Leaflet.
113	A.L.98
1086 Book 2 (2nd Edition)	A.L.44
1086 Book 3 Part 1 (2nd Edition)	A.L.29, 30, 31, 32, 33 and 34
1086 Book 4 Part 2 (2nd Edition)	A.L.21, 22 and 23
1086 Book 5 (2nd Edition)	A.L.34 and 35
1086 Book 6 (2nd Edition)	A.L.37, 38 and 39
1086 Book 7 (2nd Edition)	A.L.36, 37, 38, 39 and 40
1086 Book 10 (2nd Edition)	A.L.36 and 37
1086 Book 11 (2nd Edition)	A.L.62
1086 Book 12 (2nd Edition)	A.L.59 and 60
1086 Book 13 (2nd Edition)	A.L.55
1086 Book 14 (2nd Edition)	A.L.14
1181 Volume 2 Part 1	Technical Leaflet RAN.5
1182A Volume 1	A.L.108
1182D Volume 1 and 6	A.L.58
1275B Volume 1	A.L.230 and 231
1275B Volume 2 Part 1	(A.L.134)-A.26
1275B Volume 4 Part 6 (N) Office Copy	A.L.1
1275B Volume 4 Part 6 (N) Working Copy	A.L.1
1275G Volume 1	A.L.11, 12 and 13
1275G Volume 2 Part 1	(A.L.38)-O.2
1275E Volume 6	A.L.11 and 12
1355A Volume 1	A.L.50
1374C Volume 2 Part 1	(A.L.44)-Z.9 (Alt.3) and (A.L.45)-Z.11 (Alt.1)
1374C Volume 2 Parts 2 and 3	A.L.21
1374E Volume 4 Part 6	A.L.3
1455	A.L.222 O.A4 Issue 5, P.14 Issue 3 and Q.5 Issue 2
1464D Volume 1	A.L.155
1464G Volume 1	A.L.127
1464G Volume 2 Part 1	No. 79
1492A Volume 1	A.L.70
1538B, D, G, H Volume 3 Part 1 (5th Edition)	A.L.19
1538C Volume 1	A.L.11 and 12

A.P. No.	A.L. or Leaflet.
1538D Volume 2 Part 1	No. 192 (A.L.2) and No. 199 (A.L.1)
1538D Volume 6 Parts 2 and 4	A.I.L. 2/54
1538E Volume 2 Part 3	A.L.69
1538L Volumes 1 and 6 Part 1	A.L.49
1538L Volume 6 Parts 2 and 4	A.L.22
1538L Volume 6 Part 3	A.L.3
1538P Volumes 1 and 6 Part 1	A.L.22
1641F Volume 2 Part 1	K.37, K.38 and K.39
1661D Volume 1	A.L.88
1661E Volume 1	A.L.43
1664A Volume 1	A.L.92
1664A Volume 2 Part 1	A.34 (A.L.1) and A.43
1664D Volume 1 Parts 1 and 3 (2nd Edition)	A.L.15, 16 and 17
1803 Volume 2 Part 1	D.61, D.66, D.68, E.55, E.55 (A.L.1) F.39, F.40, F.41, F.42, F.43, F.44 and F.45
1803B Volume 2 Part 2	A.L.73, 74, 75 and 76
1803B Volume 2 Part 3	A.L.68, 69, 70, 71 and 72
1803C Volume 2 Part 2	A.L.25
1803D Volume 1 Book 2	A.L.15
1803D Volume 1 Book 3	A.L.33
1803D Volume 2 Part 2	A.L.127
1803D Volume 2 Part 3	A.L.162, 163, 164 and 165
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1803J Volume 1	A.L.31
1803J Volume 2 Part 2	A.L.13 and 14
1803R Volume 1	A.L.59
1803R Volume 6	A.L.29
1803S Volume 2 Part 3	A.L.37 and 38
1803T Volume 1	A.L.13
2102F Volume 2 Part 1	A.36 (RAN. Alt.) November, 1954, B.29 (A.L.1), Q.12 (A.L.1), Q.16 and RAN/FF/31 (A.L.1)
2102F Volume 3 Part 2 (Appendix "A" 2020)	A.L.16, 17, 18 and 19
2102H Volume 1	A.L.36
2173A Volumes 1 and 6 Part 1	A.L.34
2102H Volume 2 Part 1	A.9 (RAN. Alt.) November, 1954, C.14 (A.L.1), RAN/FF/19 (A.L.1) and RAN/20 (A.L.2)
2240A Volume 6 Part 2	A.L.54

C N O's 326 - 354/55 have not yet been issued.

A.P. No.	A.L. or Leaflet.
2240A Volume 6 Part 3	A.L.11
2306M Volumes 1 and 6	A.L.10
2337 Volume 1	A.L.107 and 108
2463 Volume 1	A.L.81, 84, 85 and 86
2530D Volume 1	A.L.15
2534E Volume 1	A.L.11, 12 and 13
2534E Volume 3 (2nd Edition)	A.L.2
2538HA Volume 1	A.L.27
2538HA Volume 6 Part 2	A.L.24 and 25
2817A Volumes 1 and 6 Part 1	A.L.113
3153M.C.A.P.21 (2nd Edition)	A.L.3
3275A	A.L.2 and 3
3282A Volume 1	A.L.6
3282A Volume 12	A.L.6
4089A	A.21 (A.L.1) Issue 2
4089E	E.128 (Issue 5) and E.162 (A.L.1)
4099M.L.	A.L.4
4117A Volume 2 Part 1	C.3
4257A Volumes 1 and 6	A.L.137
4257B Volumes 1 and 2	A.L.85
4282B Volume 1	A.L.8
4288A Volume 1	A.I.L. 1/54, A.I.L. 2/54, A.I.L. 3/54, A.I.L. 4/54, A.I.L. 5/54 and A.I.L. 6/54
4300A Volume 2	C.3 and L.2
4300A Volume 6 Part 1	A.L.10
4300C Volume 1	A.I.L. 1/54 with Marker Cards
4300C Volume 6 Part 1	A.L.17
4301A Volume 2	A.5 M14 (A.L.1) and Q7
4303B Volume 1	A.L.83 and 84
4303C Volume 1	A.I.L. 1/54
4303E Volume 1	A.L.18, 19, 20 and 21
4303Z Volume 1	A.L.40
4306A Volume 1	A.L.22
4320A Volume 1	A.L.41
4320B Volume 2	(A.L.24)-G.5
4328A, B, C, D, Volume 5 Part 3 (N)	A.L.2
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4340 Volume 1	A.L.49
4340 Volume 6	A.L.8
4343 Volume 1	A.L.56, 57, 58, 59, 64, 65 and 66

A.P. No.	A.L. or Leaflet.
4343A Volume 4 Part 6	A.L.1
4343B Volume 1	A.L.149, 150, 151, 152, 153 and 154
4343B Volume 4 Part 6	A.L.4 and 5
4343B Volume 6	A.L.12
4343D Volume 1	A.L.88, 89 and 90
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4343X Volume 2	(A.L.10)-G.1, (A.L.9)-G.2 and (A.L.11)-I.1 (A.L.1)
4360A Volume 1	A.L.24
4360A Volume 4 Part 3(N) Office and Working Copies	A.L.2 and 3
4389A Volume 1	A.L.25, 29, 30 and A.I.L. 2/54
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A.P.(RAN) 7 Volume 5 Part 1	A.L.1
S.A.L.383	A.L.79
A.D.6061 Sheet 1	May, 1954
A.D.6062 Issue 1 Sheet 1	May, 1954
A.D.6063 Sheet 1	May, 1954
A.D.6064 Sheet 1	May, 1954
A.D.6066 Sheet 1	May, 1954
A.D.6067 Sheet 1	May, 1954
N.A.M.O. Engines:	E(RR) 37 Issue 2 (1/1/55), RANAMO/L.1 (A.L.1) Issue 3 (December, 1954), RANAMO/P.5 (January, 1955), RANAMO/F.2 (Issue 2, January, 1955), RANAMO/X.2 (January, 1955), RANAMO/I.1 (January, 1955), RANAMO/O.7 (January, 1955) and RANAMO/G.10 (January, 1955)

A.P. No.	A.L. or Leaflet.
N.A.M.O. Firefly	SI/RAN/11 (December, 1954)
N.A.M.O. General:	A.L.29, A.62 (31/12/54), STI/Armament/85 (31/12/54), I.64 (18/12/54), O.63 (18/12/54), W.35 (20/12/54), STI/RAA/54 dated 24/12/54 and RANAMO/S5 (February, 1955)
N.A.M.O. Miscellaneous:	A.L.17, STI/Dragonfly/9 dated 23/12/54 and STI/Dakota/RAN/5 December, 1954
N.A.M.O. Sea Fury	STI/RAN/27 (November, 1954)
Air Pictorial	December, 1954
Bristol Type 171 Helicopter Schedule for Modifications	Amendment (10/9/54)
The British Thomson-Houston Co. Ltd., Spare Parts Lists	Magneto S.G.4 - 11 (R.H.) and Magneto S.G.4 - 12 (L.H.)
D.C.A. Air Navigation Orders Part 11	A.L.14
D.C.A. Air Navigation Orders Part 12	A.L.12
D.C.A. Air Navigation Orders Part 20 Section 20.16.2	A.L.17 (24/1/55)
D.C.A. Air Navigation Orders Part 29 Section 29.5	
D.C.A. Airways Operations Instructions Volume 1	A.L.20
D.C.A. Airways Operations Instructions Volume 2	Control Procedures for Military Aircraft Operations
Firefly Modification Booklet	A.L.15 (September, 1954) and A.L.16 (December, 1954)
I.C.A.O. Monthly Bulletin	(October, 1954) and (November, 1954)
Manual of Instructions for the Care and Maintenance of Cirrus Aero Engines	Operating Instructions for the Amal. Fuel Pump Type 136/AD2A and Maintenance and Overhaul Instructions for Hobson Type A.L.48-GM/1 Carburettors
R.A.N. Aircraft Inspection Leaflets	No. 17 Issue 4 January, 1955 and No. 20 (December, 1954)
Rotol Publication 508 Series 01	A.L.8

A.P. No.	A.L. or Leaflet.
Sperry Field Service Bulletins	Bulletin No. 3 (25/8/54), No. 6A, No. 8, No. 8A, No. 20 (27/7/54), No. 36, No. 37, No. 53, No. 58, No. 342-59A, No. 342-65, No. 342-71, No. 5cB, Index Gyrosyn Compass Type C.L.1 and C.L. 1A and Index Gyrosyn Compass Type C.L.2
Sperry Sales Service News	June, 1954, and July/August, 1954
A.A.P. No.2 Table of Contents	Sub A.L.44 (A.L.5600)
A.A.P. No.2 Group B Section 16	Sub A.L.7 (A.L.6735)
A.A.P. No.2 Group D Section 1A	Sub A.L.44 (A.L.6628)
A.A.P. No.2 Group D Section 1B	Sub A.L.42 (A.L.6636)
A.A.P. No.2 Group D Section 1C	Sub A.L.46 (A.L.6689)
A.A.P. No.2 Group F Section 3	Sub A.L.35 (A.L.6695)
A.A.P. No.2 Group F Section 4	Sub A.L.23 (A.L.6694)
A.A.P. No.2 Group G Section 6D	Sub A.L.21 (A.L.6635)
A.A.P. No.2 Group G Section 6K	Sub A.L.10 (A.L.6620)
A.A.P. No.2 Group G Section 6P Volume 1	Sub A.L.7 (A.L.6549) and Sub A.L.8 (A.L.6692)
A.A.P. No.2 Group G Section 6P Volume 2	Sub A.L.6 (A.L.6549)
A.A.P. No.2 Group G Section 105C	Sub A.L.16 (A.L.6555)
A.A.P. No.2 Group H Section 128F Volume 6	Sub A.L.7 (A.L.6619) and Sub A.L.8 (A.L.6684)
A.A.P. No.2 Group I Section 1 Volume 2	Sub A.L.13 (A.L.6627)
A.A.P. No.2 Group I Section 32A	Sub A.L.12 (A.L.6630)
A.A.P. No.2 Group I Section 15C	Sub A.L.8 (A.L.6634)
A.A.P. No.2 Group K Section 8	Sub A.L.9 (A.L.6732)
A.A.P. No.2 Group N Section 29	Sub A.L.8 (A.L.6718)
A.A.P. No.2 Group N Section 33 Part 1	Sub A.L.15 (A.L.6710)
A.A.P. No.2 Group N Section 33 Part 2	Sub A.L.17 (A.L.6654) and Sub A.L.18 (A.L.6723)
A.A.P. No.2 Group N Section 33 Part 3	Sub A.L.9 (A.L.6712)
A.A.P. No.2 Group N Section 33 Part 4	Sub A.L.10 (A.L.6711)
A.A.P. No.2 Group T Section 25L Part 1	Sub A.L.10 (A.L.6664)
A.A.P. No.2 Group T Section 25L Part 2	Sub A.L.12 (A.L.6665)
A.A.P. No.2 Group T Section 27B	Sub A.L.15 (A.L.6600)
A.A.P. No.2 Group T Section 27D	Sub A.L.14 (A.L.6650)
A.A.P. No.2 Group T Section 27F	Sub A.L.15 (A.L.6656)

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A.A.P. 741:00 Volume 2 Part 2	Modification No.22/1
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A.P. No.	A.L. or Leaflet.
R.A.A.F. Armament Special Instructions	Instruction Aircraft Armament Installation/2, Instruction Bombs/4, Instruction Bombs/8, Instruction Pyrotehnics/4 (1/2/55), Instruction Hispano Guns/4 and Instruction Engines Starter Cartridges/2 (27/1/55)
R.A.A.F. Aircraft Safety Equipment Modification	Modification Part 2, Section C No.13
R.A.A.F. Airscrews D.T.S. Spec. Instructions	Instructions No. 16, 17 and 18
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R.A.A.F. Dakota D.T.S. Spec. Instructions	Instruction No.72
R.A.A.F. Dakota Modification	Modification No.97
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R.A.A.F. Fuels, Oils and Greases D.T.S. Special Instructions	Consolidated Index (Issue 4, 1/2/55)
R.A.A.F. General D.T.S. Spec. Instructions	Instruction No.153
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R.A.A.F. Merlin Power Plant Orders	A.L.10
R.A.A.F. Radio and Facility Chart Australia and New Zealand Area 'D'	Military Aviation Notice Serial No.2D 10/1/55, No.5D 31/1/55, No. 7D 14/1/55, No. 8D 21/1/55, No.9D 28/1/55, No.10D 7/3/55, No. 11D 14/3/55, and No.12D 21/3/55
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R.A.A.F. Safety Equipment D.T.S. Special Instructions	Instruction No. 39, No. 40 and No. 42 (28/1/55)

A.P. No.	A.L. or Leaflet.
R.A.A.F. Summary of Defect Reports	Airframes Part 1 Section A: Period June, 50 - July, 54, Feb., 52 - Dec., 53, June, 52 - Dec., 53, May, 50 - June, 54, Nov., 51 - June, 54, July, 52 - March, 54, June, 51 - Jan., 54, Nov., 51 - March, 54, June, 50 - March, 54, March, 52 - Feb., 54, Feb., 52 - March, 54 and Electrical No.4/54 - Period 1/10/54 - 31/12/54
R.A.A.F. Temporary Armament Servicing Memorandum	Memoranda Crew Ejection Seats and Aircraft Escape Equipment/3 (14/12/54)
R.A.A.F. Training Bulletin	Volume 3 No.4 (1954)
R.A.A.F. Twin Wasp Instructions	A.L.36, 38, Instruction No.99 and Instruction No.101
R.A.A.F. Twin Wasp D.T.S. Spec. Instructions	Consolidated Index (Issue 3) 24/11/55
R.A.A.F. Twin Wasp Power Plant Orders	Order No.10
R.A.A.F. Vampire D.T.S. Spec. Instructions	Consolidated Index (Issue 2) 10/11/54, Instruction No.86, No.87 and No.88
R.A.A.F. Wasp D.T.S. Spec. Instructions	Consolidated Index (Issue 3) (1/2/55)
R.A.A.F. Wirraway D.T.S. Spec. Instructions	Instruction No.71

AMENDMENTS TO B.R.'S. ETC.

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B.R.4	181, 184, 185, 187, 188
B.R.70	October, 1954 Supplement November, 1954 Supplement
B.R.125	Supplements 11 and 12
B.R.128(1)	Supplement No.6 November, 1954
B.R.672(51)	8
B.R.819(2)	Appendix 6
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B.R.2015	1
B.R.2016(2)	2
B.R.2031	Amendment No.2
A.C.P.113F	Correct 27, 28
A.C.P.118	Change 2, 3

TITLE.	DATE.
Lloyds Shipping Index	7th March, 1955 14th March, 1955 21st March, 1955 28th March, 1955

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
31st May, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0081

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SECTION 1 - ADMINISTRATIVE AND GENERAL

356.

HYDROGRAPHIC INFORMATION.

The attention of Captains of H.M.A. Ships is drawn to the necessity for correctly reporting particulars of hydrographic information which may from time to time be obtained affecting charts, sailing directions and other publications supplied with chart folios.

2. Although reference to such information may be made in Reports of Proceedings, it is also to be reported fully on Form A.H.395. Consolidated Orders and Regulations, Article 342, and Q.R. and A.I., Article 3446, are relevant.

(3325/3/299)

SECTION 2 - PERSONNEL

357.

A.B.R.10 - R.A.N. ADVANCEMENT INSTRUCTIONS - ADVANCEMENT TO ACTING PETTY OFFICER AIRMAN MECHANIC.

After 1st July, 1955, advancement of Leading Airman Mechanics (A, E, or O) and Leading Airman Pilot's Mates to Acting Petty Officer Airman Mechanic (A, E, or O) (Provisional) will cease.

2. Those ratings advanced to Acting Petty Officer Airman Mechanic (A, E, or O) (Provisional) will continue to hold the rate till such time as they successfully complete the qualifying course in trade, when they will be title changed to Acting Petty Officer Airman Fitter (A, E, or O), or Petty Officer Airman Fitter (A, E, or O) if they have completed one year's acting time as Petty Officer.

3. Should an Acting Petty Officer Airman Mechanic (A, E, or O) (Provisional) fail the qualifying course in trade or decline the course for other than adequate private reasons, he is to be reverted to the lower rating - his subsequent advancement will be in accordance with A.B.R. 10, Appendix 114(F)(iv).

4. Time served as Acting Petty Officer Airman Mechanic (A, E, or O) (Provisional) immediately preceding successful completion of the trade course will count towards advancement to Chief Airman Fitter.

5. A.B.R. 10, Appendix 114, will be amended in due course by deleting (F)(v), (vi) and (vii).

(4008/4/97)

358.

EDUCATIONAL - HIGHER EDUCATIONAL TEST - PREPARATORY COURSES.

In order to provide an opportunity for selected ratings to be prepared for the Higher Educational Test so as to qualify educationally for commissioned rank, an educational course of eight weeks' duration will be held at H.M.A.S. PENGUIN in the period immediately preceding each H.E.T. examination.

2. Names of volunteers who are recommended by Commanding Officers as potential candidates for commissioned rank, arranged in order of merit, are to be reported to Navy Office by signal prior to a date which will be announced in respect of each preparatory course.

3. A list of ratings selected for the course will be promulgated from Navy Office. Selected ratings are then to be lent to H.M.A.S. PENGUIN for the duration of the course.

4. Ratings who fail to make satisfactory progress on the course will be discharged to their own ships.

5. Ratings who complete the course are to sit for the Higher Educational Test which immediately follows, either in their own ships or in H.M.A.S. PENGUIN as arranged by their respective Commanding Officers.

6. The second course in 1955 will commence on Monday, 22nd August, 1955. Names of volunteers are to be signalled to reach Navy Office before Monday, 25th July, 1955.

(4017/7/171)

359.

INSTRUCTIONAL FILMS AND FILM STRIPS - MN7411A AND B "LAND BASED HELICOPTER OPERATIONS" (PARTS 1 AND 2) - DISTRIBUTION.

A copy of the new American Training Film MN.7411A and B "Land Based Helicopter Operations", (Parts 1 and 2) is being obtained and will be supplied to the R.A.N. Air Station, Nowra, without demand, by the (Superintending) Naval Store Officer, Sydney.

2. Details of the film are as follows :-

MN.7411A - Functions

Shows the various tasks that a helicopter may be called upon to perform in support of an amphibious operation. Running time 10 minutes. One spool.

MN.74113 - Precautions

Gives examples of the precautions a helicopter pilot must take before and during operational flights. Running time 11 minutes. One spool.

3. The classification is "Restricted".

(The foregoing is the text of A.F.O. 2647/1954 altered to meet R.A.N. conditions.)

(4518/61/467)

360.

OFFENCES OF BREAKING OUT OF SHIP - MULCTS.

Attention is directed to Q.R. and A.I., Article 1974, on the above subject.

2. Navy Order 357 of 1945, which is at variance with Clause 1 of the Article, abovequoted, is hereby cancelled.

(3712/3/14)

361.

R.A.N.R. AND R.A.N.V.R. OFFICERS - EXAMINATIONS TO QUALIFY FOR COMMAND OF SMALL SHIPS.

It has been decided that in future Reserve Officers will be permitted to take the Navigation Direction Examination for Command of Small Ships in two sections, viz. Navigation and Direction.

2. The Appendix to Navy Order 520 of 1953 is to be amended as follows :-

Delete - Navigation Direction section in toto.

Substitute -

NAVIGATION.

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.

14. (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.

15. (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.

16. (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 DF 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.

17. (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.

18. (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 storms, rules for avoiding.

(g) Fleet meteorological organization, and weather reporting from H.M. Ships.

FLEET WORK.

19. (a) Station keeping by day, at night and in fog.

(b) Solution of changing station and smoke laying problems.

(c) The use of the Battenberg.

(d) The principles of construction of searches and patrols.

DIRECTION.

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.

20. (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.

21. (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) Limitations of I.F.F. Mark 3.

(d) 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, etc.) should be known.

(e) Thorough knowledge of the operation of a P.P.I.

(f) General appreciation of jamming and its countermeasures.

(g) Knowledge of common radar terms.

22. (a) States of readiness of personnel and sets.

(b) General appreciation of reporting and operating procedures.

23. Radio hazards.

(4006/22/30

362.

REMOVALS AT DEPARTMENTAL EXPENSE.

The following amendments are to be made to the conditions of removal promulgated in Navy Order 330 of 1952 as amended by Navy Orders 250 of 1953, 239 of 1954 and 128 of 1955 :-

Section B. Insert the following new paragraph :-

"Place whence subsequent removal will be granted.

11A. Where a member has been granted transfer of his family and effects under the provisions of this Order, his subsequent entitlement to a removal will, with the exception of a removal to an elected destination vide paragraph 14, normally be from the place to which he was last removed at departmental expense."

Paragraph 25. Delete the existing clause (vi) and insert the following :-

"(vi) Where a member purchases a motor vehicle in New Guinea whilst appointed or drafted there for an envisaged period of at least two years, the Department will meet the cost of removal of the motor vehicle to Australia provided that the member makes all arrangements for movement and insurance, and meets any customs charges and sales tax which may be payable on arrival in Australia. The Department will not accept any liability for cost of removal of motor vehicles to and/or from other overseas ports."

Paragraph 27. Insert after the words "Authority arranging the removal" appearing in clause (vii) the following :-

" Care is to be taken that all items are itemised, as furniture removalists will not admit liability for any article which is not included in the inventory. The delivery of the container in which goods are packed by the owner will be regarded as delivery of the goods."

Paragraph 32. Delete the amount of £600 appearing in clauses (i) and (ii) and insert in lieu the amount of £1100.

Delete the sentence "Special conditions apply where transport of goods is arranged by sea, vide paragraph 36" appearing at the end of clause (i) and insert in lieu the following :-

"These conditions apply irrespective of the method of transport used."

Paragraph 33. Delete clause (i) and insert the following :-

"(i) All claims for loss, damage or breakages are to be submitted to the Department of Supply in the Capital city of the State in which delivery of the goods is taken, except in the case of removals to the Northern Territory and Canberra when the claims should be lodged with the Departments of Works and the Interior, respectively."

Delete clause (iii) and insert the following :-

"(iii) All claims should be submitted within fourteen days of delivery of furniture and effects to the member's new residence."

Paragraph 36. Delete.

Paragraph 40. Delete clause (i) and insert the following :-

"(i) The Commonwealth will bear the cost of damage by fire, water, rats and mice, and in certain circumstances by pests (moths, silverfish, etc.), up to a maximum of £1100 as provided in paragraph 32 in respect of the furniture and effects of a member -

(a) where arrangements for storage have been carried out by the Department; and

(b) where the damage was sustained during any period of such storage."

Renumber clauses (ii), (iii), (iv), (v) and (vi) to read (iii), (iv), (v), (vi) and (vii), respectively.

Insert the following new clause :-

"(ii) Acceptance of liability in the case of damage by pests is subject to an examination showing that the furniture, etc., was free of such pests when placed in store. Goods packed by the owner or in locked containers will not be accepted as a responsiblity of the Commonwealth if damaged by moths, silverfish, etc."

Section J. Amend the title to read -

"Sale of Furniture, Effects and Motor Vehicles".

Insert the following new clause :-

"Compensation in respect of sale of motor vehicles.

44A. Where a member is entitled to have his motor vehicle removed under paragraph 25, he may elect to sell his motor vehicle instead of taking it to his new station, and with the approval of the Naval Board, be recompensed the amount of any loss sustained. The same provisions as for the sale of furniture and effects will apply."

Paragraph 48. Renumber sub-clause (b) of clause (ii) to read sub-clause (c).

Insert the following new sub-clause (b) of clause (ii) :-

"(b) where a member has been granted a removal, and for reasons associated with that removal (e.g. household furniture and effects must be removed early to fit in with transport arrangements) it is necessary for him and/or his family to reside for a short period at an hotel or other house of accommodation at the old locality; and"

Delete the words "at the new locality" appearing at the end of clause (iii).

Renumber clauses (ix), (x), (xi), (xii) and (xiii) to read (x), (xi), (xii), (xiii) and (xiv), respectively.

Insert the following new clause (ix) :-

"(ix) Members may accept leases of furnished premises for periods of 12 months or less, provided that no other suitable accommodation is available and that the rental under the lease is reasonable by comparison with existing rental charges for similar furnished premises. Rental Allowance may be paid in such cases but members, whilst in receipt of the allowance, should continue in their endeavours to obtain suitable accommodation to which to move at the expiration of the lease, not involving continued payment of an allowance."

Insert after the words "in that locality" appearing at the end of clause (xi) the following :-

"except where Accommodation Allowance is paid under clause (ii)(b)."

Delete clause (xii) and insert the following :-

"(xii) Payment of Accommodation Allowance at the old locality will be limited to a period of two weeks, but subject to a two monthly review, Accommodation and/or Rental Allowance will be payable at the new locality up to a maximum period of six months. Payment beyond a reasonable settling-in period, however, will be dependent upon the member providing evidence that he has made every possible endeavour to secure a suitable residence. Continuation beyond six months may be approved by the Naval Board in exceptional circumstances.

A member granted an allowance must notify his Commanding Officer immediately on any variation in his living conditions which would affect his entitlement to, or the amount of, the allowance."

(4822/8/2)

363.

SHORT COURSES FOR OFFICERS IN R.A.N. SHORE ESTABLISHMENTS.

Navy Order 67 of 1953 is to be amended as follows :-

Appendix - Delete items 1 and 2 and insert the following in lieu :-

Item	Place	Subject	Length	Officers for whom Suitable	R/A See Note 1	Remarks
			AIR:			
1	R.A.A.F. Station, Williamtown.	Senior Officers Land/Air Warfare Course	2 weeks	Commanders and above.	R	
2	R.A.A.F. Station, Williamtown.	Intermediate Land/Air Warfare Course	4 weeks	Lieut.-Commanders and below.	R	
				RESERVE OFFICERS:		
2A	R.A.A.F. Station, Williamtown.	Offensive Support Course	2 weeks	Executive	R	These courses will be undertaken with Officers of the Intermediate Course.
		Transport Support Course	2 weeks	Non-Executive		

(4006/121/21)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

364.

CIVILIAN REPAIR ORGANIZATION - AIRCRAFT ACCUMULATORS REFS. 5J/3254 AND 3283.

The procedure for the supply of aircraft accumulators for aircraft at the works of Fairey Aviation Company of Australasia Pty. Ltd. and Bristol Aviation Services Pty. Ltd., Bankstown, N.S.W., is as follows :-

(a) A pool will be maintained of six serviceable accumulators Ref. 5J/3254 at Fairey Aviation Company of Australasia Pty. Ltd. and two serviceable accumulators Ref. 5J/3283 at Bristol Aviation Services Pty. Ltd.

(b) Accumulators in excess of the above are to be returned to the Naval Store Officer (Air), R.A.N. Air Store Depot, Randwick, for despatch to Garden Island for servicing and charging.

(c) The accumulators of all aircraft, flown into Fairey Aviation Company of Australasia Pty. Ltd. and Bristol Aviation Services Pty. Ltd., Bankstown, are to be removed and returned through the Embodiment Loan Store to the Naval Store Officer (Air) unless the stay of the aircraft is short.

(d) The accumulators of aircraft transported to Bankstown are to be removed before despatch.

(e) Aircraft leaving Bankstown are to be fitted with a fully charged accumulator from the serviceable pool. Before fitting, the accumulators should be capacity-tested to ensure that they are of at least 75% capacity. R.A.N.A.M.O. General/L.1 refers.

2. Navy Order 28 of 1953 is hereby cancelled.

(4403/10/91)

365.

ELECTRICAL FITTINGS - REPLACEMENT OF COMMERCIAL TYPE BY ADMIRALTY PATTERN.

H.M.A. Ships, excluding Submarines.

When stocks of substitute type commercial electric fittings introduced as a wartime expedient become exhausted, defective fittings are to be replaced by current Admiralty pattern fittings.

2. It has been agreed that in addition to the replacement of defective fittings whenever such is necessary, advantage may be taken during repairs to associated cables, to rearrange circuits to enable A.P. fittings to be used. The work is to be treated as a defect.

3. Post war designs of electrical fittings of Australian manufacture, e.g., fluorescent lighting fittings, are not affected by this Order.

(The foregoing is the text of A.F.O. 478/1955 altered to meet R.A.N. conditions.)

(4518/1/919)

366.

AMMUNITION - PROPELLANT - NAVAL PROPELLANT REGULATIONS - (A) TEMPERATURE RETURNS - REVISED PROCEDURE - (B) MAGAZINE LOGS - PERIODS OF USE.

The regulations governing the periodic return of temperatures of storage of propellant have been revised.

2. As from the date of this Order, a report of propellant stored in temperatures exceeding 90°F. is to be rendered on Form S.1147A, in duplicate, on the 1st April and 1st October to cover the preceding six months period.

3. H.M.A. Ships and Establishments and R.A.N. Air Stations are not required to render blank returns. R.A.N. Armament and Mine Depots need not render returns on 1st April if no temperatures above 90°F. have been experienced for the preceding half year, but in that case returns on 1st October must cover the whole year.

4. Form S.1147A will be reprinted to the revised regulation. A specimen form will be included in an amendment to B.R.862A. Existing Forms S.1147A (April, 1950) should be used pending supply of new prints.

5. In order that the required details regarding temperatures remain available on board, H.M.A. Ships and Establishments are to retain their current magazine log, and R.A.N. Air Stations their current explosives log, until 1st June, 1955.

6. Commencing on 1st June, 1955, H.M.A. Ships and Establishments and R.A.N. Air Stations are to take into use a new magazine or explosives log. Thereafter magazine logs and explosives logs will cover the periods 1st April to 30th September and 1st October to 31st March.

7. In ships and establishments where only small quantities of explosives, not subject to Naval Propellant Regulations, are held on charge, the keeping of a magazine log may be waived by the administrative authority.

8. B.R.862, B.R.862A and B.R.863 will be amended.

9. Navy Orders 86 of 1946, 12 of 1947 and 59 of 1947 are hereby cancelled.

(The foregoing is the text of A.F.O. 410/1955, altered to meet R.A.N. conditions.)

(4433/51/224)

367.

AMMUNITION - PYROTECHNICS - ROCKETS, SIGNAL 1 LB. SERVICE - EXAMINATION OF TAPE BINDING.

The cause of failures with Rockets, Signal 1 lb. Service is attributed to the tape-binding of the socket to the body of the rocket.

2. It is the intention to modify all tape-bound rockets in Naval Armament Depots as opportunity permits, but all rockets which remain in service should have the security of the tape-binding tested before the rockets are fired.

3. New production rockets will be twine-bound.

4. R.A.N. Armament Depots only: separate instructions will be issued shortly.

(The foregoing is the text of A.F.O. 603/1955, altered to meet R.A.N. conditions.)

(4433/51/609)

368.

ARMAMENTS - H.M. SHIPS - FITTING OF SINGLE POWER WORKED BOFORS MOUNTINGS FOR L.60 GUNS, MARKS 7, 9, 9* AND 9.**

H.M.A.S. MELBOURNE will be fitted with 40-mm. Bofors, Mark 5* mountings in lieu of 40-mm. Bofors, Mark 7 mountings.

2. Mountings of the Bofors, Mark 9 series, are capable of a 12 degrees depression (of 5 degrees for the Mark 7 mountings) and if full advantage is to be taken of the mounting characteristics it is important that this figure should be worked to.

3. It should be noted that with power worked mountings there must be no physical obstruction to the gun barrel throughout the permissible training arcs. When fitting Mark 9 series Bofors it is necessary to ensure that the gun can be depressed to 12 degrees below horizontal over the whole of the training arc, heights of bulwarks, etc., being adjusted as required to provide gun barrel clearance distances as laid down in A.F.O. 2529/1954, Appendix 1 *(Gun Firing Arcs)*.

(The foregoing is the text of A.F.O. 229/1955, altered to meet R.A.N. conditions.)

(4276/2/45)

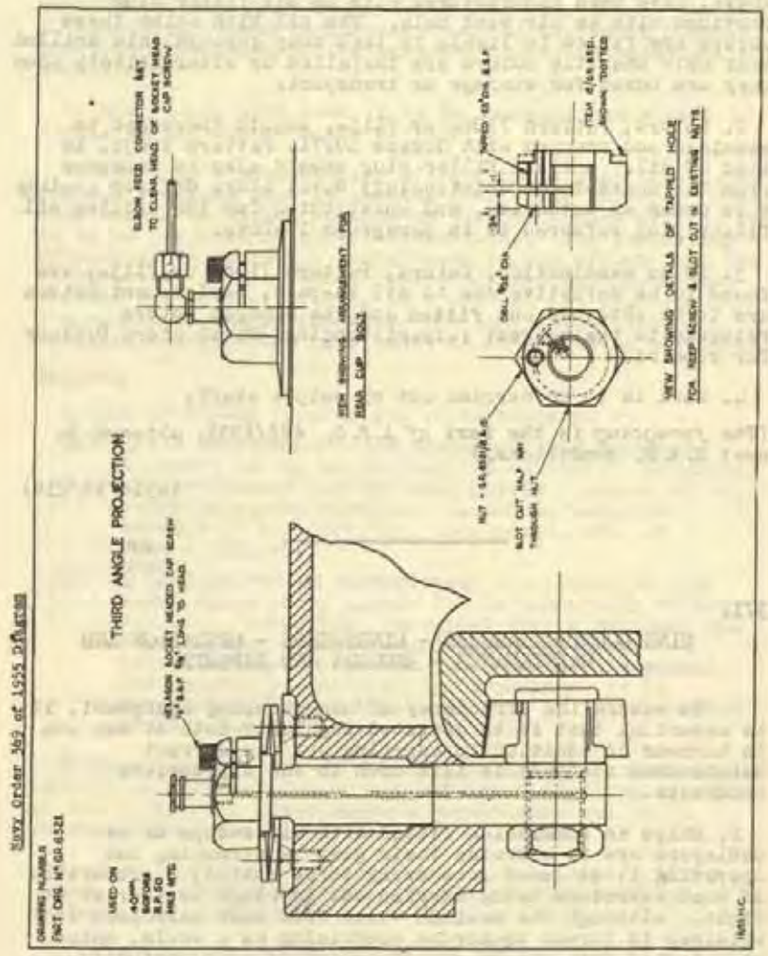
369.

GUN MOUNTINGS - 40 MM. BOFORS TWIN R.P.50, MARK 5 MOUNTINGS - TRAINING BASE - NUT FOR CLIP BOLT SUPPORTING ROLLER - MODIFICATION NO.25.

(a) *Ships, Establishments and Authorities concerned.*	Ships and Shore Establishments, Dockyards, Repair Establishments and Gunnery Equipment Depots holding these mountings.
(b) *Types and Marks of Mounting*	40-mm. Bofors Twin R.P.50, Mark 5 Mounting.
(c) *Parts of Mounting*	The nut for Clip Bolt Supporting Rollers, items 8 and 15, drawing GR 6521.
(d) *Purpose of Modification*	The task of adjusting the clip roller clearance is made difficult on a large number of mountings in service because the nuts on the clip bolts are locked with small grub screws. This has necessitated the removal of the gun driving motors before the clearance on the rear clip rollers can be adjusted.
(e) *Nature of Modification*	If the grub screw is fitted it should be removed, and before reassembly the nuts should be slotted, drilled and tapped to enable the fitting of a ¼-in. B.S.F. Hexagon Socket Headed Cap Screw, ⅜-in. long, to head as shown in Navy Order 369 of 1955 Diagram. All mountings should be fitted with the modified locking arrangement.
(f) *Drawings or Navy Order Diagram*	Navy Order 369 of 1955 Diagram.
(g) *By whom to be done*	Dockyards, Repair Establishments and Depots.
(h) *When to be done*	On the next occasion of stripping the mounting or adjustment of clip roller clearances.
(i) *How to be treated*	As a defect.

(The foregoing is the text of A.F.O. 557/1955, altered to meet R.A.N. conditions.)

(4429/41/181)



370.

ANTI-SUBMARINE - ASDIC MOTOR UNIT, PATTERN A.2412B AND A.2413B - MOTORS, GEARED 1/10 H.P., PATTERN 7108A AND 7113A - GREASING ARRANGEMENTS.

Asdic sets 127, 149, 164 and 174 series.

Motors, Geared 1/10 h.p., Pattern 7108A and 7113A, components of Motor Unit, Pattern A.2412B and A.2413B, a part of the training arrangements of the Asdic sets quoted above, have been manufactured with an oil filler plug provided with an air vent hole. The oil with which these motors are filled is liable to leak away through this drilled vent hole when the motors are installed or alternatively when they are boxed for storage or transport.

2. Motors, Pattern 7108A or 7113A, should therefore be examined and charged with Grease 10271, Pattern 10039, in lieu of oil. A blank filler plug should also be demanded from the nearest (superintending) Naval Store Officer quoting this Order as authority, and substituted for the drilled oil filler plug referred to in paragraph 1 above.

3. If on examination, Motors, Pattern 7108A or 7113A, are found to be defective due to oil seepage, replacement motors are to be obtained and fitted and the damaged motors returned to the nearest (superintending) Naval Store Officer for repairs.

4. Work is to be carried out by ship's staff.

(The foregoing is the text of A.F.O. 488/1955, altered to meet R.A.N. conditions.)

(4518/11/238)

371.

MINE COUNTERMEASURES - MINESWEEPS - OPERATION AND MAINTENANCE - RECORDS AND REPORTS.

To ensure the efficiency of minesweeping equipment, it is essential that it is operated regularly both at sea and in harbour in addition to carrying out the correct maintenance routines as laid down in the appropriate handbooks.

2. Ships in commission fitted with minesweeps or as danlayers are to exercise their gear by streaming and operating it at least once every three months, a proportion of such exercises being carried out in rough weather or at night. Although the maximum value from such exercises is obtained in formed squadrons exercising as a whole, ships on detached duty should operate alone if no opportunity arises for exercises in company.

3. In no case is the streaming or recovery of minesweeps to be treated as an evolution or as a part of general drill.

Records of Maintenance and Operation

4. In order to achieve standardisation in the method of keeping records of maintenance and operation of mine countermeasures equipment throughout the Fleet the following system is to be introduced :-

5. The Minesweeping Officer is to appoint a senior rating to have custody of, and be responsible for, the T.A.S. Work Book. The information on each individual sweep is to be recorded on the appropriate loose leaf data sheet, Forms S.1624(1-7). These performance records will give a clear and full indication of the material and operational state of each sweep.

6. the T.A.S. Work Book is to be examined and signed weekly by the Minesweeping Officer.

7. The ship's Minesweeping Officer is to keep the T.A.S. Log and Progress Book up to date from these records. This book should be signed monthly by the Commanding Officer and is to be produced at Annual Inspections. The Inspecting Officer is to include a certificate to the effect that the requirements of this Order regarding practices have been carried out or that, taking into account the employment of the vessel in the period since the last inspection, a reasonable effort has been spent in Minesweeping practices.

Reports

8. The following reports are to be rendered :-

(a) *By all Minesweepers and Danlayers in Commission.* - A report to the Administrative Authority forwarded on 1st January and 1st July giving a resume of the hours operated, equipment expended, and full details of all partings, breakdowns, etc. on Form S.1624(6).

(b) *By Administrative Authorities.* - A report to the Naval Board (copy direct to the Commanding Officer, H.M.A.S. SUCHOUTTER) forwarded during February and August comprising a co-ordinated record of individual ship's performance, during the period, and remarks on failures or breakdowns, to be rendered on Form S.1624 - "Report on the Operation of Mine Countermeasure Equipment".

9. These reports are in no way intended to replace special reports on difficulties or suggestions concerning existing or new equipment. Such matters should continue to be raised through the usual channels.

10. Supply of the necessary forms will be made, without demand, to Squadron Leaders, and all minesweepers and danlayers in commission.

11. Forms of the S.1615 series are to continue to be used until supply of Forms S.1624 has been effected.

(The foregoing is the text of A.F.O. 277/1955, altered to meet R.A.N. conditions.)

(3031/31/27)

372.

MONEY CHEST, PATTERN 5294 - ALLOWANCE TO BOOM DEFENCE VESSELS.

A money chest, Pattern 5294, is to be allowed to H.M.A. Boom Defence Vessels.

2. Vessels in commission concerned should forward demands to the appropriate (superintending) Naval Store Officer if a chest is not already held. The Superintending Naval and Air Store Officer, Sydney, will arrange supply to the vessel under construction.

3. The establishment of sea stores for boom defence vessels (B.R.371) will be amended.

(The foregoing is the text of A.F.O. 227/1955 altered to meet R.A.N. conditions.)

(4505/88/129)

373.

NAVAL STORES (GENERAL) (CLASS E, GROUP 2d) - GASKETS, SPIRAL WOUND METALLIC ASBESTOS FOR MACHINERY JOINTS, FLANGED, STEAM.

The present sizes of gaskets, spiral wound, included in the Rate Book and Authorised List of Naval Stores (B.R.810), are not suitable for use in jointing pipe flanges on pipes below ½-in. and ⅝-in. bore. The sizes and pattern numbers allocated are as follows :-

	Nominal Size	*Ext. Diam. of Gasket*	*O.D. of Backing Ring*
4362	½-in.	1-in.	2 5/16-in.
4363	⅝-in.	1-in.	2 5/16-in.

2. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 343/1955, altered to meet R.A.N. conditions.)

(4512/23/72)

374.

BOTTLE TRANSMITTER, PATTERN 5356MA - ALLOWANCES.

In view of the high rate of failure of bottle transmitters used in conjunction with radio equipment installed in aircraft carriers, especially when wired in cascade, arrangements are in hand for these instruments to be re-designed.

2. The allowance of spare bottle transmitters, Pattern 5356MA, to all aircraft carriers has been increased to 18 as a temporary measure.

3. The Commanding Officer, H.M.A.S. SYDNEY, should forward demands to complete to this revised allowance to the Superintending Naval and Air Store Officer, Sydney. On receipt of the additional transmitters, all spare Vacuum Switches, Pattern 2030, should be returned to the Superintending Naval and Air Store Officer, Sydney.

4. Further instructions regarding the introduction of the new type of transmitter for all ships, will be promulgated in due course.

(The foregoing is the text of A.F.O. 423/1955 altered to meet R.A.N. conditions.)

(4518/37/159)

375.

NAVAL STORES (AIR) - GYRO GUNSIGHT TEST EQUIPMENT REFERENCE 8B/3313 AND 8B/3323 - REVISED ALLOWANCES.

The allowances of Ref. 8B/3313 Periscope Graticule Aligning and Reference 8B/3323 Test Set Type 5, as shown in A.P.(N) 377 and A.P.(N) 378, have been revised and the R.A.N. allowances are now as follows :-

	Reference	
	8B/3313	8B/3323
H.M.A.S. MELBOURNE	1	1
R.A.N.A.S. Nowra	1	1
N.A.S. Rep.	1	1

2. Supply will be effected to approved Services, without demand, by the Naval Store Officer (Air), Bundock Street, Randwick.

(4403/15/116)

376.

NAVAL STORES (GENERAL) (CLASS E, GROUP 6) - PIGMENTS IN OIL - SUPPLY.

Following on recommendations by the Naval Paint Committee, it has been decided that future purchases of the undermentioned pigments in oil will be made to specification S.A.A. Int. 2. These materials will be accounted for in Class E, Group 6, with the pattern numbers shown.

Description	Pattern Number
Pigment in oil, to Specification S.A.A. Int. 2:-	
White Lead	like 409
Zinc Oxide	like 104
Blue, Prussian	-

Description.	Pattern Number.
Pigment in oil, to Specification S.A.A. Int. 2:-	
Umber, Burnt	like 81P
Sienna, Raw	-
Sienna, Burnt	-
Black	like 110C
Red, Venetian	like 65P

2. No further purchases will be made of the items listed in the Appendix to this Order. Present stocks are to be exhausted before issues of the new materials are made.

(4512/60/177)

APPENDIX

ITEMS NO LONGER REQUIRED IN THE R.A.N.

Pattern	Description
8P	Oil Paste, Blue, Ultramarine, to B.S.314, reduced.
15P	Oil Paste, Brown, Vandyke.
19P	Oil Paste, Chrome, Yellow, middle, to B.S.282.
33P	Oil, Paste, Green, Brunswick, middle, to B.S.303 reduced.
52P	Oil Paste, Ochre, to B.S.337.
65P	Oil Paste, Red, Venetian, to B.S.370.
70P	Oil Paste, Red, Permanent.
75P	Oil Paste, Sienna, Burnt.
76P	Oil Paste, Sienna, Raw.
81P	Oil Paste, Umber, Turkey, Burnt, to B.S.313.
104	Oil Paste, Zinc Oxide, White.
110a	Oil Paste, Natural Oxide of Iron, to B.S.298.
110C	Oil Paste, Black, to B.S.197, Grade 2.
111	Oil Paste, Red Oxide of Iron (Bauxite Residue).
370A	Oil Paste, Blue-Black, for dark grey paint.
371	Oil Paste, Blue-Black, for light grey paint.
372	Oil Paste, Titanium White.
409	Oil Paste, White Lead.
-	Oil Paste, Chrome, Lemon.
-	Paste, Blue, Shading.
-	Paint, Drop, Black.
-	Zinc Oxide in Oil.

377.

NAVAL STORES (GENERAL) (CLASS E, GROUP 6) - PIGMENTS - SUPPLY.

Following on recommendations by the Naval Paint Committee, it has been decided that future purchases of the undermentioned pigments will be made to Specification S.A.A. Int. 1. These materials will be accounted for in Class E, Group 6, with the pattern numbers shown.

Description	Pattern Number
Pigment in oil, to Specification S.A.A. Int. 2:-	
Lead Chrome, middle (Yellow)	like 19D
Genuine Red Lead, Dry	like 2
Red, Bright	like 70D
Carbon Black	like 6D

2. No further purchases will be made of the items listed in the Appendix to this Order. Present stocks are to be exhausted before issues of the new materials are made.

(4512/60/178)

APPENDIX

ITEMS NO LONGER REQUIRED IN THE R.A.N.

Pattern	Description
2	Red Lead, Dry.
6D	Dry Colour, Black, Lamp, to B.S.287.
8D	Dry Colour, Blue, Ultramarine, to B.S.314.
15D	Dry Colour, Brown, Vandyke, to B.S.319.
19D	Dry Colour, Chrome, Yellow, middle, to B.S.282.
33D	Dry Colour, Green, Brunswick, middle, to B.S.303 reduced.
52D	Dry Colour, Ochre, to B.S.337.
65D	Dry Colour, Red, Venetian to B.S.370.
70D	Dry Colour, Red Lake (Vermilion substitute and red permanent) to B.S.333.
75D	Dry Colour, Sienna, Natural, Burnt, to B.S.312.
76D	Dry Colour, Sienna, Natural, Raw, to B.S.312.
81D	Dry Colour, Umber, Turkey, Burnt, to B.S.313.
-	Vegetable Black.
-	Prussian Blue, dry.
-	Chrome Lemon.
-	Paint, dry, Orange Chrome.

Pattern	Description
-	Ochre, Red.
-	Oxide of Iron, dry.
-	Red Oxide, Spanish, dry.
-	Titanium Oxide.
-	Zinc Oxide Powder.

SECTION 6 - SHORE ESTABLISHMENTS

378.

ESTABLISHMENT OF A NAVAL BOMBARDMENT RANGE NEAR JERVIS BAY.

Paragraph 11(f) of Navy Order 236 of 1953 is to be amended to read -

"During firings when the Observation position is not in use, he is to remain in the vicinity of position 838 755."

(4185/21/12)

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
7th June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0086

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SECTION 1 - ADMINISTRATIVE AND GENERAL

379.

Aviation - Helicopter Rescue Procedure.

The following notes are issued for the guidance of all aircrew, so that the minimum delay may be experienced in the winching of survivors from the sea or from dinghies in varying circumstances :-

(a) *Category "A"*. - Standard procedure for rescue of survivors in the water or in dinghies wearing the Standard Life Jacket (Aircrew), when the survivor is fully capable of helping himself.

The helicopter will approach into wind at slow speed lowering the hook to which will be attached the special padded rescue strop.

Action by Survivor

(i) The survivor should grasp the rescue strop as quickly as possible, he should slip one arm and his head through, followed by his other arm, so that the padded strop is around the upper body under the armpits with the hook and the D-rings to the front.

(ii) When ready for hoisting hold one arm out at 45 degrees to indicate the fact to the winch operator.

(iii) Once clear of the water extend both arms horizontally so that there is no doubt that hooking on has been carried out correctly. It is unnecessary to hold on to the wire or the weighted hook. There is no objection however to the survivor steadying himself with one hand. The other should be in readiness to protect his head from contact with the aircraft should swing develop.

(iv) When hoisted level with the door, no attempt should be made to enter the aircraft until the aircrewman is ready to give assistance and no attempt to unhook should be made until sitting down inside the cabin.

(v) In conditions of no wind or calm sea, when the survivor is in a dinghy, it may be difficult for the pilot to hover over the dinghy, since the latter tends to move in the down wash. If this is apparent to the survivor, he should get into the water holding on to the dinghy, not releasing it until the strop is in his hands. Should the rescue fail, the survivor should get back into the dinghy.

(b) *Category "B"* - As above with no strop available.

Action by Survivor

Pass the buckets on the Standard Life Jacket (Aircrew) over the moused hook on the winch wire. Proceed as in Category "A", paragraphs (ii), (iii), (iv) and (v).

(c) *Category "C" - Procedure for rescue of a Survivor unable to help himself* - The double lift method will be used in which the aircrewman is lowered on the winch wire to effect the rescue.

(d) *Category "D"*

(i) *Procedure for the rescue of Survivors using the Helicopter Rescue Net.* - This net is in the process of development and may be available for use in the future. The net can be used for rescue of survivors who are either fully capable or unable of helping themselves.

(ii) *Action by Survivor.* - The net will be lowered from the helicopter as it approaches the survivor. Before reaching the survivor, the net will be in position with the leading edge below the surface of the water. The helicopter will be manoeuvred slowly ahead so that the survivor is gathered into the net. When the winch operator sees that the survivor is safely inside, the net will be hoisted.

(iii) If the survivor is able to, he should help himself into the net and thus speed the rescue.

(iv) On reaching the door of the helicopter, the survivor will be helped into the aircraft as described in paragraph (iv) of Category "A".

2. When there are more survivors in the water than the helicopter can rescue in one trip, the following points should be considered :-

(a) The state of the survivors and their safety equipment, so that the survivor most in need of help is rescued first.

(b) The advisability of dropping a spare dinghy to a survivor who cannot be rescued.

(c) Dropping a smoke float to mark the position of the survivors.

(d) Requesting the assistance of a ship to help in the rescue.

(e) Requesting the assistance of other aircraft to help in the search.

(f) Leaving the helicopter's aircrewman in the sea with a dinghy so that his place in the aircraft can be taken by the survivor.

Only under exceptional circumstances should the helicopter leave the scene of the rescue before it has been definitely confirmed that all personnel remaining in the water *are safely embarked in dinghies.*

3. Should any attempted rescue fail, many of the points mentioned in paragraph 2 should be considered as well as the possibility of ordering the winch operator into the water to give assistance to the survivor should he require it.

4. Navy Order 206 of 1954 is hereby cancelled.

(The foregoing is the text of A.F.O. 637/1955 altered to meet R.A.N. conditions)

(3384/91/4)

380.

Operational Planning and Bomb Training - Standardization of Terms.

The following revised terminology for use in operational planning and bombing training will be brought into force in the Royal Australian Navy on 1st July, 1955:-

Units of Measurement.

(a) All measurements relating to bombing errors are to be indicated in feet and not yards.

(b) All measurements of target sizes are to be indicated in feet and square feet and not yards and acres.

(c) All bombing densities are to be quoted in tons per million square feet (abbreviation T/M.S.F.) and not tons per acre.

Weapon Terminology.

(a) Deflection. The measurement of distance at right angles to the aircraft's track (this replaces the term "Line").

(b) 50 per cent Circular Error (C.E.). The radius of a circle with the centre at the Desired Mean Point of Impact (D.M.P.I.) within which half the missiles independently aimed at that point may be expected to strike (this replaces the term "50 per cent Error Radial Overall").

(c) 50 per cent Deflection Error (D.E.). Half the distance between two lines drawn parallel to the aircraft's track and equidistant from the D.M.P.I. within which half the missiles independently aimed at that point may be expected to strike (this replaces the term "50 per cent Error Line").

(d) 50 per cent Range Error (R.E.). Half the distance between two lines drawn perpendicular to the aircraft's track and equidistant from the D.M.P.I. within which half the missiles independently aimed at that point may be expected to strike (this replaces the term "50 per cent Error Range").

NOTE:- The terms in sub-paragraphs (b), (c), (d) above, imply "overall" errors unless otherwise stipulated by the inclusion of the word "random" (R) or "systematic" (S) as necessary.

2. These terms are to be used as appropriate in the compilation of weapon training forms and returns required in accordance with Navy Order 81 of 1954.

(3385/6/7)

SECTION 2 - PERSONNEL

381.

Courses - Officers - School of Land/Air Warfare, Williamtown.

With reference to Navy Orders 268 of 1950, and 218 and 458 of 1953, the following courses will be held at the School of Land/Air Warfare, Williamtown, during the period July-December, 1955 :-

Course.	Commences.	Completes.
No.34 - Intermediate Air Support	18th July.	12th August.
Senior Officers' Study Period	28th August.	2nd September.
No. 17 - Senior Air Support	16th October.	28th October.
No. 35 - Intermediate Air Support	13th November.	9th December.

NOTE:- It has been decided that, in future, Officers of all Branches of the R.A.N. and Reserves will be eligible to undergo these courses. Navy Orders 268 of 1950, and 67, 218 and 458 of 1953 are being revised accordingly.

(4006/24/51)

382.

Instructional Films and Film Strips - A593, "Spithead Review - 1953" - Distribution

Copies of the new film A593, "Spithead Review.- 1953" are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments.	No. of 16-mm. Copies.
Flinders Naval Depot.	1
H.M.A.S. LEEUWIN.	1
R.A.N. Film Library, Sydney.	1

2. This film record of the Coronation Review of the Fleet, Spithead 1953, has been compiled from material shot by both newsreel and naval cameramen. Although incomplete in its coverage it gives an overall impression of that historic occasion and shows most of the types and classes of ships present at the Review. It should prove of value in familiarizing New Entries with H.M.A. Ships. Running time 15 minutes. One spool.

(4518/61/463)

383.

Instructional Films and Film Strips - A596, "Coronation of H.M. Queen Elizabeth II - Naval Participation"- Distribution.

Copies of the new film A596, "Coronation of H.M. Queen Elizabeth II - Naval Participation" are being obtained and distribution will be made without demand by the (Superintending) Naval Store Officer, Sydney, on the following scale :-

H.M.A. Establishments.	No. of Copies.
Flinders Naval Depot.	1
R.A.N. Film Library, Sydney.	1
H.M.A.S. LEEUWIN.	1

2. The film illustrates the part played by the Commonwealth Navies in the processions both to and from the Abbey. It was compiled from Admiralty and newsreel material, primarily for record purposes, but the marching of the Naval Contingent and the smartness of those lining the routes are so outstanding that the film is recommended for showing to all men and women undergoing courses of parade training or being prepared to take part in public ceremonies. Running time 20 minutes. One spool.

(4518/61/461)

384.

Medical - Methyl Chloride Refrigerant Gas - Precautions.

Methyl Chloride refrigerant gas is about 1¾ times as heavy as air. It is poisonous, and as it has no irritant properties, and any smell it may have is extremely slight, it gives no warning of its presence in an atmosphere. The symptoms of poisoning are headache, dizziness, staggering gait, and difficulty with vision. There is an added danger in that the symptoms may be delayed in onset.

2. Methyl Chloride is inflammable, and in certain proportions in air (8.2-18.7) is explosive. Ventilating fans for methyl chloride plants are never fitted in the compartment so as to avoid the possibility of fire or explosion due to sparks at the motor brushes. The use of a halide lamp or other flame type indicator for detection of leaks is forbidden, as are also all other naked lights and smoking in compartments where methyl chloride refrigerators are fitted but not, unless a defect has developed, in the case of small machines such as domestic refrigerators and water coolers where the total quantity of refrigerant in the unit is small in relation to the size of the compartment in which it is situated.

3. A copy of Poster S.357, which directs attention to the dangers of methyl chloride gas and the requirements of Engineering Manual B.R.16, Article 293, paragraph 3 (some of which, for convenience, are shown as an Appendix to this Order), is to be exhibited outside and inside all methyl chloride machinery rooms, and on the doors of all cold and cool rooms where the cooling coils contain methyl chloride. Copies of the Poster can be obtained from the (Superintending) Naval and Air Store Officer, Sydney.

4. Where leakage of methyl chloride is suspected, or to be expected from the necessary breaking of a joint in the refrigerant circuit or other cause, personnel concerned with this are to wear a Pattern 230 breathing apparatus and a rating is to be in attendance just outside the compartment. To be available at all times for immediate use in case of emergency, and only to be used for that purpose, an additional breathing apparatus is to be kept in a convenient position near the entrance to the main refrigerating compartments and cold and cool rooms.

5. In cases of methyl chloride poisoning first aid treatment pending the arrival of a medical officer should include transport of the patient to an uncontaminated atmosphere, preferably warm, laying him down after seeing that his air passages are clear, covering him with blankets and keeping him warm with hot water bottles, and if unconscious applying artificial respiration supplemented as soon as possible with oxygen from an R.M. resuscitation apparatus.

(The foregoing is the text of A.F.O. 394/1955 altered to meet R.A.N. conditions)

(4227/52/3)

APPENDIX

PRECAUTION

METHYL CHLORIDE GAS

THE GAS CONTAINED IN THE COOLING MACHINERY OR COILS IN THIS COMPARTMENT IS POISONOUS AND INFLAMMABLE (ENGINEERING MANUAL, B.R. 16 (50), ART. 293 (3)). ANY SUSPICION OF A LEAK SHOULD BE REPORTED IMMEDIATELY.

NAKED LIGHTS AND SMOKING ARE PROHIBITED IN THIS COMPARTMENT

A copy of this poster is to be exhibited **outside and inside** all methyl chloride machinery rooms and on the doors of all cold and cool rooms where the cooling coils contain methyl chloride.

385.

Ratings - Specialist Qualifications - Recommendations.

A number of instances has occured recently where the advancement of ratings has been delayed by the neglect of Commanding Officers to provide continuous recommendations for Specialist Qualifications when such recommends were required before advancement could be authorised.

2. Attention of Commanding Officers is therefore drawn to A.B.R.10/53, Article 88.

(4007/32/123)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

386.

Aircraft - Ammunition - Rocket (A/C and Motor) - Heads, Flash, 60-lb.

The following stores are hereby introduced to Naval Service:-

KL027 HEADS, flash, 60 lb., N1 filled, SR807, Mark 2 or 3.

2. These heads have been introduced for night firing practice with R.Ps. at R.A.N. Air Stations and allowances are shown in CB.4485B.

3. The heads consist of empty shell H.E. 60 lb. S.A.P. filled with a pyrotechnic composition (SR807) instead of high explosive. Fuzes No. 878 and thermal initiators as used in S.A.P. shell are fitted. The only difference between the two marks of head is that whereas the Mark 2 head is fitted with No. 878 Mark 1 fuze and Mark 2 thermal initiator the Mark 3 head has fuze No. 878 Mark 2 and 1 thermal initiator. They are completely interchangeable in use. A very limited number of heads known as Mark 1 and filled with white phosphorous were produced and issued for trials but they will not be generally introduced to service.

4. KL027 HEADS are packed 2 per box M.206 and are classified as Group 9 category X for storage ashore. There is no requirement for them to be stowed in H.M.A. Ships.

(The foregoing is the text of A.F.O. 746/1955 altered to meet R.A.N. conditions)

(4443/13/22)

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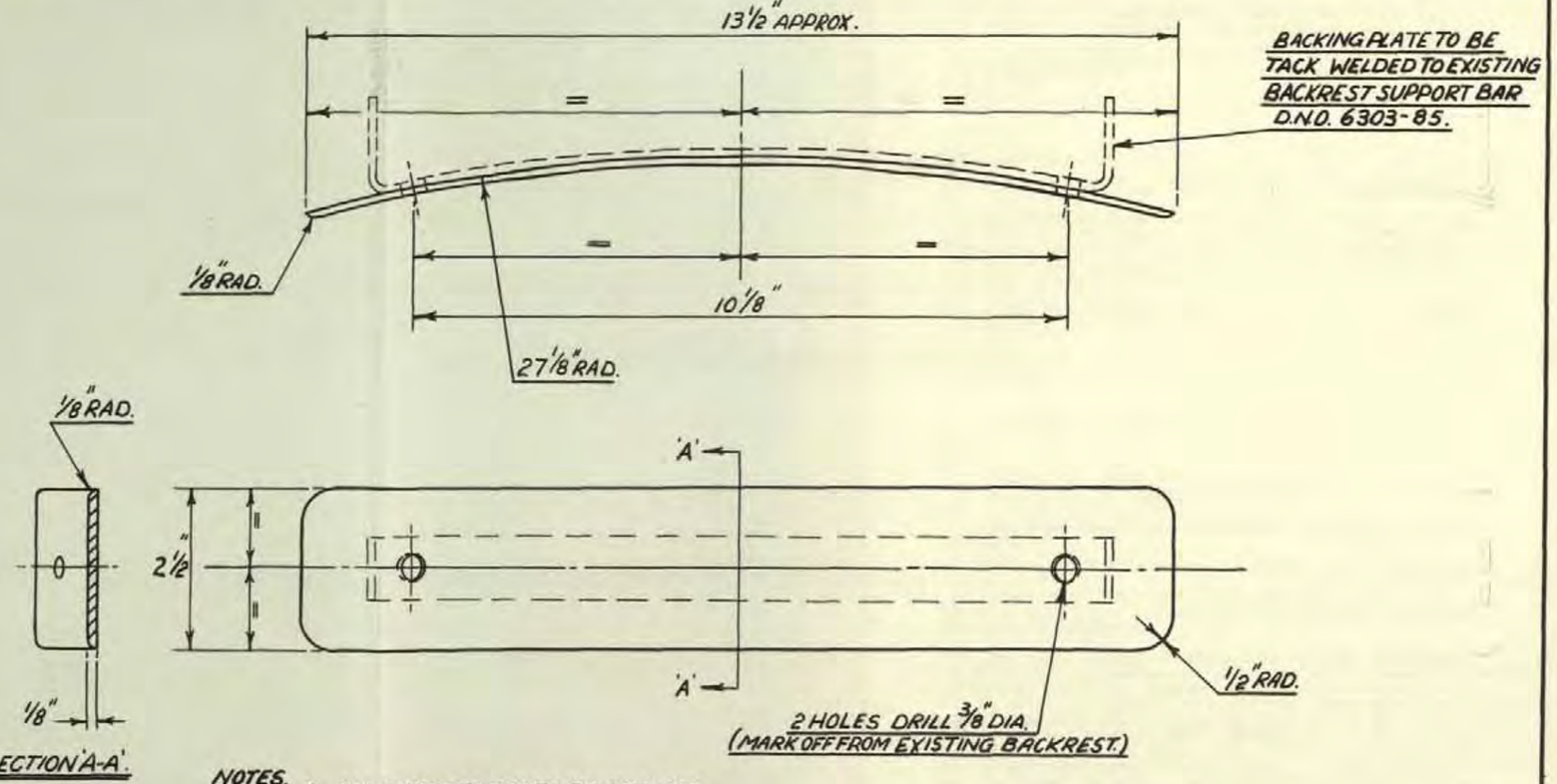
DRG. Nº D.O.U.W. Nº. A/50692.

BACKING PLATE FOR SEAT OF A.L.O. SIGHT PATT. Nº A.G.6004.

SCALE 1/2.



SECTION 'A-A'.

NOTES.
1. ALL SHARP EDGES TO BE REMOVED.
2. FINISH — ONE COAT OF ZINC CHROMATE PRIMER FOLLOWED BY TWO COATS OF GREY PAINT.

DRAWN	M.D.M. 21-2-55
TRACED.	B.M.H.
CHECKED.	J.H.G.
PASSED.	
APPROVED	

THIRD ANGLE PROJECTION.

MATERIAL.	MILD STEEL PLATE OR STRIP STRAIGHT LENGTH 13-5/8"

DRG. Nº D.O.U.W. Nº A/50692.

387.

Gun Direction - Air Lookout Sight Pattern A.G.6004 - Modification.

(a) *Ships and authorities concerned.*	All Ships, Fleet Shore Establishments, and Gunnery Equipment Depots holding these sights.
(b) *Types and marks of mountings.*	Air Lookout Sight Pattern A.G.6004.
(c) *Part of mounting affected.*	Back rest of seat.
(d) *Purpose of modification.*	To reinforce the plastic back rest.
(e) *Nature of modification.*	To weld a mild steel backing plate to the support bar, and bolt the plastic back rest to the plate.
(f) *Drawing No.*	D.O.U.W. No. A/50692.
(g) *By whom to be done.*	Ship's staff and Gunnery Equipment Depots.
(h) *When to be done.*	As soon as an opportunity offers.
(i) *How to be treated.*	As a defect.

(4430/6/41)

388.

Gun Mountings - 4-in., Mark 19 Series - Fitting of Oversize Shuttle Valves in Recoil Cylinders - Reports.

In future when wear is found to have occurred in the bore of the recoil piston rods (Item 1 of drawing N.5173), the worn piston rod is to have the bore ground true and an oversize shuttle valve (Items 6 and 7 of drawing N.5173) fitted. On no account should the bore of the recoil piston rod be increased above 2.560-in. (+ .002-in.).

2. The words "OVERSIZE BORE", followed by the new diameter, are to be stamped on the face of the piston rod.

3. The final diameter of the shuttle valve is to give a diametric clearance of not less than .002-in., and not more than .005-in. in the new bore. The word "OVERSIZE", followed by the new diameter, is to be stamped around the 2.15-in. diameter portion of the valve. A small brass plate engraved "OVERSIZE SHUTTLE VALVE FITTED" is to be attached to the end of the control rod so as to be visible when recoil cylinder is assembled.

4. When oversize shuttle valves are fitted, a report is to be forwarded to the Director of Ordnance and Underwater Weapons, Navy Office, Melbourne, quoting the Register Number of the mounting, whether for right or left hand gun, the new diameter of the shuttle valve and the piston rod bore.

5. One spare shuttle valve, machined to the new diameter, will be supplied for each oversize valve fitted, for retention in ship spares.

6. Oversize shuttle valves 2.56-in. diameter should be demanded from the nearest Gunnery Equipment Depot as required.

Final machining to the required size is to be carried out by the refitting authorities.

7. The report mentioned in paragraph 4 above should include remarks concerning behaviour of the gun concerned during run out and of the action of the S.A. gear.

(The foregoing is the text of A.F.O. 751/1955 altered to meet R.A.N. conditions)

(4429/29/72)

389.

Gun Mountings - 40-mm. Bofors, Mark 9* - Replacement of Firing Solenoid Cover - Modification No. 5.

(a) *Ships, Establishments and Authorities concerned.*	Ships and Fleet Shore establishments in which these mountings are held.
(b) *Types and Marks of Gun Mountings.*	40-mm., Bofors, Mark 9*.
(c) *Parts of Gun Mounting affected.*	Firing Solenoid.
(d) *Purpose of modification.*	To improve watertightness.

(e) *Nature of modification.*	The original lid, Part No. 11241, is liable to distort when tightened down and is to be replaced by a stronger lid, Part No. 11861. To fit the new lid, the shroud over the solenoid in the cab wall should be unscrewed, the original lid removed, and the new lid fitted using the existing nuts. In a few early mountings the shroud is riveted, instead of screwed, to the cab, these rivets should be drilled out and the shroud rescured by suitable nuts and bolts. The part number is stamped on the outside of each lid and it should be confirmed that the original (Part No. 11241) is fitted prior to demanding replacements as this modification has been introduced into current production.
(f) *Drawing.*	Nil.
(g) *By whom to be done.*	Ship's Staff.
(h) *When to be done.*	At the earliest possible opportunity. Demands for replacement lids should be forwarded to the nearest Gunnery Equipment Depot quoting the register numbers of the mountings concerned.
(i) *Classification.*	To be treated as a defect.

(The foregoing is the text of A.F.O. 752/1955 altered to meet R.A.N. conditions)

(4429/41/182)

390.

Alteration and Addition Items - Battle Class Destroyers.

The following alteration and addition item is approved in principle for Battle Class Destroyers :-

Class List Item No. 81 Classification 'B'

Item: "Convert armament communications from sound powered to amplified speech working."

Compensating Weight Required: 2830 lbs. at upper deck level or 1197 lbs. at forecastle deck level.

References: (a) TOBRUK's letter 78/8 of 25th May, 1954.

(b) Captain D.10 letter 15510/76A of 18th June, 1954.

(c) A.F. 1344/1505/19 of 2nd August, 1954.

2. Proposals to meet the compensating weight requirements are to be forwarded.

(4280/1/242)

391.

H.M.A. Ships and Floating Docks. Lists of Equipment, Portable Fittings, Spare Gear, Drawings and Instruction Books:

Short Title - Lists of Equipment etc. Instructions.

1. PREPARATION OF LISTS OF EQUIPMENT, ETC.

(a) General Managers of H.M.A. Naval Dockyards, or the appropriate Naval Overseers are responsible that Lists of Equipment, etc., as required by this Order, are prepared.

(b) Guidance and assistance of Inspecting Officers from Navy Office may be requested if considered necessary.

(c) Lists are to be prepared during the construction, conversion or modernisation of the vessels concerned.

(d) Lists in draft form are to be forwarded to Navy Office for approval prior to printing and distribution.

2. INFORMATION PROVIDED BY LIST OF EQUIPMENT, ETC.

(a) The List of Equipment, etc., provides accounting officers with a record of the equipment, portable fittings, spare gear, drawings and instruction books which they have in their charge on board. Engineer's and Electrical Officer's (Part I) Lists also provide a record of items held elsewhere for the use of the vessel or class of vessel.

(b) Authorised allowances are shown by -

(i) Statement of Drawings and Instruction Books (Form A.D. 787G/A.S. 473G).

(ii) Schedule of Ship's Equipment (Form A.D. 787H/ A.S. 473H).

(iii) Itemised List of Spare Gear (Form A.D. 787J/ A.S. 473J).

Where the above is not appropriate, the List of Equipment, etc., indicates the publication wherein the information may be found, e.g., Establishment of spare parts and tools (B.R.226).

(c) Items designated, where appropriate, by the letters 'R' (returnable to supplying authority when replacement is demanded); or 'C' (consumable - return to supplying authority not required).

3. LISTS OF EQUIPMENT, ETC., REQUIRED.

Separate lists are to be compiled for each of the following :-

(i) Engineer Officer's List.	Mechanical equipment other than that associated with gunnery and T.A.S. material.
(ii) Electrical Officer's List (Part I).	Electrical equipment other than that associated with gunnery and T.A.S. material.
(iii) Electrical Officer's List (Part II).	Electrical gunnery and T.A.S. equipment. (Navy Order 356 of 1952).
(iv) Commander (Air)'s List.	Aviation equipment except - (i) Naval and Air Stores. (ii) Fixed equipment in aviation workshops, etc.
(v) T.A.S. Officer's List.	T.A.S. equipment other than that defined by Navy Order 356 of 1952.
(vi) Ordnance Engineer's List.	Mechanical gunnery and T.A.S. equipment (Navy Order 356 of 1952).
(vii) Shipwright Officer's List.	Hull equipment as appropriate.
(viii) Boatswain's List.	Hull equipment as appropriate.

4. CUSTODY LIST.

Where the "user" of any portable fittings is not the accounting officer, a custody list of these portable fittings is to be prepared in duplicate for use by the accounting officer and "user".

5. DEFINITION AND ARRANGEMENT OF FORMS COMPRISING THE LIST OF EQUIPMENT, ETC.

FORM	IDENTITY NO.	INSTRUCTIONS FOR USE
(i) Memorandum of instructions	A.D.787A/ A.S.473A	
(ii) Index	A.D.787B/ A.S.473B	To be arranged with main classes of equipment in alphabetical order.
(iii) Certificate 'A' (first charge)	A.D.787C/ A.S.473C	To be signed on the date of acceptance of the vessel.

FORM	IDENTITY NO.	INSTRUCTIONS FOR USE
(iv) Certificate 'B'	A.D.787D/ A.S.473D	Transfer between accounting officers. (Reports of stocktaking are to be rendered, if necessary, upon supersession of accounting officers (C.O.R. Art. 299).
(v) Certificate 'C'	A.D.787E/ A.S.473E	Transfer to Dockyard Control. When a List of Equipment, etc., is closed, a survey and stocktaking of equipment, etc., 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.
(vi) Certificate 'D'	A.D.787F/ A.S.473F	Final disposal. When the vessel is finally disposed of, Certificate 'D' is to be completed and redundant copies of the List of Equipment, etc., destroyed; the certificate of destruction being forwarded to Navy Office.
(vii) Statement of Drawings and Instruction Books	A.D.787G/ A.S.473G	To include all drawings and instruction books supplied. To be arranged alphabetically with standard nomenclature (paragraph 6). The "As Fitted" Electrical Apparatus Schedule (late Part O.U.6137) is to be included in the Electrical Officer's statement of drawings.
(viii) Schedule of Ship's Equipment.	A.D.787H/ A.S.473H	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 (paragraph 6).

FORM	IDENTITY NO.	INSTRUCTIONS FOR USE
(viii) Schedule of Ship's Equipment	A.D.787H/ A.S.473H	Equipments comprising a set or installation (paragraph 4) 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).
(ix) Itemised List of Spare Gear	A.D.787J/ A.S.473J	To include all items allowed as List I - On Board Spares (List 'C' for Gunnery Equipment) and List III - Depot or Parent Ship Spares - To be detailed under the general headings of equipments shown in the Schedule of Equipment (Form A.D.787H). Equipments are to be divided into assemblies and sub-assemblies (paragraph 4) in accordance with the maker's catalogue and/ or Parts List, where these are relevant.

6. NAVAL AND AIR STORES.

All Naval and Air Stores which will be required to maintain or operate individual items of equipment are to be listed on flyleaf to Form A.D.787J which is to be inserted behind the itemised list of spare gear for that equipment. They are not to be included on Form A.D.787J.

7. DEFINITIONS OF MATERIEL.

(a) Equipment - A complete piece of machinery such as a diesel engine, a generator, a motor or a variable speed gear pump. Two or more equipments comprise a "set" of "installation", e.g., a diesel generator set, a motor generator set.

(b) Assembly - Any part of an equipment which can be replaced as a unit, such as the circulating water pump of a diesel engine, an electrical speed governor for a motor alternator, the governor of a turbo pump, or an amplifier tray for a flyplane predictor.

(c) Sub-assembly - Any part of an assembly which can be replaced as a unit. A sub-assembly bears the same relation to an assembly as an assembly bears to an equipment; e.g. :-

A diesel engine is an equipment.
A fuel pump of the engine is an assembly.
A combined plunger and barrel of the fuel pump is a sub-assembly.

8. NOMENCLATURE.

Descriptions are to be of standard nomenclature, beginning with the principal noun. The noun is to be written in capital letters, and in the plural. It is to be followed by other words necessary for identification.

The maker's Part No. is always to be included. If no maker's Part No. is available, a drawing or reference No. should be shown.

Gunnery Equipment items are to be referred to by Pattern No. or G.E. Drawing No.

9. METHOD OF PRINTING LISTS OF EQUIPMENT, ETC.

Both tracing and paper sheets are provided in respect of -

(i) Index (A.D.787B/A.S.473B).

(ii) Statement of Drawings and Instruction Books (A.D.787G/A.S.473G).

(iii) Schedule of Ship's Equipment (A.D.787H/A.S.473H).

(iv) Itemised List of Spare Gear (A.D.787J/A.S.473J).

Tracing sheets (A.D. series) are for use when reproduction is required. Paper sheets (A.S. series) are for draft work and for use as temporary pages pending reproduction.

The lists may be typed or printed by hand with indian ink. The sheets when typed are to be backed with black carbon paper to ensure the opaqueness necessary for clear printing.

10. DISTRIBUTION.

(a) Sufficient copies are to be prepared to enable distribution to be made as in the Appendix to this Order.

(b) The General Manager, Garden Island, is to be regarded as the co-ordinating authority for Lists of Equipment, etc., and normally is to hold all No. 2 (Yard) copies.

Refitting authorities, other than General Manager, Garden Island, may, where considered necessary, obtain No. 2 copies on loan.

(c) Copies being raised for the first time are to be in the hands of the responsible accounting officers concerned, as early as possible, to enable checking to take place before acceptance of the ship or floating dock.

Deficiencies are to be listed on separate sheets, numbered, signed, dated and attached to the certificates of acceptance (Forms A.D.787C/A.S.473C).

11. SURVEY, REPAIR AND REPLACEMENT.

The repair and replacement of items recorded in the List of Equipment, etc., when beyond the capacity of ship's staff, is to be effected as follows :-

(i) Equipment (fitted or portable) not designated 'R' or 'C', by means of Defect List.

(ii) Equipment and spare gear, etc., designated 'R' or 'C', by demand on the appropriate supply authority.

12. ALTERATIONS AND AMENDMENTS.

Are to be supported by raising Form A.S.197/A.D.526, in accordance with Consolidated Orders and Regulations, Article 298.

13. SHIPS IN RESERVE.

Ship's copies of the List of Equipment, etc., are to remain on board, in the custody of the appropriate Commanding Officer, Reserve Ships, whilst the vessel is in Reserve.

14. Consolidated Orders and Regulations, Article 298, will be amended.

(4355/1/40)

APPENDIX

List of Equipment etc.	Engineer Officer's	Electrical Officer's (Part I)	Electrical Officer's (Part II)	Commander (Air)	T.A.S. Officer's	Ordnance Engineer Officer's	Shipwright Officer's	Boatswain's
Copy No. 1 (Master Copy)	Navy Office	Navy Office	Navy Office	Navy Office	Navy Office	Navy Office	Navy Office	Navy Office
Copy No. 2 (Yard Copy)	Yard refitting Ship	Yard refitting Ship	-	Yard refitting Ship	-	-	Yard refitting Ship	Yard refitting Ship
Copy No. 3 (Store Copy)	General Manager, Garden Island. For R.A.N. Central Machinery & Spares Depot.	General Manager, Garden Island. For R.A.N. Central Machinery & Spares Depot.	Gunnery Equipment Stores Officer, Garden Island.	General Manager, Garden Island. For R.A.N. Central Machinery & Spares Depot.	Gunnery Equipment Stores Officer, Garden Island.	Gunnery Equipment Stores Officer, Garden Island.	-	-
Copy No. 4 (Fair)	Ship	Ship	Ship	Ship	Ship	Ship	Ship	Ship
Copy No. 5 (Working)	Ship	Ship	Ship	Ship	Ship	Ship	Ship	Ship

392.

Method of Repairing Cracks in Synthetic Resin Transparent Panels, e.g. Perspex.

An improved method of repairing cracks in synthetic resin transparent panels has been found satisfactory, viz. -

Ingredients

(1) Simplex "Simplified" Cold Curing Powder.
(2) Simplex "Simplified" Cold Curing Liquid.

Directions

Mix sufficient material for the repair in the following proportions :-

(a) Allow 10 drops of liquid to fall into a glass container. (Do not shake).

(b) Add sufficient dry powder to absorb all free liquid. (Do not stir).

(c) Then add 5 extra drops of liquid to the saturated powder and stir evenly with a stainless steel or glass rod until the mixture is fluid with slight but perceptible body.

(d) Chamfer edges of crack or break and fill with the mixture, holding firmly together with the hand for about 5 minutes, meanwhile cleaning excess mixture from the joint. Do not use excessive pressure.

(e) Allow to stand for approximately 10 minutes to harden.

Do not continue to use Simplex "Simplified" after mixture ceases to drop easily from the glass or stainless steel rod.

2. Important. This method of repair is not applicable to synthetic resin transparent panels fitted to Naval Aircraft. Repair, where permissible, of aircraft panels is shown in A.P.1464, Vol. 1, Part 2, Section 4, Chapter 5.

3. The ingredients should be accounted for as Naval Stores and demands for requirements should be forwarded to the appropriate Naval Store Depot.

4. Navy Order 549 of 1954 is hereby cancelled.

(4476/46/5)

393.

Naval Stores (Air) - Alteration in Reference Numbers.

Stocks of the undermentioned item should be transferred to Section 32C -

Present Ref. No.	Part No.	Description	Denom.	New Ref. No.
26FH/2089	Technical Rubber Co. No. 101	Sealing Strip (D.139099/2 and 3)	Feet	32C/627

2. The relevant publications are being amended.

(The foregoing is the text of A.F.O. 609/1955 altered to meet R.A.N. conditions)

(4404/27/109)

394.

Naval Stores (General) (Class B, Group 8B) - Charging-Pipes or Hoses, Pattern 2015A, supplied for Gunnery and Torpedo Purposes - Revised Allowances and Accounting.

Ships of the "Daring" Class, Destroyers and Frigates

Charging-pipes or hoses supplied to certain ships as components of gun mountings, and accounted for as "portable fittings", are to be dealt with as "sea stores".

2. Arrangements are therefore to be made forthwith for any of these items included in the Ordnance Engineer Officer's List of Portable Fittings to be transferred to the ship's Naval Store Account by Form S.549, in accordance with Article 109(f) of B.R.4 (Naval Storekeeping Manual).

3. Charging-pipes or hoses, Pattern 2015A, will be supplied in future for charging the recuperator systems of gun mountings and will replace hoses, Pattern 2015 (which will be made obsolescent), and the special adaptors supplied in "C" sets of gunnery spares.

4. The following statement shows the revised allowances of hoses, Pattern 2015A, for gunnery and torpedo purposes to ships concerned with this Order.

Class	Working Quantities		Spares		Remarks
	Gunnery purposes	Torpedo purposes	Gunnery purposes	Torpedo purposes	
Ships of the "Daring" Class.	6*	4	-	2	Spares allowed for Torpedo purposes are also intended to serve Gunnery requirements.
"Battle" Class Destroyers.	4*	4	-	2	
Other Destroyers.	1†	4	-	2	

Class	Working Quantities		Spares		Remarks
	Gunnery purposes	Torpedo purposes	Gunnery purposes	Torpedo purposes	
Frigates:- A/S, Type 12.	2*	-	1	-	
Others, fitted with Torpedo Tubes.	1†	2	-	1	See note above.
Others, not fitted with Torpedo Tubes.	1*	-	1	-	

* Hoses supplied with mountings as component parts.

† Not when fitted with spring recuperators.

5. Ships holding obsolescent hoses, Pattern 2015 or 2016A, are to retain them until they are unfit for further service, but the total number of hoses held on board should be adjusted to agree with the total ship allowance of hoses, Pattern 2015A, which will become fully effective when obsolescent hoses are worn out.

6. When hoses, Pattern 2015, are replaced the special adaptor supplied in the "C" set of gun mounting spares should be returned to the appropriate Gunnery Equipment Store.

7. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 492/1955 altered to meet R.A.N. conditions)

(4505/80/150)

395.

Naval Stores (General) (Class E, Group 7) - Methylated Spirits - Supply.

Following on recommendations of the Naval Paint Committee, it has been decided that future purchases of methylated spirits will be made to Australian Standard K.30. This material will be accounted for as "like Pattern 107" under Class E, Group 7.

2. Present stocks are to be exhausted before issues are made of the new material.

(4512/71/95)

396.

Naval Stores (General) (Class F, Group 2A, Part 3) - Lamps, Electric, X.965732 and Jackets, Pattern 16467, for Naval Air Stations.

Lamps, X.965732, were initially purchased complete with the jacket, vacuum, Pattern 16467. As the lamp and jacket are often required independently, future purchases will be made of the separate items. The descriptions of the lamp and jacket have accordingly been amended as follows :-

Ref. No. X.965732	Lamp, electric, 100/260 volt, 140 watt, sodium discharge ceramic bayonet cap, for use in Flare Units for Type F, Portable Flarepaths at Naval Air Stations.
Pattern No. 16467	Jacket, vacuum, for lamp X.965732.

2. Existing stocks are to be broken down and taken on charge under their individual pattern numbers.

3. The relevant publications will be amended.

4. Navy Order 139 of 1955 is relevant.

(The foregoing is the text of A.F.O. 368/1955 altered to meet R.A.N. conditions)

(4518/22/251)

397.

Paints and Compositions - "Liquid Envelope" Operations - H.M.A. Ships, Dockyards and Establishments.

The solvent used in packaging by the "Liquid Envelope" system is highly inflammable and toxic; in consequence, the following precautions and regulations are to be observed when this process is in use.

2. When practicable, these operations should be carried out when vessels are lying outside the Dockyard in tidal waters.

3. While "Liquid Envelope" operations are being carried out, an area up to a radius of 30 feet from the spray point will be classified as a Dangerous Area, in accordance with Clause 2.6 of B.R.1754.

4. Large notices, with bold white lettering on a red background reading as follows, are to be displayed on the outskirts of the Danger Zone :-

DANGEROUS AREA

NO SMOKING

NO NAKED LIGHTS ALLOWED.

5. Ships, Establishments or Dockyard Departments carrying out the operations are to notify the Fire Officer(s) concerned, and, if appropriate, the Commanding Officer of the vessel concerned, of the operation, and are to arrange for displaying and positioning the warning notices. The Commanding Officer will be responsible for supplying and rigging fire appliances, hoses, etc., as considered necessary, by the Fire Officer. In the case of a vessel under Dockyard control, the responsibility of the Commanding Officer falls on the General Manager of the Dockyard.

6. The Commanding Officer of any ship in which "Liquid Envelope" is being applied or of any ship alongside it, is to ensure that all naval personnel working in those ships comply with these regulations.

7. When operations are carried out between decks, the risk of fire and explosion is greater and suitable exhaust ventilation is to be arranged using pneumatic jet ejectors, or if available, fans with flame proof motors.

8. Men employed on this work are to be provided with, and wear, an approved respirator and protective clothing.

(The foregoing is the text of A.F.O. 3420/1954 altered to meet R.A.N. conditions)

(4227/1/5)

398.

Presentations Available for Re-Allocation.

The presentations ex H.M.A.S. SHROPSHIRE shown in the Appendix to this Order are available for re-allocation within the Royal Australian Navy. Ships or Services requiring any of the items should forward details of their requirements to reach Navy Office by 22nd September, 1955.

2. Administrative Authorities are requested to consider the possible requirements of ships which are expected to commission in the near future.

(3583/71/438)

APPENDIX

PRESENTATIONS

ITEM	DONOR	QUANTITY
Map of Shropshire	Lt. A.D. Powell, R.M.	1 No.
Authographed photograph of General Sir D. Campbell	Not known	1 No.
Autographed photograph of H.R.H. Prince George	Not known	4 No.
Autographed photograph of H.R.H. Prince of Wales	Not known	3 No.
Police Baton	Shrewsbury Borough Police.	1 No.

ITEM	DONOR	QUANTITY
Tray - silver with handles	Australian Victory Contingent, 1946	1 No.
Gramophone - cabinet model	Not known	1 No.
Gramophone - pickup	A.C.F.	1 No.
Ensign - silk	Ladies of Shropshire	1 No.
Book stand - oak	Not known	1 No.
Pictures - "Dogs"	Cecil Alden	2 No.
Autographed photograph of H.M. Queen Mary	The Royal Family	1 No.
Autographed photograph of H.M. King George V	The Royal Family	1 No.
Autographed photograph of H.M. Queen Elizabeth	The Royal Family	1 No.
Photograph - H.M.S. SHROPSHIRE	Not known	1 No.
Photograph - "Ludlow Castle" 10¼" x 12¼"	Not known	1 No.
Urns - thermos 10 gallon	A.C.F.	6 No.
Toaster - 8 slice	A.C.F.	1 No.
Amplifier - Bevan Sound System	A.C.F.	1 No.
Speaker - Rola Dynamic	Not known	1 No.
Projectors - cinemagraph 35 mm.	Not known	2 No.
Autographed photograph of H.M. King George VI	Not known	1 No.
Encyclopedia Brittanica 15 vols.	Not known	1 Set
Bookshelf for Encyclopedia	Not known	1 No.
Inkstand - solid silver with loose ink well	County of Shropshire	1 No.
Cup - silver 2 handles 8½"	County of Shropshire	1 No.
Cup - silver 2 handles small	County of Shropshire	2 No.
Salver - silver, circular 16"	County of Shropshire	1 No.
Salver - silver, circular 14"	County of Shropshire	2 No.
Salver - silver, circular 8½"	County of Shropshire	2 No.
CHAPEL EQUIPMENT		
Cruet - glass	Rev. H.J. Venn, R.N.	1 No.
Cross - brass	C. of E. Society	1 No.
Cross - wooden	Not known	1 No.
Organ - 4 stop "Estey"	Messrs. Naylor & Co. Sydney.	1 No.
Candlestick - wood	Not known	2 No.
Cross - wooden	Not known	1 No.
Altar rails	Not known	2 No.
Chairs	Not known	6 No.

ITEM	DONOR	QUANTITY
Electric sign - "Quiet Please - Service On"	Not known	1 No.
Sign - "Evening Prayers"	Not known	1 No.
Sign - "Holy Communion"	Not known	1 No.
Collection bags in wooden holders	Not known	4 No.
Miscellaneous hymn books, communion cards and religious text books	Not known	

399.

Shafting - Propeller Tail Shaft Bearing Bushes - Re-Rubbering.

Navy Order 75 of 1955 is to be amended as follows :-

Paragraph 2 - List III Spares is to be amended to read List II Spares.

(3771/11/108)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

400.

Dry Provisions - Markings on Packages.

Packages and containers for dry provisions procured under current and future contracts will not bear any indication of the period of warranty applicable or of the date of expiry of such warranty.

2. Packages will normally be marked as formerly except that the date of production (month and year) preceded by the letters "P.D." will be shown in place of the warranty expiry date, which was formerly preceded by the letters "W.E.".

3. When the date of production is not known, the date of delivery (month and year) into H.M.A. Victualling Yards will be shown preceded by the letters "D.D.".

4. The foregoing information will be shown irrespective of whether or not a warranty has been given by the suppliers.

5. The foregoing in no way varies the necessity for arranging consumption of provisions in strict order of date and the instructions contained in Consolidated Orders and Regulations, Articles 421 and 432, are to be rigidly observed.

6. Navy Order 190 of 1952 is hereby cancelled.

(4528/1/227)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

401.

Form A.S. 1246F - History Sheet for Ratings of the Supply and Secretariat Branch - Introduction.

It has been decided to amalgamate into one, the four History Sheets at present existing for the Supply and Secretariat Branch, viz., A.S.1246D (Writer ratings), S.1246E (Steward ratings), S.1246F (Stores ratings) and A.S.1246K (Cook ratings). The new History Sheet is entitled "Supply and Secretariat Branch Rating's History Sheet" and bears the number A.S.1246F. This new form will be issued when stocks of the existing forms are exhausted.

(3526/12/1283)

LIST OF ADMIRALTY FLEET ORDERS REPROMULGATED AS COMMONWEALTH NAVY ORDERS (NAVY ORDER 104 OF 1954)

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
900/54	231/54	-
931	-	244/54
932	-	245
933	223	-
935	-	248
936	244	-
937	-	292
938	249	-
940	-	331
942	296	-
947	-	436
948	357	-
950	-	221
974	206	-
978	-	233
984	-	360
985	-	344
994	-	269
999	-	240
1001	-	371
1004	-	242
1005	-	243
1007	-	247
1008	441	-
1009	303	-
1010	-	304
1011	-	C.C.N.O. 36
1019	253	-
1042	295	-
1046	-	311
1055	-	343
1056	-	361
1060	-	816
1071	-	700
1072	-	375
1074	222	-
1076	-	309
1080	-	353
1083	-	254
1084	442	-
1085	-	459
1116	-	342
1128	-	397
1130	-	134/55
1132	-	275/54
1134	-	252
1136	278	-
1137	255	-
1139	-	432
1148	336	-
1158	-	339
1181	302	-
1182	393	-
1184	288	-
1187	-	351
1189	-	579
1190	684	-
1193	-	437

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1198	-	560
1216	-	260
1241	-	359
1251	-	419
1255	-	325
1256	-	290
1259	291	-
1262	-	377
1263	-	709
1269	-	379
1270	-	435
1275	-	440
1276	-	335
1299	-	321
1310	-	518
1317	546	-
1323	-	589
1324	-	363
1340	-	469
1343	-	349
1344	-	350
1345	-	326
1346	-	327
1348	-	686
1349	305	-
1352	-	356
1353	-	334
1355	-	358
1357	-	452
1369	-	480
1370	-	630
1405	-	550
1406	-	420
1408	324	-
1409	-	372
1411	378	-
1413	-	822
1418	-	599
1419	-	54/55
1441	-	399/54
1444	401	-
1475	-	471
1477	499	-
1480	-	621
1482	-	478
1527	369	-
1528	-	310
1531	-	472
1532	-	373
1533	-	453
1538	-	763
1539	-	495
1547	-	140/55
1548	460	-
1549	559	-
1595	-	479/54
1614	-	461
1615	-	83/55
1616	-	500/54
1617	392	-

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1619	150/55	-
1622	-	581
1623	-	598
1624	-	380
1646	384/54	-
1653	-	466
1660	-	449
1661	-	450
1664	-	421
1665	425	-
1666	457	-
1670	-	497
1672	434	-
1673	475	-
1674	-	557
1675	-	474
1676	438	-
1677	433	-
1678	145/55	-
1680	370/54	-
1700	-	464
1727	-	645
1729	473	-
1730	-	426
1734	558	-
1744	-	522
1759	-	561
1772	-	602
1791	-	491
1793	533	-
1795	-	48/55
1800	-	597/54
1822	-	604
1835	525	-
1849	-	618
1853	536	-
1859	498	-
1860	-	570
1864	521	-
1892	507	-
1900	526	-
1912	-	516
1914	-	568
1916	-	11/55
1917	-	620/54
1918	-	538
1920	651	-
1925	-	571
1952	-	619
1966	-	672
1970	539	-
1973	623	-
2010	506	-
2029	-	534
2031	555	-
2075	-	578
2085	-	682
2086	551	-
2089	-	674
2090	-	673
2092	-	592

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2094	554	-
2095	-	615
2100	-	642
2112	826	-
2113	-	583
2124	824	-
2131	-	326
2145	562	-
2147	-	591
2148	-	614
2196	-	613
2205	624	-
2206	-	569
2219	-	322
2242	-	160/55
2250	-	696/54
2256	-	4/55
2257	-	751/54
2260	-	775
2262	-	677
2265	683	-
2272	-	139/55
2298	-	764/54
2306	-	729
2311	-	791
2327	-	698
2338	-	699
2339	-	676
2340	647	-
2341	-	648
2342	-	45/55
2345	-	636/54
2346	637	-
2348	711	-
2349	-	174/55
2353	-	725/54
2354	-	760
2403	-	122/55
2412	670	-
2413	-	135
2418	85/55	-
2452	-	768/54
2470	-	671
2471	675/54	-
2472	-	8/55
2473	-	736/54
2474	-	359
2476	-	759
2478	-	685
2480	707	-
2484	724	-
2491	-	188/55
2498	-	728/54
2516	-	15/55
2526	5/55	-
2527	752/54	-
2529	-	187
2530	-	720/54
2531	-	702
2532	-	209/55
2534	-	762/54

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2535	-	780
2537	-	114/55
2551	-	98
2577	-	41
2590	774	-
2593	717	-
2594	-	858/54
2595	-	719
2596	-	776
2597	-	754
2598	721	-
2603	-	805
2604	738	-
2647	-	359
2660	-	792
2661	-	75/55
2662	-	46
2663	-	777/54
2666	-	779
2670	-	212/55
2688	-	807/54
2696	-	786
2704	-	65/55
2705	-	40
2706	-	66
2724	803	-
2728	-	823/54
2730	82/55	-
2753	-	39/55
2755	-	785/54
2758	-	100/55
2765	-	834/54
2768	806/54	-
2777	-	87/55
2779	-	796/54
2780	-	44/55
2781	-	796/54
2783	-	846
2785	-	821
2791	-	53/55
2795	-	247
2823	852	-
2828	-	64
2835	-	242
2836	788	-
2845	-	839/54
2847	-	842
2852	843	-
2854	-	316
2861	-	144/55
2862	-	860/54
2873	84/55	-
2890	-	855
2901	-	166/55
2902	-	841/54
2903	-	76/55
2904	-	171
2905	-	43
2906	-	797/54
2908	-	50/55

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
2914	-	9
2915	863/54	-
2917	80/55	-
2941	-	814/54
2948	-	104/55
2961	857/54	-
2964	-	802/54
2965	47/55	-
2966	-	49/55
2967	-	52
2969	-	861/54
2971	-	173/55
2978	142	-
2979	-	137
2981	-	193
3027	-	68
3040	-	167
3042	-	311
3045	-	859/54
3046	-	77/55
3048	817/54	-
3049	-	6
3051	844	-
3060	-	862/54
3062	-	191/55
3097	103/55	-
3107	129	-
3108	-	107
3110	42	-
3114	51	-
3119	-	89
3154	-	123
3168	-	168
3172	-	206
3174	-	253
3182	138	-
3183	-	319
3184	-	278
3194	-	146
3239	-	222
3242	-	183
3250	131	-
3252	-	225
3253	73	-
3257	-	108
3262	79	-
3265	-	275
3269	-	190
3270	141	-
3309	-	223
3313	-	203
3314	-	202
3320	154	-
3322	-	169
3323	-	271
3325	-	229
3334	-	260
3335	350	-
3338	136	-
3339	351	-
3340	143	-

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
3362	-	196
3364	157	-
3374	-	239
3387	-	201
3388	151	-
3389	152	-
3391	-	243
3403	-	130
3405	155	-
3420	-	397
3425	-	236
<u>1955</u>		
31/55	153/55	-
36	-	185/55
46	156	-
48	-	211
50	-	235
80	-	305
100	-	283
103	-	249
104	-	270
106	-	331
112	-	320
114	-	210
116	-	321
148	-	329
162	-	232
163	-	230
170	349	-
176	-	340
221	-	250
222	-	334
223	-	251
226	-	292
227	-	372
229	-	368
231	-	296
232	348	-
262	342	-
275	-	312
276	-	226
277	-	371
279	-	315
283	-	231
285	-	279
295	354	-
329	353	-
333	-	287
334	-	289
336	111	-
338	-	293
340	-	337
343	-	373
347	347	-
349	352	-
352	-	299
368	-	396
394	-	384
409	344	-

A.F.O.'s (April, 1954 and onwards)	ADOPTED IN FULL C.N.O. 1954 OR 1955	ADOPTED IN AMENDED FORM C.N.O. OR C.C.N.O. 1954 OR 1955
1955		
410	-	366
411	345	-
413	-	335
415	-	339
421	-	338
423	-	374
468	-	328
469	-	308
476	343	-
478	-	365
483	-	313
487	-	332
488	-	370
489	346	-
492	-	394
510	-	119
557	-	369
603	-	367
609	-	393
637	-	379
746	-	386
751	-	388
752	-	389

NOTE:- A.F.O.'s subsequent to 900/1954, which are not listed above, can generally be accepted as not applicable, but some may still be under consideration.

Those within the above numbers, subsequently repromulgated, will be included in later monthly cumulative lists.

(Navy Orders 206 of 1954 to 401 of 1955, dated 1st June, 1954, to 7th June, 1955.)

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C.N.Os. 402 - 419

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
14th June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0089

TABLE OF CONTENTS

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

402.

Machinery - Condenser Re-Tubing Tools.

H.M.A. Ships

Damage to condenser tubes is being caused by the use of re-tubing tools which have become burred at the leading edges through misuse. Internal scoring of the tubes thus caused accelerates corrosion.

2. To reduce the possibility of such damage, the ends of all re-tubing tools are to be rounded instead of bevelled at the leading edge as indicated in Navy Order 402 of 1955 diagram.

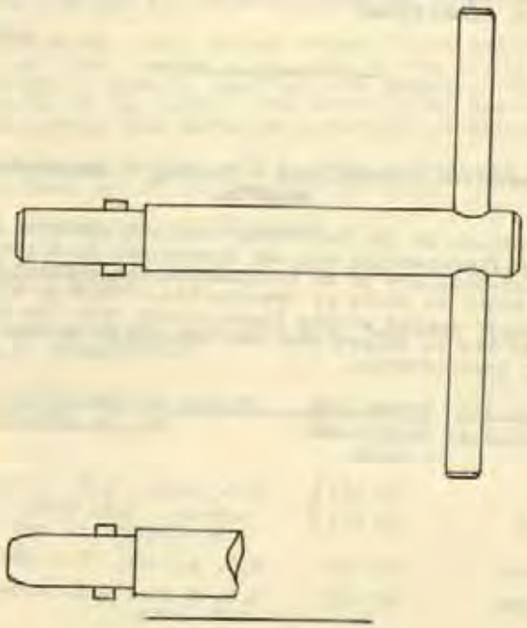
3. Even very light scoring is likely to initiate inlet-end erosion, and the tool should be inspected before use, care being taken not to cant the tool which will cause the spigot to bear heavily on the inside of the tube.

(The foregoing is the text of A.F.O. 744/1955 altered to meet R.A.N. conditions)

(4505/60/56)

Navy Order 402 of 1955 Diagram.

CONDENSER RE-TUBING TOOL.



403.

Ammunition - 0.5-in. and Below - Cartridges, S.A., 0.22-in. Rim Fire - Stocks of Ammunition made in 1950 - Withdrawal.

To maintain the improvement in quality of 0.22-in. rim fire ammunition available for Service users, all stocks of JX549 Ctges 0.22-in. (1950 manufacture) are to be withdrawn. This does not include ammunition of Australian manufacture.

2. H.M.A. Ships and Establishments are to return any such ammunition held to R.A.N. Armament Depots at the first opportunity, demanding replacement as necessary by ammunition made 1951 and later, or Australian made of any date.

3. R.A.N. Armament Depots only. - All stocks of JX549 Ctges 0.22-in., and any returned as a result of this Order, should be transferred to unserviceable charge and dealt with in accordance with current instructions for the disposal of unserviceable S.A.A.

4. The following entry is to be made on Sheet 15 of Restriction List (B) :-

Column 1. - 4

Column 2. - Rimfire (U)

Column 3. - Manufactured 1950 (other than Australian manufacture)

Column 4. - Withdraw and sentence unserviceable

Column 5. - Dispose of in accordance with current instructions

Column 6. - Navy Order 403 of 1955.

(The foregoing is the text of A.F.O. 673/1955 altered to meet R.A.N. conditions)

(4442/26/25)

404.

Ammunition - Propellant - Landing - Destruction - Reports.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots 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 specially to the Naval Board for instructions.

Propellant lot or sub-lot No.	Propellant nature and size	Nature of gun ammunition which may be involved
RNC 265	SC 061	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4.5-in.; Q.F. 4-in. (F.A.); Q.F. 12-pdr. 12 cwt.
RNC 324XA	SC 061	
RNC 2115XP	SC 109	Q.F. 4.7-in. (S.L.).
RNC 2121XR	SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.

Propellant lot or sub-lot No.	Propellant nature and size	Nature of gun ammunition which may be involved
RNC 2343XS	SC 122	B.L. 6-in.; Q.F. 4.7-in. (S.L.); Q.F. 4.5-in.
RNC 3609XC	NF 052	Q.F. 4.7-in.; Q.F. 4-in.; Q.F. 12-pdr.

2. Attention is drawn to 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.

(The foregoing is the text of A.F.O. 555/1955 altered to meet R.A.N. conditions)

(4433/51/226)

405.

Ammunition - Rocket Flares - Motors, Rocket, 2-in., Mark N9 - Faulty Welding of Venturis.

A case has occurred in which the venturi of a 2-in., Mark N9 rocket motor was blown out on firing.

2. Investigation shows the cause to be that the welding together of the rear ends of the venturi and the motor body was incomplete. During manufacture and assembly four tack welds are initially applied solely to locate and hold the venturi and body in relation to one another while the main circumferential weld is made. Any Mark N9 motor bodies without the circumferential weld are considered defective and are to be regarded as Category (dd) vide B.R. 862(45), Naval Magazine and Explosive Regulations, Article 305.

3. All Mark N9, 2-in. rocket motors filled between 3/53 and 12/54, inclusive, are to be returned to the nearest R.A.N. Armament Depot, clearly labelled, the number of this Order being quoted on the label. The return notes are to be endorsed quoting this Order as authority for return.

4. The date of filling will be found stencilled in black near the front end of the motor, e.g. 7/53.

5. Nil returns are not required.

6. R.A.N. Armament Depots.- Separate instructions have already been issued.

(The foregoing is the text of A.F.O. 747/1955 altered to meet R.A.N. conditions)

(4433/91/812)

406.

Gun Mountings - 4.5-in. Twin R.P. 41 Mountings Marks 6 and 6* - Modifications - Amendment List No. 1.

The following amendments and additions are to be made to Appendices 1 and 2 of Navy Order 523 of 1954 :-

A M E N D M E N T S

Mod. No.		
158	Column 3:	Idicator to read Indicator
	Column 6:	Insert "R.N." before Frigate
202	Column 4:	Insert "X. 1619003"
	Column 5:	Insert "X. 1619003 All Items"
	Column 6:	Delete Remarks
211	Column 4:	Delete "N.49850"
	Column 4:	Insert "N.53622"
218	Column 6:	Insert "Item 14/N. 38543 to be modified to 14/N 50709" "Item 13/N. 38423 to be modified to 10/N. 50708. Seal housing may require building up."
219	Column 5:	Insert "N. 50709/17 - 24 N. 50708/22 - 28 N. 50707/10 - 16."
248	Column 6:	Insert "Not required with B & D door switches."
301	Column 2:	Insert "6 & 6*"
	Column 6:	Delete Remarks
302(a)	Column 4:	N. 36570 & N. 36570 Parts 3 to read N. 36570E. & 36570E. Part 3 N. 32494 to read N. 39494
	Column 6:	Insert "To be carried out as an A & A Item. A.F.O. A.747/54 Item 122 is relevant."
A.N.68	Cancel	
Appendix II	Column 1	Delete: "Admiralty" in heading Insert: "A.N.", in lieu.

A D D I T I O N S

MOD. NO.	MARK OF MOUNTING	DESCRIPTION	DRAWINGS	SUPPLY OF "P" PARTS NAVY ORDER 19 OF 1953	REMARKS
A.N. 72	6	Fixed structure shell and cartridge hoists. Fit hoist cover at top of hoist.	N. 48760 N. 48759		Mk. 6* mountings will be fitted in manufacture.
A.N. 73	6 & 6*	Cutting in cradel top plate to facilitate withdrawal of barrel locking plate.	N. 36295		If required when modifying barrel locking plate.
A.N. 74	6 & 6*	Copper pipes connecting Oil Servo Unit and top cover of Oil Servo Unit to be lagged. Lagging to be covered to prevent contamination by oil.			
A.N. 75	6 & 6*	Oil Servo Units Mks. 5 & 5*. Modification to prevent condensation and corrosion and to simplify removal of moving coil. Fit header tanks, etc.	N. 53618 N. 53617 N. 53603 N. 39954 D. 1621257 E. 1621252 E. 1621251		As an interim measure steel cover plate on Servo Unit to be replaced by brass cover plate - - - -

(Cont'd.)

MOD. NO.	MARK OF MOUNTING	DESCRIPTION	DRAWINGS	SUPPLY OF "P" PARTS NAVY ORDER 19 OF 1953	REMARKS
A.N. 75	6 & 6*	Oil Servo Units Mks. 5 & 5*. Modification to prevent condensation and corrosion and to simplify removal of moving coil. Pit header tanks, etc.	E. 1621250 D. 1621249 B. 1621067 C. 1621021 D. 1621009 D. 1621008 D. 1621007 D. 1515084		As an interim measure steel cover plate on Servo Unit to be replaced by brass cover plate - - - -
A.N. 76	6 & 6*	Amplifiers Mk. 15H (E.P.V.28) and Mk. 2J (E.M.V.51). Modification to pither Circuit.	A.P.O. 3252/1954		To be carried out be Ships Staff.
A.N. 77	6 & 6*	Pit guard rails at shell and cartridge hoist loading numbers positions in Gun-house.	D.O.U.W. A/50729		

(4429/123/249)

407.

Guns - Q.F., 40-mm., Marks N1, N1/1 to N1/4 and 9 Left - Modification to Hand Operating Rod.

The following modification has been approved :-

Guns	Q.F., 40-mm., Marks N1, N1/1 to N1/4 and Mark 9 Left.
Part affected	DV 436 ROD, hand operating, Mark 1, left gun.
Purpose	To ensure that the toe of the hand operating rod engages correctly with the outer crank for proper functioning.
Nature of Modification	Toe of DV 436 ROD, if 6-mm. wide, to be modified to approximate toes of rods of current manufacture with a width of 10-mm. by building up by flame welding to BSS 1453/1952 - A5 wear resisting alloy steel rod, or alternatively, Stellite Grade 6 steel, welding rods.
Drawing	N.O.D. 3138/29.
By whom to be done	R.A.N. Armament Depots.
When to be done	When convenient.

2. Schedule of Modifications. Part 1.

Guns - Q.F., 40-mm.,
Mark N1 and Accessories. **Add** Serial No. 30.

Guns - Q.F., 40-mm.,
Mark 9 and Accessories. **Add** Serial No. 21.

(The foregoing is the text of A.F.O. 749/1955 altered to meet R.A.N. conditions)

(4428/43/249)

408.

Anti-Submarine - Asdic Hull Outfit 7 - Safety Switch for use with Pattern 9962 Raise/Lower Motor (Asdic Installations Type 170 and 164/174 Series).

The Asdic Hull Outfit 7 at present incorporates a Pattern 9962 Raise/Lower Motor. This motor is a plain series type and will race, rapidly attaining an excessive and dangerous speed, should the V belts connecting the motor to the gear box break or be forced off under any circumstances.

2. Commanding Officers of ships concerned are to ensure that when raising or lowering the dome, the person operating the switch of the Board Control, Pattern 5868A (or A.3348), watches the belts the whole time the motor is running and opens the supply immediately the belts break or are forced off.

3. Arrangements are in hand to obtain and supply in due course, a compound wound motor to replace the unsuitable series wound motor, Pattern 9962.

4. As an interim measure, a Pattern A4059 Safety Switch with guard for the D.C. motor will be supplied without demand to holders of Asdic Hull Outfit 7 when stocks become available. The switch is to be fitted in accordance with Drawing U.D.38032 reproduced as part of this Navy Order. This drawing shows the modifications required to the existing belt, the height to which the belt guard must be set, and the revised wiring in the Board Control, Pattern 5868A (or A3348).

5. The switch, normally closed, is operated by an arm at the end of which is fitted a pulley wheel. This wheel is supported by the forward of the two belts. Should the belt break, or be forced off, the wheel and the arm drop, thus opening the switch and breaking the control circuit.

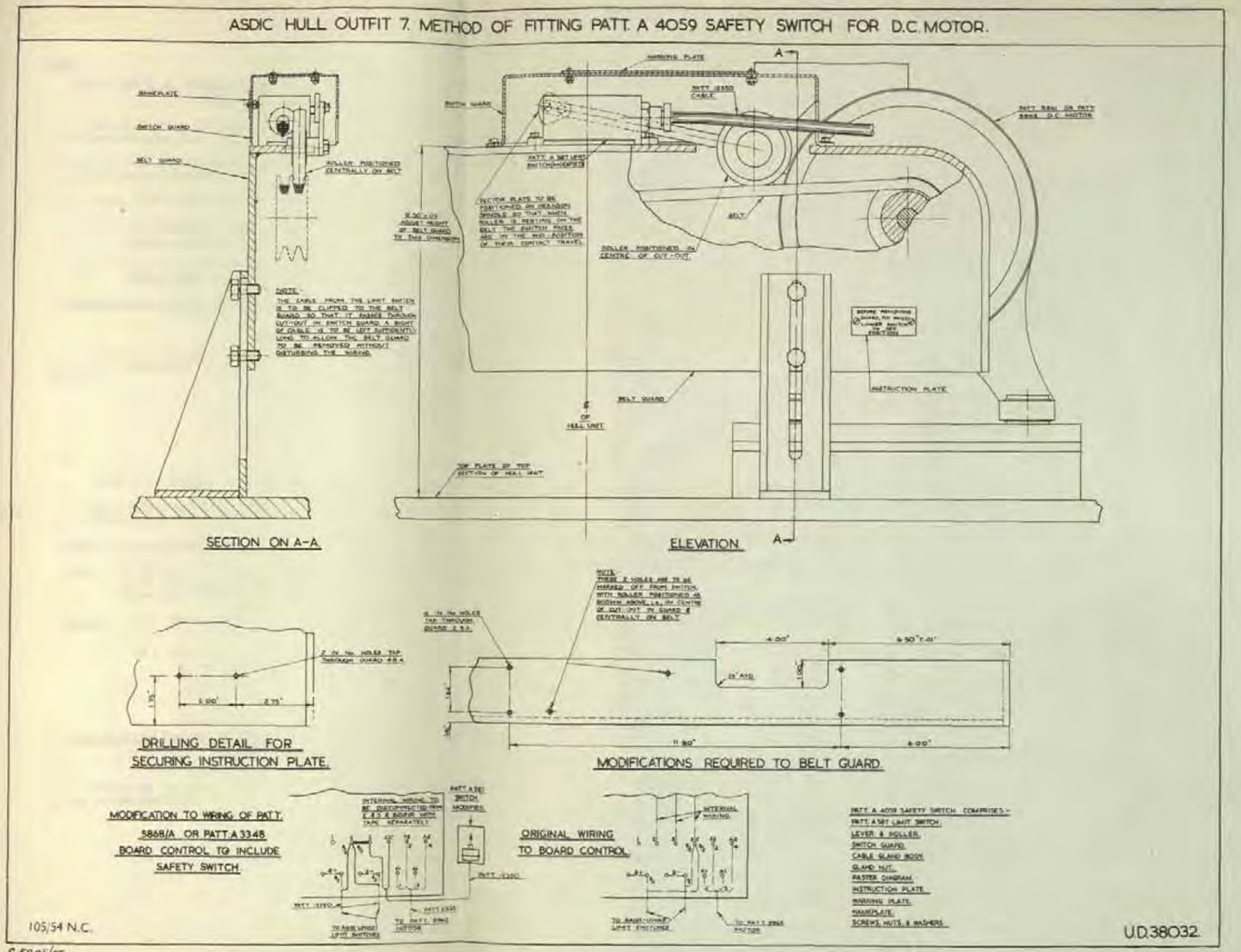
6. A "paster" diagram, supplied with the Pattern A.4059 switch, shows changes in the connections of the Board Control Pattern 5868A (or A.3348). This "paster" is to be stuck inside the cover of the Board Control, adjacent to the existing "paster".

7. This Order does not apply to ships with Asdic Hull Outfit 7A where the raise/lower motor is of an A.C. type having a shunt characteristic and will not race should the belts break or be forced off.

(The foregoing is the text of A.F.O. 3324/1954 altered to meet R.A.N. conditions)

(4518/11/224)

Navy Order 408 of 1955 Diagram.



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409.

A.A. and A.S. Frigates (Modified River) - Alteration and Addition Item.

The following alteration and addition item is approved in principle for A.A. and A.S. Frigates (Modified River) :-

"To fit two (2) in number whip aerials A.W.A. and aerial exchange outfit E.L.".

2. Class list item numbers are as follows :-

(a) A.A. Frigates (Modified River)
Class item No. 511 Classification 'A'

(b) A.S. Frigates (Modified River)
Class item No. 512 Classification 'A'

Compensating Weight Required: .56 ton at forecastle deck level or 1.44 tons at upper deck level.

3. Proposals to meet the compensating weight requirements are to be furnished by all A.A. and A.S. Frigates (Modified River).

(4283/101/76)

410.

H.M.A.S. SYDNEY - Alteration and Addition Item.

The following alteration and addition item is approved in principle for H.M.A.S. SYDNEY :-

Class List Item No. 275 Classification "A"

Item: To fit new test equipment in accordance with B.R. 1917, Modifications Nos. 13 and 14 to radars, Type 293 P/Q and 277 P/Q respectively.

Notes:- (a) Ship's staff may progress this item as time and labour permit.

(b) Fitting of the new test equipment to Types 277 and/or 293 radar(s) earlier than the P. or Q. version will be carried out concurrently with the conversion of the set(s) to the P. or Q. standard.

Compensating Weight Required: 427 lbs. at Galley deck level or 900 lbs. at Hangar deck level.

2. Proposals to meet compensating weight requirements are to be forwarded by H.M.A.S. SYDNEY.

(4278/103/127)

411.

Naval Stores (General) (Class D, Groups 1-5) - Allocation of New Pattern Numbers.

The Appendix to this Order details new pattern numbers which have been assigned to various items dealt with under Class D, Groups 1-5, of the Rate Book of Naval Stores to facilitate accounting and to eliminate duplications.

2. Stock and records shall be adjusted accordingly.

3. H.M.A. Ships and Establishments are to adjust their ledgers in accordance with Article 109(g) of B.R. 4 (Naval Storekeeping Manual).

4. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 763/1955 altered to meet R.A.N. conditions)

(4510/1/43)

APPENDIX

Class and Group	Old Pattern No.	Description	Revised Pattern No.
D.1	N.8016	Canvas, Merchant Navy, No. 4	8016
D.1	N.8033	Canvas, worn, broad, 24-in.	8033
D.1	N.8037	Tubing, canvas hose, No. 1 size	8037
D.1	N.8038	Tubing, canvas hose, No. 2 size	8038
D.1	N.8039	Tubing, canvas hose, No. 3 size	8039
D.1	N.8040	Tubing, canvas hose, No. 4 size	8040
D.1	N.8041	Tubing, canvas hose, for submersible pumps	8041
D.3	N.8151	Matting, sword, 7-in.	8151
D.3	N.8153	Matting, sword, 5-in.	8153
D.3	N.8155	Matting, sword, 3-in.	8155
D.3	N.8157	Bunting, old	8157
D.3	N.8160	Flags, old	8156
D.3	N.8162	Oakum, black	8062
D.4	N.8401	Aprons, canvas, for leadsmen	8401
D.4	N.8403	Bags for leather gear	8403
D.4	N.8411	Cloths, deck, 24-ft. × 18½-ft.	8411
D.4	N.8412	Cloths, deck, 12-ft. × 12-ft.	8412
D.4	N.8413	Cloths, deck, 8-ft. × 8-ft.	8413
D.4	N.8416	Cots, canvas	8416
D.4	N.8417	Cots, canvas	8417
D.4	N.8419	Jackets, canvas, M.N., Size 1	8419
D.4	N.8420	Jackets, canvas, M.N., Size 2	8420
D.4	N.8421	Jackets, canvas, M.N., Size 3	8421
D.4	N.8422	Jackets, Fearnought, Size 1	8422
D.4	N.8423	Jackets, Fearnought, Size 2	8423
D.4	N.8424	Jackets, Fearnought, Size 3	8424
D.4	N.8425	Trousers, canvas, M.N., Size 1	8425
D.4	N.8426	Trousers, canvas, M.N., Size 2	8426
D.4	N.8427	Trousers, canvas, M.N., Size 3	8427
D.4	N.8428	Trousers, Fearnought, Size 1	8428
D.4	N.8429	Trousers, Fearnought, Size 2	8429
D.4	N.8430	Trousers, Fearnought, Size 3	8430
D.4	N.8431	Dresses, combination, canvas, Size 1	8431
D.4	N.8432	Dresses, combination, canvas, Size 3	8432
D.4	N.8433	Dresses, combination, canvas, Size 3	8433
D.4	N.8434	Dresses, combination, drill, brown, 1	8434
D.4	N.8435	Dresses, combination, drill, brown, 2	8435
D.4	N.8436	Dresses, combination, drill, brown, 3	8436
D.4	N.8437	Gloves, Fearnought	8437
D.4	12	Wallets, canvas	9812
D.4	13	Wallets, canvas	9813
D.4	16	Wallets, canvas	9816
D.4	15	Wallets, canvas	9815
D.4	17	Cases, canvas	9817
D.4	—	Flags, black, 2-ft. × 2-ft. square	8643
D.4	—	Wallets, canvas, for speed flags, Size 6, on staves, 3-ft. 6-in.	8404
D.4	—	Protective overmittens for anti-gas gloves	8574
D.5	N.8976	Oakum, white	8976
D.5	N.8977	Sennet, rotproofed	8977

412.

Naval Stores (General) (Class E, Group 7) - Anti-Corrosive Metal Primers - Supply.

Following upon recommendations of the Naval Paint Committee, it has been decided that future purchases of paint for use as an anti-corrosive metal primer will be confined to Red-Oxide/Zinc Chromate Primer to Specification S.A.A. Int. 5A. This material will be accounted for under Class E, Group 7, as a non-pattern item.

2. The undermentioned items have been superseded in the Royal Australian Navy by the introduction of this primer. Existing stocks of any of the superseded items which are found on test to conform to Specification S.A.A. Int. 5A should be used up before the new material is issued.

Pattern	Description	Remarks
509	Paint, red lead.	When used as metal primers.
5368	Paint, red lead, non-setting to B.S. 1011, Type 2.	
-	Paint, red lead, "Champlead" and other proprietary brands.	
3568	Primer, zinc chromate, red, to Specification D.N.C./M/75.	
-	Primer, zinc chromate, red, to Specification D.O.T.M. 5258.	
5362	Primer, zinc chromate, yellow, to Specification D.N.C./M/76.	
-	Primer, zinc chromate, yellow, to Specification D.O.T.M. 5258.	
508	Paint, mixed, oxide of iron.	
-	Paint, red oxide of iron.	
-	Metal primer, "Danboline" and other proprietary items.	

(4512/71/100)

413.

Naval Stores (Technical) (Class F, Group 3B) - Admiralty Gyro-Magnetic-Compass, Type 6 - Introduction.

Admiralty Gyro-Magnetic-Compass, Type 6 (A.G.M.6), has been introduced for new construction and modernisations where magslip transmissions are required from the Admiralty Gyro-Magnetic-Compass. The A.G.M.6 is usually fitted in conjunction with the gyro-compass, Pattern 5005. The new equipment consists of the undermentioned items which will be added to the Rate Book and Authorised List of Naval Stores, under Class F, Group 3B :-

(a) New patterns.

Pattern	Description	Ship's Accounting Classification
8160	Master Unit, complete with compass, Pattern 8131.	Permanent
8161	Gyro Unit complete with mounting.	Permanent
8163	Rack.	Permanent
8164	Combined Differential Unit, Alignment Indicator and Total Error Corrector (D.A.T.E.C.).	Permanent
8165	Amplifier.	Permanent
8166	Transmitter Panel.	Permanent
8167	Meter Panel.	Permanent

(b) Existing patterns which have already been introduced for A.T.M.C. 4G, A.G.M.5 and Gyro-Compass, Pattern 5005 and are common to A.G.M.6 :-

Pattern	Description
8132	Binnacle, complete with coil unit, Pattern 8133.
8134	Azimuth Circle, for compass, Pattern 8131.
8142	Plinth, 20-in., for binnacle, Pattern 8132.
8143	Base Ring, for binnacle, Pattern 8132.
8146	Flinders Bar Fitting, for binnacle, Pattern 8132.
8147	Sphere Bracket, for binnacle, Pattern 8132.
8170	Test Lead, 8-way, screened.
8171	Test Lead, 12-way, screened.
5105	Motor Generator, D.C./A.C., 500-watt, 22-volt input, 115-volt, 1-phase, 400 c/s output.
5106	Starter, for Pattern 5105.
5087	Regulator, Automatic Voltage, carbon pile, for motor generator, Pattern 5105.

2. The following accessories and components of the above-mentioned major items of equipment, will also be dealt with under Class F, Group 3B :-

(a) New patterns.

Pattern	Description	Ship's Accounting Classification
8168	Aysynn, type ACP. 300/1.	Permanent
8169	Aysynn, type ACP. 400/10.	Permanent
8172	Converter Unit, single phase to 3 phase, 400 c/s.	Permanent
8173	Rectifier, Westinghouse, type 16.K.12.	Permanent
8174	Switch Unit Assembly, for D.A.T.E.C., Pattern 8164.	Permanent
8175	Switch, toggle, 3 amp. S.P., slotted dolly.	Permanent
8043	Motor, Pattern 8040, with 18T. pinion.	Permanent
8045	Motor, Pattern 8041, with 30T. pinion and bob weight.	Permanent
8046	Motor, Pattern 8041, with worm gear box, brake disc and coils complete.	Permanent
8176	Discs, Automatic Deviation Corrector, for D.A.T.E.C., Pattern 8164 (box of 3).	Permanent

(b) Existing patterns.

Pattern	Description
8131	Compass, magnetic.
8133	Coil Unit, for binnacle, Pattern 8132.
8148	Aysynn, type ACT.800.
8149	Voltmeter, 2-in. square, 0-30 volt, D.C.
8150	Voltmeter, 2-in. square, 0-150 volt, A.C., 400 cycles.
8151	Hood, for master units, Pattern 8130 and 8160.
5515	Transmitter, "M" Type.

3. The allocation of A.G.M.6 equipment will be arranged by the Naval Board together with the distribution of maintenance stocks.

4. Allowances of spares to ships fitted with A.G.M.6 will be promulgated separately.

5. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 495/1955 altered to meet R.A.N. conditions)

(4518/37/163)

414.

Stores - Apparatus, Breathing, Pattern 5665 - Modification for use in A.B.C. Attack.

In order to ensure that the wearer of Pattern 5665 breathing apparatus shall be provided with pure **air under** "Gas" conditions, a container Type E, Mark 6 (as used with the G.S. respirator) is to be so modified that it can be screwed on to the end of the air tube in place of the existing strainer. It is therefore intended that one container fitted with a union nut should be allowed for each Pattern 5665 breathing apparatus held.

2. To prepare the breathing apparatus for use in A.B.C. attack, the existing strainer is removed and replaced by the modified container.

3. The modified containers are Naval Armament Stores and will be known as P.W.055 CONTAINER, Type E, Mark 6 - Assembly.

4. The allowances of containers for this purpose are as follows :-

Light Fleet Carriers	- 24 No.	
Cruisers and Depot Ships	- 14 "	
Daring Class Ships	- 10 "	
Destroyers, Frigates and Ocean Minesweepers	- 10 "	
Boom Working Vessels	- 3 "	
Tugs, Seaward Defence Boats, Inshore Minesweepers	- 2 "	
S.A.R. Craft, General Purpose Vessels	- 1 "	
Shore Establishments	- 1 "	per breathing apparatus held.

5. H.M.A. Ships and Establishments are to demand requirements from the nearest R.A.N. Armament Depot.

6. R.A.N. Armament Depots only.

F.W.042 CONTAINERS, Type E, Mark 6 - Assembly, are to be modified by soldering a Pattern 5667 union nut to the neck of the container and fitting a leather washer in the nut seating, in accordance with attached diagram. Requirements of Pattern 5667 union nuts are to be obtained from the nearest Naval Store Depot and leather washers are to be made locally.

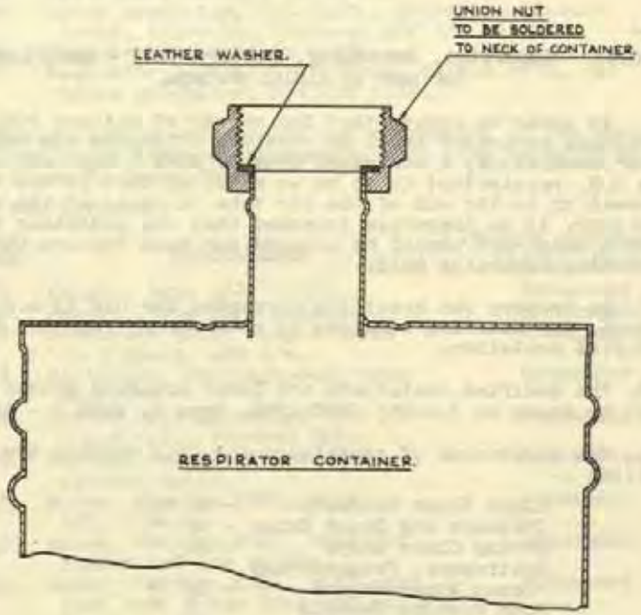
(The foregoing is the text of A.F.O. 3260/1954 altered to meet R.A.N. conditions)

(4512/50/193)

Navy Order 414 of 1955 Diagram.

MODIFICATION TO STANDARD GENERAL SERVICE RESPIRATOR

CONTAINER (TYPE 'E' MARK 6.) TO FIT PATT. 5665. BREATHING TUBE



SCALE :- FULL SIZE.

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

415.

Clothing - Housewives - Introduction of Modified Components.

The range of items included in ratings' housewives has been reviewed and, on exhaustion of present stocks of housewives, the items shown in the Appendix to this Order will replace those now supplied.

2. The design of the housewife has also been modified and the new pattern will be supplied when stocks of the old type are exhausted.

(The foregoing is the text of A.F.O. 3120/1954 altered to meet R.A.N. conditions)

(4532/68/15)

APPENDIX

Beeswax (a)		1 piece
Buttons, black brace		3 No.
Buttons, blue, for Action Working Shirts		3 "
Buttons, raincoat 11/16"		6 "
Buttons, white, fly		3 "
Buttons, white, brace		3 "
Needles, darning	(b)	10 "
Needles, sewing	(b)	10 "
Thimble		1 "
Thread, black	(c)	1 reel (100 yards)
Thread, white	(c)	1 reel (100 yards)
Worsted, blue	(c)	1 skein

NOTES:- (a) To be excluded from contents of housewives when existing stocks are exhausted.

(b) To be replaced by a packet of assorted needles on exhaustion of stocks of sewing and darning needles.

(c) To be supplied on cards until existing stocks are exhausted.

416.

Marking of Declared Clothing.

Articles of clothing acquired by one rating from another (with the Divisional Officer's permission), are to be marked at the time of transfer with the letters "D.C." (declared clothing) by means of a stamp conforming with the design and dimensions shown below. Stamps required for this purpose are to be manufactured on board.

(The foregoing is the text of A.F.O. 728/1955 altered to meet R.A.N. conditions)

(4526/8/6)

417.

Uniform - Availability of Gold Wire Badges.

With reference to paragraph 5 of Navy Order 435 of 1953, stocks of the following badges are now available on demand from the Superintending Victualling Store Officer, Royal Edward Victualling Yard :-

Pattern Nos.

N.1	N.68	N.206	N.297
N.2	N.70	N.207	N.298
N.12	N.71	N.209	N.312
N.13	N.72	N.210	N.313
N.15	N.73	N.211	N.314
N.16	N.85	N.212	N.315
N.17	N.122	N.213	N.317
N.21	N.123	N.214	N.318
N.25	N.124	N.215	N.321
N.31	N.125	N.218	N.324
N.32	N.126	N.219	N.327
N.33	N.137	N.230	N.328
N.35	N.139	N.280	N.336
N.36	N.140	N.281	N.337
N.37	N.142	N.282	N.338
N.46	N.154	N.283	N.352
N.47	N.155	N.285	N.385
N.48	N.156	N.286	N.388
N.49	N.167	N.287	N.396
N.50	N.190	N.288	N.397
N.52	N.191	N.289	N.403
N.53	N.192	N.291	N.410
N.54	N.193	N.292	N.412
N.60	N.201	N.293	N.413
N.61	N.202	N.295	N.416
N.67	N.203	N.296	N.417

2. Although reasonable stocks of these badges are available, demands are to be restricted to cover requirments for three months only, in order to minimise the risk of badges deteriorating through prolonged storage in H.M.A. Ships and Establishments.

(4532/12/170)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

418.

Instructions for the Fleet Air Arm - Amendment.

"Instructions for the Fleet Air Arm" is to be amended as follows :-

Article 348. Delete and substitute -

"348 Link Trainer Practice.

Commanding Officers are to ensure that, as a general rule, pilots under training and pilots out of recent flying practice complete at least two hours link trainer practice a month, although the amount of practice to be carried out must vary to meet individual needs."

2. This amendment will be issued in R.I. series in due course.

(3712/50/92)

419.

Form A.S.331 - Requisition for Survey - Introduction of Single-Line and Medium Sizes.

Single-line and medium (4 line) sizes of Form A.S.331 have been introduced for use by ships and establishments when the use of the existing large size form would be uneconomical. Supplies of the new forms are now available from (Superintending) Naval Store Officer, Sydney, on demand.

(3526/12/1346)

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C.N.Os.420-439/55.

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(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
21st June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0090.

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SECTION 1 - ADMINISTRATIVE AND GENERAL

420.

Inspection and Trials - Organisation in the R.A.N.

This Order outlines the organisation for inspections and trials of equipment in H.M.A. Ships when building, converting, modernising and undergoing refit.

2. The relevant sections of B.R. 1921 (Procedure for Supervision of Ships and Vessels Building and Completing at Contractors' Yards), B.R. 1856 (T.A.S. Equipment and Trials). B.R. 2034, (Handbook for Routine Tuning, Periodic Trials and Testing Instrument for Gun Auto System) and various Navy Orders and Admiralty Fleet Orders are being extracted to form an R.A.N. Manual of Inspections and Trials which will be published in due course as an A.B.R. This book will be the fundamental authority for all inspections and trials in the Royal Australian Navy.

3. The Inspection and Trials Organisation is designed to ensure that -

(i) Trials of equipment installed in ships are carried out to provide for its acceptance into service at a satisfactory standard, whether the installation or modification of such equipment has been done by a civil or service organisation.

(ii) Inspections are made to determine that the ship is completed (or altered) in accordance with its specifications and will meet the accepted requirements for Naval Service.

4. A Commander Inspections and Trials (Short title - Commander Trials) has been appointed at Navy Office. His terms of reference are as follows :-

(i) He is responsible to the Naval Board for co-ordinating the programmes of all inspections and trials, in conjunction with the appropriate Navy Office Directorates, the General Overseer and/or Administrative Authority.

(ii) He is the authority on Seamanship matters for all inspections and trials of ships not in commission.

(iii) He is to satisfy himself as to the adequacy of arrangements affecting general habitability.

(iv) He is to co-ordinate trials carried out by User Specialist Officers (borne in their schools for duties with the Trials Team), the Electrical Equipment and Trials Unit and/or the Auto Testing Team as appropriate.

(v) He will ensure that appropriate provision is made for inspection and trials for which non-executive and technical officers are responsible.

(vi) He will co-ordinate any follow up action which may be required as a result of recommendations or proposals made by Inspecting Officers or Trials Teams.

(vii) He will advise the Naval Board on manning requirements as ships approach completion.

(viii) He will inform General Overseers and/or Administrative Authorities of intended visits of Inspecting Officers and Trials Teams sufficiently in advance for appropriate arrangements to be made.

5. In the case of specialised "user" equipments the inspection or trial will be carried out by the officer appointed for such duty, on the staff of the User School concerned. Technical advice and assistance will be arranged by Commander Trials.

6. Officers carrying out inspections and/or trials are to forward reports in the normal manner to the authorities concerned. In addition, one copy of each report is to be forwarded to Commander Trials.

7. Commander Trials, in conjunction with ships and their Administrative Authorities, will co-ordinate pre - and post - refit trials. Specialist Officers on board will normally conduct these trials, using ship's staff aided by technical advice and/or assistance arranged by Commander Trials, i.e., Auto-tuning and Testing Team, Electrical Trials Team, etc. Defect Items found during pre-refit trials should be dealt with through the usual channels. Reports of post refit trials are to be submitted by the Commanding Officer of the ship to his Administrative Authority, with copies for information to other authorities concerned and to Commander Trials.

8. In connection with paragraph 4(ii) and (iii) hereof, Commander Trials will visit ships under construction and conversion as necessary, to consult with Overseers and ship's officers on the following items insofar as they affect habitability and seagoing and fighting efficiency, in order to avoid subsequent alterations, as far as is practicable.

In order that any proposed modification should receive early consideration of its adoption, Commander Trials is to consult with the Overseers to see what work is necessary and report to the Naval Staff if any but a minor alteration to existing plans or work done is involved.

Overseers have authority to arrange for minor alterations which do not affect Staff requirements, affect stability or cause delay in completion. Alterations other than of a minor nature must receive Naval Board approval.

(a) Anchor, cable and towing arrangements, including -

Capstans
Cable lockers.

(b) Masts, rigging, etc., comprising -

Accommodation ladders, including davits and stowages.
Provision and other davits.
Awning arrangements.
Canvas gear.
Boat stowage, davits and crutches.
Bollards and fairleads.
Scuppers and drains.
Hawsers and hawser reels.

(c) Arrangements for replenishment at sea, including fuelling at sea.

(d) Colour schemes of living spaces.

(e) Arrangements and stowage of -

Paint room.
Canteen and canteen store.
Boatswain's store.
Part of ships lockers.
Tiller flat stowages (Destroyers and below).
Staff office.

(f) Principal keyboards and notice boards.

(g) Weather deck coverings.

(h) Washing and sanitary facilities, etc., comprising -

Bathrooms.
W.C's and urinals.
Laundries.

(i) Arrangement of accommodation for officers and men, comprising -

Cabin arrangements.
Ward room.
Messing and sleeping arrangements, including associated stowages.
Recreational arrangements.
Church and school.
Cloak rooms.
Drying rooms.

9. For ships in commission, where equipment is installed or modified in the course of a routine refit, inspections and trials are to be arranged direct between Commander Trials and the Commanding Officer in conjunction with his administrative authority. Reports are to be forwarded as in paragraph 6.

(3388/61/2)

SECTION 2 - PERSONNEL

421.

A.B.C.D. Courses - July to December, 1955.

With reference to Navy Order 523 of 1953, the commencing dates of Damage Control and A.B.C. Courses to be held at the A.B.C.D. School, H.M.A.S. PENGUIN, are as follows :-

TITLE	DURATION	COMMENCING DATES
Junior A.B.C.D.	(3 days D.C.) (2 days A.B.C.)	8th August 10th October 24th October
Standard D.C.	5 days	18th July ✓ 15th August 29th August 19th September ✓ 31st October 14th November 28th November
Standard A.B.C.	5 days	25th July ✓ 15th August 29th August 5th September ✓ 14th November
Advanced D.C.	5 days	22nd August 7th November
Advanced A.B.C.	5 days	22nd August 21st November
Special Courses:-		
Passive Defence Officers.	2 weeks	19th September
Standard A.B.C.D. - for L.M.(E.)s. Ex - M.T. Course.	2 weeks	5th September 5th December
Senior and Commanding Officers short Refresher Course in A.B.C.D.	2 days	1st September

✓ Standard Course which is followed by the appropriate Advanced Course (vide Navy Order 523 of 1953, Appendix 1, Column 3).

2. The Senior and Commanding Officers Course has been instituted to provide these officers with up-to-date information on A.B.C.D. matters and to acquaint them with training facilities available in the A.B.C.D. School, H.M.A.S. PENGUIN.

(4007/3/127)

422.

Courses - Petty Officers' School - July to December, 1955.

With reference to Navy Order 131 of 1951, the following is a forecast of the courses to be carried out at the Petty Officers' School, Flinders Naval Depot, during the period July to December, 1955 :-

COURSE NO.	COMMENCING
71	18th July
72	5th September
73	24th October.

2. Duration of the course is 6 weeks.

(4007/31/41)

423.

Courses - Regulating Branch - July to December, 1955.

The following is a forecast of the commencing dates of courses to be held at the Regulating School, Flinders Naval Depot, during the period July to December, 1955 :-

Leading Patrolman - 18th July

Regulating Petty Officer - 19th September.

(4007/39/25)

424.

Officers' Short Courses - July to December, 1955.

With reference to Navy Order 67 of 1953, the following short courses for officers will be held in H.M.A. Schools in the period July to December, 1955 :-

(a) Divisonal		25th July 10th October 14th November
(b) Gunnery		
Basic		18th July 31st October
Lieutenant R.A.N.R.		25th July 7th November
Reserve (g) Officers	Part 1 Part 2	1st August 15th August
(c) Communications		
Basic		11th July 7th November
Lieutenant R.A.N.R.		18th July 14th November
(d) T.A.S.		
Basic		26th September
Lieutenant R.A.N.R.		3rd October

NOTE:- Dates for one additional Basic T.A.S. and Lieutenant R.A.N.R. course together with Reserve (a/s) course will be promulgated by signal.

(e) N.D.		
Basic		12th September 5th December
Lieutenant R.A.N.R.		19th September 12th December
Reserve (n) Officers	Part 1 Part 2	7th November 21st November.

2. Dates of commencement of A.B.C.D., A.J.A.S.S. and School of Land/Air Warfare courses will be promulgated separately.

(4007/11/116)

425.

Diving Regulations.

Diving Operations

Diving techniques have developed greatly since the Diving Manual was written in 1943, and a revised edition of the book is now in the course of production. Existing regulations for the safety of divers and conduct of diving operations are not all appropriate to every form of diving now practised. The regulations which follow have been framed for inclusion in the new Diving Manual and are to come into force from the date of receipt of this Order replacing all previous Orders with which they conflict.

2. The wide scope of diving operations nowadays inevitably means that certain regulations cannot be met at all times. These regulations are framed, however, to give the maximum safety to the divers, and Commanding Officers must make themselves personally responsible that no unjustifiable deviations are permitted.

Responsibility

3. Diving is to come under the general direction of the T.A.S. Officer if one is borne, but officers qualified in diving duties are otherwise directly responsible to the Captain for the performance of their diving duties. This responsibility should be held by one of the following according to circumstances and availability :-

(a) An officer qualified (C.D.).

(b) An officer qualified (Q.D.D.).

(c) An officer qualified as an Instructional Diving Officer.

(d) An officer qualified in diving supervision.

The choice must depend on circumstances; for instance, in a ship with standard divers but no clearance divers, and in which a Commissioned Boatswain (Q.D.D.) is borne it would be appropriate for the latter to be in charge of diving even if a Clearance Diving Officer is also borne.

4. In ships in which none of the above officers is borne, no diving is to be carried out, with the exception that officers qualified in shallow water diving may take charge of shallow water diving operations. The term shallow water diving refers to diving covered by the syllabus for the Shallow Water Diving Course as laid down in Admiralty Fleet Orders.

N.90

Supervision of Diving Operations

5. Diving operations whether carried out from a boat, a ship, the shore, or in a recompression chamber and regardless of the type of equipment being used, are normally to be under the direct charge of an officer. Certain exceptions are given in the ensuing paragraph.

6. Diving operations in depths in excess of 180 feet may only be carried out under the supervision of one of the two officers enumerated in paragraph 3(a) and (b). Diving in depths between 180 and 120-ft. is to be carried out under the supervision of any of the officers listed paragraph 3 above. At the discretion of the Commanding Officer, diving in depths not greater than 120-ft. may be carried out under the supervision of a Diver 1st Class or Clearance Diver 1st Class.

7. The operational use of a recompression chamber, or diving practice therein, in pressures greater than an equivalent depth of 180-ft., is always to be under the supervision of one of the two officers enumerated in paragraph 3 (a) or (b). Between the equivalent depths of 180 and 120-ft. such use is always to be under the supervision of one of the officers enumerated in paragraph 3 who, in the opinion of the Commanding Officer, fully understands the operation of the recompression chamber. Routine diving practice in a recompression chamber in pressures not exceeding an equivalent depth of 120-ft. may, at the discretion of the Commanding Officer, be carried out under the supervision of a Diver 1st Class or Clearance Diver 1st Class.

8. The overall responsibility for the conduct of diving operations rests with the officer detailed in accordance with paragraph 3, and he is to see that any other officer or rating, to whom direct charge may be delegated, fully understands the nature of the work to be carried out and the importance of his duties.

Informing Commanding Officer

9. Except in Diving Schools and other ships or establishments where diving takes place continuously, the Commanding Officer is to be informed before any diving operations take place. He is always to be informed before diving in depths in excess of 120-ft. is carried out or if any special operations in any depth are planned.

Attendance

10. All divers are to be attended by qualified divers. The term "qualified diver" means one of the following :-

Diver, 1st Class
Diver, 2nd Class
Diver, 3rd Class
Clearance Diver, 1st Class
Clearance Diver, 2nd Class
Clearance Diver, 3rd Class
Artificer Diver
Shallow Water Diver.

In depths greater than 180-ft., however, attendants must be qualified in, or under training for, Deep Diving. When Shallow Water Divers are attending men in standard equipment the officer-in-charge must satisfy himself that the attendant is fully conversant with any variations in procedure which may affect his duty.

11. Normally there is to be at least one attendant for each diver but the following exceptions are permitted :-

(a) When clearance divers are diving on floats (see paragraph 16) one attendant may be responsible for four divers.

(b) When "free underwater swimming" operations, as authorized by paragraphs 17 and 18 are taking place, one attendant may be responsible for four divers.

NOTES:- (i) The stand-by diver, if sent down, is not included in the four mentioned above.

(ii) The stand-by diver is not to be counted as one of the attendants.

Stand-by Divers

12. Whenever diving operations are being carried out, a stand-by diver is to be available at short notice and the necessary equipment for him must be prepared before any diving takes place.

In the following circumstances he is to be at immediate notice as defined in paragraph 13 below :-

(a) During "free swimming" operations.

(b) During deep diving operations.

(c) When diving on propellers or wrecks in self-contained equipment.

(d) When diving on wrecks in standard equipment in waters where tidal streams are strong.

(e) In any other cases where the officer-in-charge considers there is a risk of the diver getting foul.

13. Immediate notice, when referring to stand-by divers, is to be interpreted as follows :-

(a) *Deep diving and standard diving.* - Diver dressed as far as his corselet, air pipe and breast-rope connected and tested, weights ready for use. In addition, for deep diving, canisters prepared and tested.

(b) *Mine Recovery Suit* - Diver dressed in suit with breast-rope connected and telephone tested, breathing set and weights ready for use, front window open, cylinders closed.

(c) *Other self-contained equipment* - Diver fully dressed with front window open or face-mask off as appropriate, cylinders closed.

Attendants and Stand-by Divers in Emergency

14. Except as in paragraph 12 diving is not to be carried out unless at least four divers are available, i.e., diver and his attendant, stand-by diver and his attendant. In emergency, if only two divers are available diving may be carried out but the Commanding Officer must satisfy himself that the personnel selected as attendants are fully acquainted with the signals. Only in very great emergency is diving to be permitted if only one diver is available and, in such a case, special precautions must be taken to prevent that diver getting foul underwater.

Life-lines

15. Except as allowed by paragraph 19, 20 and 21, when diving or underwater swimming, a diver is always to have a breast-rope or life-line securely attached to him and tended by a qualified diver.

16. When diving takes place in standard, deep or M.R.S. gear, the standard Admiralty pattern breast-rope, or the special deep breast-rope, is always to be used.

17. When diving is undertaken in other self-contained equipments, the life-line should be not less than 1½-in. manilla (or sisal), except for underwater swimming, when 1-in. may be used. Log line should not be used. The attendant is to check that the life-line is properly secured round the diver before he enters the water.

18. When underwater swimming on a life-line under a ship, a diver should not go further across the keel than is necessary for examining centreline fittings.

19. The following are the only authorized exceptions to the above :-

(a) Qualified Clearance Diving Officers and Ratings and Clearance Diving Officers and Ratings under training, may dive using Clearance Diving Breathing Apparatus, with their life-lines attached to floats.

The "supervising officer", who must be a Clearance Diving Officer or Clearance Diver, 1st Class, is responsible that the life-lines are long enough for the maximum depth of water the diver will encounter, making due allowance for rise and fall of tide.

A boat, preferably a power boat, is to be in attendance in the vicinity of the floats and a stand-by diver is to be ready at immediate notice. There must be a stand-by diver for each team and at least one attendant for every four divers.

(b) When carrying out "free swimming" under the conditions in the ensuing paragraph.

Free Swimming

20. When "free underwater swimming", that is underwater swimming without life-lines, is taking place, the operation is to be supervised by one of the following officers :-

(a) Clearance Diving Officer.

(b) Royal Marines Special Boat Section Officer.

At their discretion these officers may delegate their authority to one of the following, although as often as possible they should be present themselves :-

(c) Clearance Diver, 1st Class.

(d) Royal Marines Swimmer Canoeist, 1st Class.

This authority must be given specifically for each separate occasion, and the officer giving it must satisfy himself that the man to whom he gives it is fully aware of his responsibilities. He is to lay down the precise nature of the operation, together with any special precautions to be taken, and make sure that his deputy is acquainted with all the

circumstances which have any bearing on it. The supervisor should be where he can best exercise control of the swimmers and the safety-boat, but he is not to be in the water.

21. Subject to the above, qualified Clearance Diving Officers and Ratings, Royal Marines Special Boat Section Officers and Royal Marines Other Ranks qualified as Swimmer Canoeists are authorized to carry out free underwater swimming operations, provided that the following conditions are fulfilled :-

(a) The officer-in-charge is satisfied that their efficiency is up to the standard required for free underwater swimming.

(b) They have exercised underwater, including practice in slipping weights and surfacing in emergency, during the past thirty days.

(c) Reasonable precautions have been taken to ensure that they have not had a full meal within the past hour. It is recommended that operational units regulate their meals to fit in with their diving programme; if necessary only having light meals before starting work.

*(d) A safety-boat, flying the appropriate warning signals, is under way in the vicinity. Where the area of operations is small, it is recommended that a 10-ft. dinghy or similar craft be used. Where the scene of operations covers a large area, a power boat should be used. The type and number of safety-boats must depend on the type and location of the operation.

(e) A stand-by diver dressed for underwater swimming is ready at immediate notice (see paragraph 12). He should be embarked in the safety-boat or where he can be of most use.

NOTE:- If it is necessary to send down the stand-by diver to search for a missing man he should have an easily-detachable life-line. The object of this is to enable those in the boat to see what area has been searched and to allow him to attach the line to the missing man when he finds him.

(f) Not more than three-quarters of the team, or unit, are underwater at the same time.

(g) All ships in company, and authorities concerned, have been informed that free underwater swimming operations are taking place. When appropriate ships are to fly a signal "Free underwater swimmers exercising in vicinity".

*NOTE:- (1) The safety-boat is to display a large size Flag 7 in the bows of the boat by day and be prepared to flash TE using international procedure (meaning "You should proceed at slow speed whilst passing vessel or station making this signal") to approaching vessels.

(2) Details of the R.N. standard night warning signal are given in B.R. 2009, Exercise T.12. Pending approval for its wider application, safety-boats should warn all approaching vessels by flashing the signal TE from the international code.

General

22. The primary responsibility of the officer-in-charge in peace, is the safety of his divers and he must always use his discretion and common-sense when deciding what safety precautions are necessary in the circumstances prevailing. It is recommended that whenever operational efficiency will not suffer thereby, swimmers should have attached to them a light line (such as codline) with a small piece of wood, or other suitable float at the other end. At night a red safety-light should be attached to this float. There are cases, however, such as when swimming about a ship's bottom when the risk of this line getting foul will make its use inadvisable. In some circumstances, particularly during training, it is advantageous for swimmers to be linked in pairs with a short, easily detachable length of codline. A diver, whether diving or swimming must always wear a knife.

23. When the above personnel are under training, such additional precautions as the officer-in-charge thinks fit should be taken. Life-lines are not to be discarded until he is satisfied that a sufficiently high standard has been reached.

24. The vital importance of personal supervision of equipment is stressed. A man's life, when he is free underwater swimming, depends on him alone and he must see that his equipment is in perfect order. If it is properly maintained and correctly used, it will not let him down.

25. Correct drill is therefore also of supreme importance and it is only frequent and regular practice which will ensure this.

26. A final most important factor is physical fitness. A very high standard is essential.

Special Exercises and Operations

27. In certain circumstances, the whole object of an exercise may be nullified by rigid adherence to safety regulations. In such cases, detailed plans for the operation, which make quite clear what deviations are contemplated, should be submitted to the Administrative Authority for approval. The latter should be guided in his decision by the degree of training and experience of the man involved.

Exercise of Divers

28. ALL RATINGS AND ROYAL MARINE OTHER RANKS QUALIFIED IN DIVING ARE TO BE EXERCISED UNDERWATER AT LEAST ONCE A MONTH. This exercise should include the different types of apparatus in which they are trained. This is to be regarded as a minimum and they are to be exercised more frequently whenever conditions allow. The importance of regular exercise of divers cannot be over-emphasised. Untrained men are a danger to themselves and others. The increasing complexity of equipment and the necessarily short courses make it absolutely vital that these latter be supplemented by regular practice. Those men so qualified should exercise in depths greater than 72-ft. at least once a quarter. Men who for any reason have not been exercised for more than three months are not to be employed on difficult work nor are they to dive in depths greater than 72-ft. All officers qualified in diving should exercise underwater as often as possible; this is particularly important when they are in diving appointments.

Medical Regulations

29. These are laid down in B.R. 1750A(50), Handbook of Naval Medical Standards.

(The foregoing is the unaltered text of A.F.O. 724/1955)

(3712/2/6)

426.

Medical - Carbon Monoxide Poisoning - Examination of Specimens in Suspected Cases.

Navy Order 40 of 1955 is to be amended by the addition of the following addresses at the end of paragraph 2 :-

"or The Sick Quarters, R.A.N. Air Station, Nowra, N.S.W.".

(4018/5/103)

427.

Promotion of Ratings to Officer Status.

The Naval Board attach great importance to the necessity for ensuring that ratings who possess the ability to qualify for promotion to officer status are aware of the conditions governing such promotion, and receive all possible help to achieve it. Vacancies exist for officers in most branches of the Royal Australian Navy.

2. It is not intended to set out fully in this Order the regulations governing courses, etc., but rather to explain where they may be found, in order that potential candidates may readily study them in the ships or establishments in which they are serving.

3. There are two principal methods by which ratings can be promoted to officer, viz., as "Upper Yardmen" or to the Branch List. In the latter case further promotion can be obtained direct to Lieutenant under certain conditions.

A. UPPER YARDMAN.

(i) Eligibility.

Full instructions are contained in Q.R. and A.I., Appendix 1, Part 2. Promotion is open to the rank of Acting Sub-Lieutenant of the Executive, Engineer, Electrical and Supply and Secretariat Branches, according to the rating of the candidate. All ratings are eligible, although Engineering Mechanic and Naval Airman Mechanic and Pilot's Mate ratings must attain Mechanician status as a first step. The time necessary to reach this stage has been shortened for specially selected ratings of the Engineering Mechanic Branch.

(ii) Age Limits.

The purpose of this scheme is to obtain young men as officers. Youth is in the interests of the candidates themselves. Promotion to Acting Sub-

Lieutenant at too late an age could lessen the opportunities for promotion to the senior ranks. The upper age limits, at the time of selection for courses in the United Kingdom, are -

Executive Officer candidates	- 22½ years.
Engineer Officer candidates (as at 1st February)	- *26 years (Artificers) 28½ years (Mechanicians)
Electrical Officer candidates	- *26 years (Artificers) 25½ years (Other ratings)
Supply Officer candidates	- 23½ years.

*The R.A.N. upper age limit has been raised above that shown in Q.R. and A.I.

(iii) Educational Standard.

Before candidates are sent to the United Kingdom for promotion courses, they are required to qualify educationally by obtaining four second-class H.E.T. passes in specified subjects at the same sitting. In the case of Engineer and Electrical candidates, however, the preliminary annual examination covers educational subjects.

(iv) Professional Standards.

Certain professional standards are required before ratings are selected for courses. These vary from a set examination in the case of Engineer and Electrical candidates, to completion of a period of practical experience in the case of Supply and Secretariat candidates. The examination for Engineering and Electrical candidates is held annually during the months of August and February respectively.

(v) Selection for Courses.

When candidates have attained the professional and educational standards they appear before Fleet Selection Boards, who advise the Naval Board whether candidates should proceed with promotion courses. In order that ratings do not spend long periods of study for H.E.T. only to be rejected by Fleet Selection Boards, however, ratings of the Executive and Supply and Secretariat Branches may appear before the Boards on passing the H.E.T. subjects of English and Practical Mathematics. If provisionally selected they continue their preparations to pass the complete educational examination, but are still required to obtain the four subjects at one sitting (i.e., they must repeat English and Practical Mathematics).

(vi) Courses and Promotion.

After selection candidates proceed to the United Kingdom, where they undergo a series of courses in technical establishments and at the Royal Naval College, Greenwich. Promotion to Acting Sub-Lieutenant is achieved, and time gained for eventual promotion to Lieutenant is assessed.

(vii) Initial Selection and Recommendation.

(a) Potential candidates are normally selected in Flinders Naval Depot soon after entry in the R.A.N. This does not, however, debar a rating from being recommended at a later stage in his career, and it is indeed probable that qualities will emerge in some cases which were not apparent at first. It is observed, also, that a rating who has reached the prescribed educational standard, and who has not been recommended as an Upper Yardman candidate, may request through his Divisional Officer for consideration.

Before undertaking the educational examination, it should be ascertained whether the candidate for whom no recommendation for promotion has been made, can satisfy the age and other requirements for promotion.

(b) On first recommendation, a confidential certificate of service is raised and kept in the Captain's personal charge. Periodical reports are rendered to ensure that candidates are kept in mind and their progress observed.

(viii) Drafting.

An Upper Yardman candidate is drafted to a ship providing the best opportunity for study and training, generally the Training Carrier. Preparatory courses for H.E.T. examinations are also available in H.M.A.S. PENGUIN. Recommended volunteers for these courses are called for by signal.

(ix) The steps to be taken are shown in the Appendix, in the form of a diagram.

B. PROMOTION TO THE BRANCH LIST.

(i) Scope.

(a) Details are shown in Q.R. and A.I., Chapter 5 (Articles 0501 to 0565).

(b) Branch List officers are specialists in the duties of sections of the Branches to which they belong. Thus, within the Executive Branch are included Commissioned Boatswains, Gunners, Gunners (T.A.S.), Boatswains (P.R.), P.T. Officers, Boatswains (Q.D.D.), Communication Officers, Airmen, Observers and Masters-at-Arms. Whilst it does not offer the same scope for promotion as the General List (except by Direct Promotion to Lieutenant, as shown in paragraph 4), the Branch List carries a retiring age of 55 years, as against 45 in the case of a General List Lieutenant-Commander who is not promoted to Commander. The scope of promotion is shown in Q.R. and A.I., Articles 0571-6.

(ii) Age Limits.

The zone for promotion lies between the ages of 25 and 34 in most branches, but there are temporary exceptions, currently shown in A.F.O. 1317/1953. Certain service requirements (length of service, V.G. conduct, rating achieved, etc.) must also be satisfied.

(iii) Educational Requirement.

The educational requirements are shown in Q.R. and A.I., Appendix 2, Part 6. In all cases the possession of a Higher Educational Certificate is required (i.e., four second class passes), but in most branches certain subjects are compulsory. Except as shown in (iv) (a) below the educational qualification must be obtained before taking the professional examination.

(iv) Professional Requirement.

(a) Candidates for promotion to Commissioned Boatswain, Boatswain (P.R.), Gunner and Gunner (T.A.S.) are required to pass a Seamanship examination before an Examination Board, before or after qualifying educationally. On successful completion of this examination and on qualifying educationally, candidates proceed to the United Kingdom for courses and promotion.

(b) There is no preliminary professional examination for Communication Branch ratings, and promotion follows completion of course in the United Kingdom (H.M.S. MERCURY).

(c) Candidates for Commissioned Airman take examinations as convenient, and complete their qualification with courses at Flinders Naval Depot and at the R.A.N. Air Station, Nowra.

(d) In other branches professional examinations are held annually (at six-monthly intervals for Commissioned Wardmaster) in the months :-

Commissioned Engineer/ Mechanician	- November/December
Commissioned Air Engineer	- January
Commissioned Ordnance Engineer	- August
Commissioned Electrical Officer (L), (R), (AL) or AR)	- January
Commissioned Writer Officer and Stores Officer	- November/December
Commissioned Wardmaster	- April and October

Full particulars are promulgated annually in Navy Orders (currently Navy Order 486 of 1954).

For Commissioned Shipwright Officer, Commissioned Master-at-Arms, Commissioned Catering Officer, Commissioned Cookery Officer and Commissioned Bandmaster, candidates may apply for examination on qualifying educationally.

(v) Drafting.

(a) Ratings wishing to prepare for Branch rank should request through their Divisional Officers to be noted as candidates. Evidence of intention to qualify should be shown (sitting for H.E.T., etc.), and where possible appropriations will be made to suitable ships or establishments.

(b) Potential candidates may apply for H.E.T. preparatory courses in H.M.A.S. PENGUIN when volunteers are called for by signal.

4. A third avenue of promotion is the "Direct Promotion to Lieutenant" scheme, as set down in Q.R. and A.I., Articles 0581 to 0590. This scheme is applicable to Branch List Officers, but is outlined here in order that prospective officers may be acquainted with career prospects.

(i) Eligibility.

Senior Commissioned and Commissioned Officers (Branch List) between the ages of 25 and 35 years may be selected for promotion direct to Lieutenant.

(ii) Training.

Selected officers proceed to the United Kingdom where they undergo a series of courses lasting approximately one year. They are promoted to Lieutenant and receive a grant of seniority of one-half of their service as Branch List Officers, and then take their places with officers ex the R.A.N. College.

(iii) Scope.

This scheme is worthy of consideration by ratings who are unable to comply with the Upper Yardman conditions, particularly those who are debarred by age.

It is in the interests of all ratings who wish to qualify under these conditions, to qualify for Branch rank at as early an age as possible.

5. Navy Order 70 of 1950 is hereby cancelled.

(This Order will be reprinted for posting on Notice Boards.)

(4008/4/103)

APPENDIX

PROMOTION TO PERMANENT COMMISSIONED RANK (UPPER YARDMAN SCHEME).

NOTE:- The professional qualification may be obtained before or concurrently with the educational qualification. In the case of Supply and Secretariat candidates, the professional qualification is a period of practical experience.

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

428.

Guns - O.Q.F. 40-mm. Exchange Zone and Allowances of Spare Barrels.

Consequent upon the requirement for matching of muzzle velocities of barrels in multiple 40 mm. mountings controlled by C.R.B.F.D. and S.T.A.A.G. systems (vide Navy Order 45 of 1955), allowance of spare barrel assemblies in the Royal Australian Navy will be as follows :-

(a) for guns in multiple mountings controlled by C.R.B.F.D. or S.T.A.A.G.	-	2 spare barrels for for every six or less guns mounted.
(b) for guns in local control multiple mountings and in single mountings	-	1 spare barrel for every 4 or less guns mounted.

2. Spare barrels are not allowed to the following ships :-

Inshore Minesweepers
Boom Defence Vessels
Seaward Defence Boats
Tugs
Tenders
R.A.F.A's
D.E.M.S.

3. 40 mm. barrels are to be exchanged in future when the P.R.L. falls between 1¼ and 1 outfit. B.R.292 will be amended.

(4428/43/206)

429.

Torpedo Components - Igniters, Torpedo, Mark 11, Overage - Withdrawal from Service.

All Igniters Torpedo Mark 11 are now overage for full service use; any held on board H.M.A. Ships, etc., are to be returned as soon as possible to the nearest Naval Armament Depot, and Igniters Torpedo Mark 13 demanded in lieu.

(The foregoing is the text of A.F.O. 838/1955 altered to meet R.A.N. conditions)

(4431/12/422)

430.

Communications - Revised Meteor Code.

The Meteor Code used by the United Kingdom authorities and the Commonwealth Meteorological Branch for passing ballistic information has been adopted for use by the Royal Australian Navy.

2. The form of the Meteor Code is as follows:-

ST (or AA) Meteor $L_eL_eL_oL_ok$ (or XXXXX) gggg PPPP

ffTT (or hhTT) vvDDD ffTT (or hhTT) vvDDD....(DTG).

3. The meaning of the groups is given below -

Group	Coded Group	Meaning
(a)	ST (or AA) Meteor ..	Surface Target (or Anti-Aircraft) Meteor.
(b)	$L_aL_aL_oL_ok$	Latitude, Longitude (whole degrees omitting hundreds).

k=0....no correction; 1....add ½° to Lat.; 2....add ½° to Long.; 3....add ½° to both; 4....no correction — Longitude East 0°-99° or West 100°-180°

5....no correction; 6....add ½° to Lat.; 7....add ½° to Long.; 8....add ½° to both; 9....no correction — Longitude West 0°-99° or East 100°-180°

Values of Lat. and Long. are accurate to nearest ½° except where k=4 or 9 which indicates whole degree accuracy only.

	or XXXXX	Letters or words to indicate area.
(c)	gggg	Mid-time of four-hourly period of forecast.
(d)	PPPP	Barometer at Mean Sea Level in millibars (alternatively in inches and hundredths); the letters BAR may be inserted before PPPP.
(e)	ffTT	(ST) - Time of flight in seconds and corresponding ballistic temperature in °F.
	or hhTT	(AA) - Height of burst in thousands of feet and corresponding ballistic temperature in °F.
(f)	vvDDD	E.C.W. (ballistic wind) velocity in ft./sec. and direction *from*, at the time of flight (ff) or height (hh) of group (e). (Note: speed before direction).
(g) and (h)	ffTT (or hhTT) .. vvDDD	Repeat groups (e) and (f) as often as necessary to cover other times of flight and heights.
(i)	(DTG)	Date time group (or equivalent) of time of issue from meteorological office.

NOTES:-

(i) Figures not available should be replaced by X's.

(ii) TTT and vvv. Three figure groups are used for values of TT and vv over 100.

(iii) TRUE. If true winds, instead of E.C.W's (ballistic winds) are included TRUEhh precedes the wind group and ballistic temperatures are omitted.

(iv) Meteor Reports issued by other than Naval authorities will invariably give the position group (b) as XXXXX; will include BAR, followed by PPPP in inches and hundredths and will give the D.T.G. as a four-figure clock time followed by the date. Any Meteor Reports sent by H.M.A. Ships to these authorities should be in this form.

4. The revised Meteor Code is to be brought into force immediately. The Code will be incorporated in the Gunnery Manual, Volume 1, Part 10, and in Radio Weather Messages, W.7.

(The foregoing is the text of A.F.O. 679/1955 altered to meet R.A.N. conditions)

(3311/21/13)

431.

Aircraft Carriers - Catapults and Arresting Gear - Instructions for Fitting Wire Rope End Sockets.

The following instructions, together with Navy Order 431 of 1955 Diagram, show the procedure to be adopted when fitting end sockets to steel wire ropes of catapults and arresting gear :-

(a) Tin the basket of the socket, using Baker's fluid or sal ammoniac as a flux. The basket is the conical and cylindrical portion of the interior of the socket, inside which the end of the rope lies. Particular care must be taken to avoid overheating the steel, particularly local overheating, or the temper will be modified. The melting point of tin is 232°C. (449°F.); and the temperature of the socket need only exceed this sufficiently to allow the tin to flow freely.

On completion of tinning, wash the socket in hot fresh water to remove all traces of the flux used.

(b) Serve the rope securely with soft seizing wire for a length of not less than one rope diameter, and in a position such, that, when socketing is complete, the rope will be the required length when the whole of the seizing is lying just outside the small end of the basket.

Note.—The tightness of this seizing is very important, and if properly done, ensures that all wires will take an equal load when the job is completed. If seizing is started back from the mark for cutting and worked towards it, the finish of the seizing will be at the end of the basket of the completed job ; thus the twisted ends of the seizing, lying in the lay of the rope, will be further secured by the poured metal.

(c) Cut the rope so that a length, equal to the length of the basket plus about half the diameter of the rope, projects beyond the end of the seizing. To prevent the rope unlaying whilst it is being cut a short seizing should be made as close as possible to the point at which the rope will be cut. This seizing will simplify drawing the rope through the socket and can then be removed. (Navy Order 431 of 1955 Diagram (a).)

(d) After drawing the rope through the socket, the rope end should be unlaid and each individual wire separated out, so that the rope resembles a brush. Care must be taken not to bend any wires back far enough to kink them. (Navy Order 431 of 1955 Diagram (b).)

(e) Remove the fibre core down to the seizing, and seal with tallow or kerosine to prevent saturation of the core with degreasant, acid solution, or water during operation. (*See* sub-paragraph (*g*) below).

(f) Bend the individual wires at a distance equal to about half the diameter of the rope from their ends to form equal hooks facing inwards to the centre of the rope.

The splay of the wires should be such that the hooked ends will fill the larger end of the socket basket. (Navy Order 431 of 1955 Diagram (c).)

(g) Cleanse the wires of all grease by washing in gasoline (MTGAS) or a strong solution of " Basol 77 " chemical degreasant (Pattern No. N. 11709). Dip the wires for five minutes in a fifty per cent. solution of hydrochloric acid to remove the zinc coating. Wash well in fresh water, then in a solution of washing soda and finally wash with clean fresh water.

Note.—The following precautions must be observed when using these degreasants :—

(i) Gasoline (MTGAS).—In order to minimise the risk of fire, the work is to be carried out on the flight deck with the minimum quantity of gasoline necessary for efficient cleansing of the wires, and the requirements of B.R. 1754 are generally to be complied with. *AVGAS is not to be used.*

(ii) " Basol 77 ".—To get proper degreasing it is necessary to make up a strong solution of " Basol 77 " in boiling water. Such a solution must not be allowed to come into contact with the skin or clothing nor must it be allowed to saturate the fibre core, otherwise internal corrosion of the rope may result. The wires must be cleansed with fresh water before treatment with hydrochloric acid solution.

(*h*) Ensure that the brush as formed in sub-paragraphs (*d*), (*e*) and (*f*) is quite dry, and tin by carefully immersing in a pot of molten Babbits Metal at a temperature sufficient to char but not to ignite a splinter of wood. Hold the brush immersed to within half an inch of the seizing for about half a minute, then remove and quickly give the wire a sharp blow on a rounded surface about one foot above the brush. This will remove all surplus Babbits metal and enable the brush to be drawn into the basket without undue force.

Note.—It is important to ensure that personnel are quite clear when immersing and removing brush from the metal, as the least sign of dampness will cause the metal to fly.

(*i*) Draw the tinned brush end into position in the basket. This is most readily done by fixing the socket to an eyebolt and pulling on the rope using a stopper and a small set of blocks. The hooked ends should be even and slightly below the level of the mouth of the larger end of the basket. The wire seizing should be just outside the extreme small end of the basket.

(*j*) The junction of the rope with the socket should be protected with clay or served with asbestos cord, to avoid overheating and prevent the metal running through. (Navy Order 431 of 1955 Diagram (d).)

(*k*) The socket should be clamped in a vice or otherwise firmly held, with the basket vertical. *It is essential that the rope should be in its working* position (i.e., co-axial with the basket) for at least 24 rope diameters below the socket. (Navy Order 431 of 1955 Diagram (e).)

(*l*) Heat the socket evenly all round, with a torch or blow lamp, until the tin coating of the basket just starts to melt, i.e., about 240°C. (464°F.).

Particular care must be taken to avoid playing the flame on to the ends of the wire in the basket or on to the rope below the socket. Particular care also must be taken to avoid overheating, particularly local overheating, of the socket. If an oxy-acetylene torch is used it must be adjusted to give a long flame.

Sufficient heating of the socket is essential to the free flow of molten metal ; undue heating will impair the temper of the rope wires and of the socket.

(*m*) Immediately before pouring, dust powdered resin among the wires. The heat in the basket will be sufficient to melt the resin which should flow freely down the wires.

(*n*) Molten Babbits metal (87·89 per cent. tin, 8–9 per cent. antimony, 3–4 per cent. copper), melting point 290°C. (554°F.) should be in readiness in a ladle of sufficient capacity to hold the full amount of metal required to fill the basket. The metal should be at 330–340°C. (630–650°F.), at which temperature it is fully fluid. *It is preferable to determine this temperature* by thermometer, but a rough test can be made by immersing a match stick in the metal. The temperature should be such that it will discolour or slightly char the wood ; *if the wood chars rapidly with smoke or* flame, the metal is too hot.

(*o*) Dross should be removed from the surface of the metal, and only clean bright metal poured into the prepared and heated socket.

Pouring should be continuous and uniform until the metal completely fills the basket and covers the wires. Tapping the socket lightly will help to release any air which may be trapped. Shrinkage should be made up as the metal cools until its surface is convex.

(*p*) The socket should remain undisturbed until it has cooled naturally to air temperature.

Notes

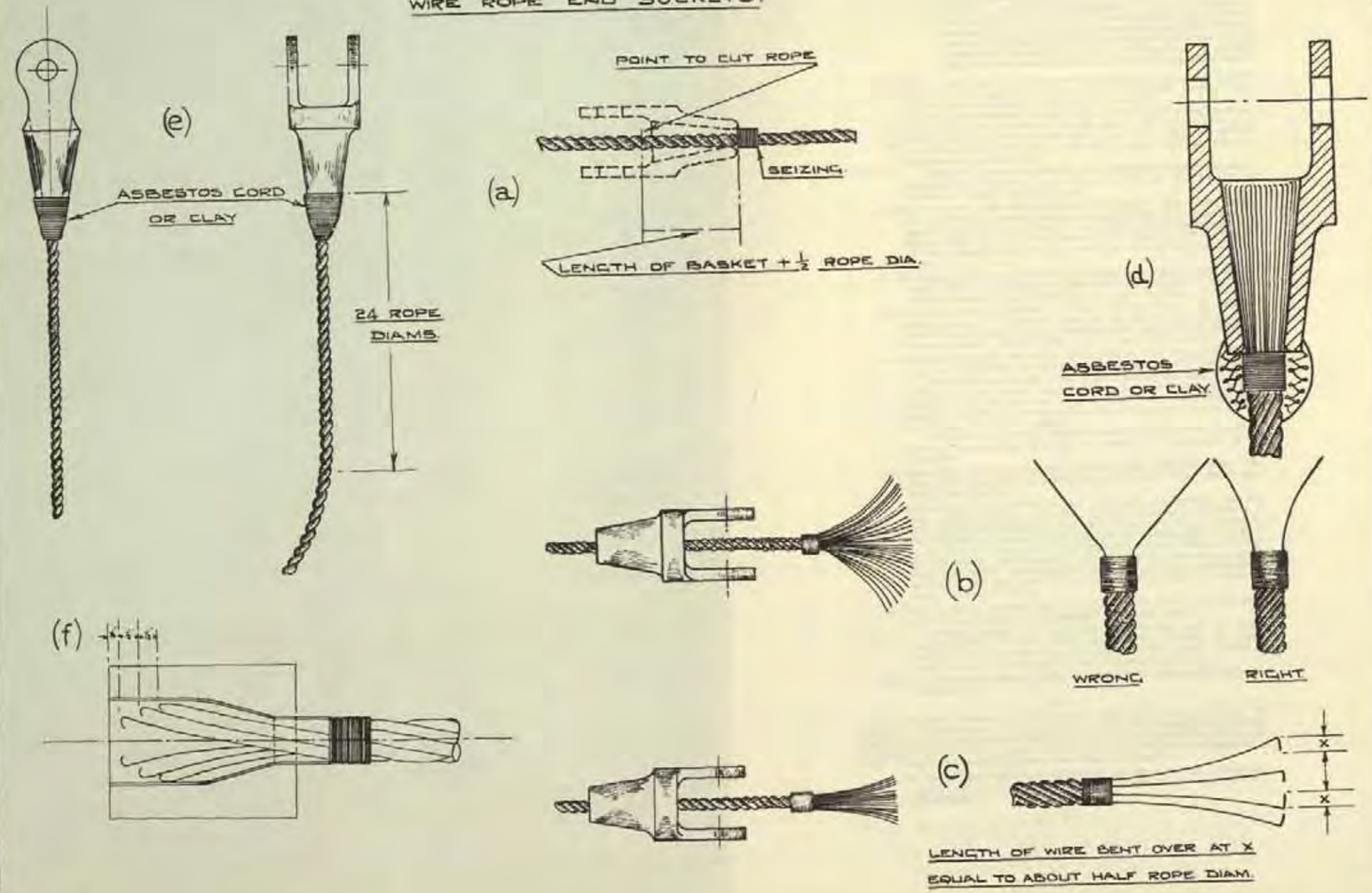
It is extremely important to fill the socket completely with metal, if the full strength is to be developed. If the socket is not sufficiently heated before pouring, there is a danger of the white-metal solidifying before it has penetrated to the bottom of the socket, resulting in a dangerously weak joint which to outward appearances is sound. There are two ways of checking that this has not occurred :—

(*a*) By noting small particles of white-metal that have run right through the socket, and that can be seen when the asbestos cord or clay protection is removed.

2/1)

CATAPULTS & ARRESTING GEAR

INSTRUCTIONS FOR FITTING WIRE ROPE END SOCKETS.



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(*b*) By comparing the amount of fluid taken to fill the socket when the rope end is in place with the amount of white-metal actually poured. As this quantity varies considerably with different types of socket it is advisable to make a test with clean fresh water immediately before instructions in sub-paragraph (*k*) above. As a very rough indication a three-inches circumference rope takes about half the capacity of a 4¼-in. diameter ladle. A four-inches circumference rope takes about three-quarters of the capacity of a 4¼-in. diameter ladle.

The practice of driving a spike or wedge into the socket before pouring the white-metal is dangerous and is on no account to be allowed.

2. In Marks 10, 11, 12 and 13 Arresting Gear, the centre span rope is connected to the main reeving rope by a special split connection. The method of fitting the steel ferrules used in this type of connection to the wire rope is given generally in the above instructions. The modifications to the procedure are given below :—

(*a*) The steel ferrule is first gripped in the dummy socket and from then onwards until cooled off, the ferrule/dummy socket combination should be treated as a normal open basket socket.

(*b*) Instructions (*a*) to (*e*) of paragraph 1 should be followed next for tinning the ferrule, seizing the rope, cutting the rope, removing the core and unlaying the wires.

(*c*) With the brush prepared as uniformly as possible, 33 per cent. of the total number of wires, lying round the circumference of the brush, should be shortened 1-in. The next 33 per cent. of the wires, lying inside these outer wires should be shortened ½-in. The remainder in the centre should be left at their original length. Every endeavour should be made to divide the number of wires in each *strand* into the above proportions at the same time as the *whole rope* is being divided.

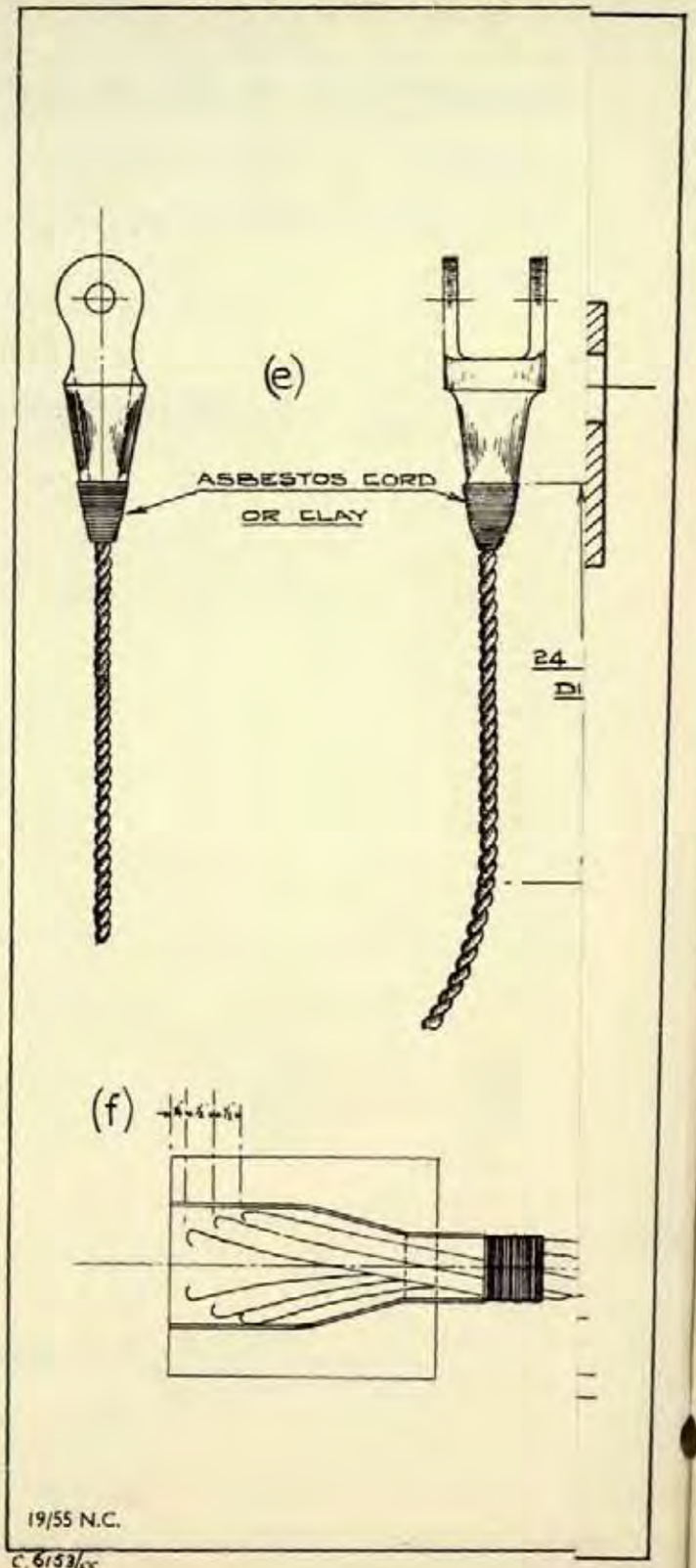
(*d*) Bend the ends of all wires to form hooks as given in instruction (*f*) of paragraph 1. When pulled back into the ferrule, the longest hooks should come about ¼-in. inside the ferrule. (Navy Order 431 of 1955 Diagram (f).)

(*e*) Complete the cleaning, tinning and pouring as given in instructions (*g*) to (*p*) of paragraph 1.

3. In view of the vital importance of these fittings, the failure of which may involve loss of life, particular care should be taken by Commanding Officers of ships in commission, Overseers, and Dockyard Officers to ensure that these instructions are strictly carried out.

(The foregoing is the text of A.F.O. 561/1955 altered to meet R.A.N. conditions)

(3773/2/1)



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(*e*) Complete the cleaning, tinning and pouring as given in instructions (*g*) to (*p*) of paragraph 1.

3. In view of the vital importance of these fittings, the failure of which may involve loss of life, particular care should be taken by Commanding Officers of ships in commission, Overseers, and Dockyard Officers to ensure that these instructions are strictly carried out.

(The foregoing is the text of A.F.O. 561/1955 altered to meet R.A.N. conditions)

(3773/2/1)

432.

Electrical and Electrical/Mechanical Equipment - Substitution of Dummy Bearings during Storage or for Transport.

H.M.A. Ships and Establishments

To avoid damage by pitting, ball and/or roller bearings may have in certain cases been removed from heavy electrical and electrical/mechanical equipment held in store for prolonged periods, or for purposes of transport.

2. Where this is the case holding authorities are to ensure that -

(a) A prominent tally is affixed to the parent equipment stating that the ball and/or roller bearings have been removed and whether dummy bearings have been fitted temporarily. This tally is to remain on the equipment when issued to a service for general information of the latter.

(b) The ball and/or roller bearings separately packed are to be issued concurrently with the main equipment.

3. All Authorities when receiving heavy equipment from store are to ensure that the correct ball and/or roller bearings are installed whether a warning tally is fitted or not.

(The foregoing is the text of A.F.O. 551/1955 altered to meet R.A.N. conditions.)

(3756/10/1)

433.

Alteration and Addition Items - H.M.A. Fleet Tugs.

The following alteration and addition item is approved in principle for H.M.A. Fleet Tugs :-

Class List Item No. 159 Classification "A"

Item: "To fit air casings on main generators and main motors to provide a ducted air supply free of oil vapour in accordance with Navy Office Drawing No. 120 D/534 W."

Compensating Weight Required: Nil.

References: (a) Commanding Officer PENGUIN's B.N.D. 7/4/18 of 22nd November, 1954.

(b) F.O.I.C. E.A's E.A.4001/505/3/2 of 7th December, 1954.

(c) H.M.A.S. SPRIGHTLY's proposed Alteration and Addition Item letter S/G.

2. Form A.D.275a is to be forwarded for H.M.A. Ships RESERVE and SPRIGHTLY.

(4300/1/58)

434.

Alteration and Addition Item - H.M.A. Majestic Class Light Fleet Carrier.

The following alteration and addition item is approved in principle for H.M.A.S. SYDNEY :-

Class List Item No. 276 Classification "A"

Item: "1 No. 5 inch Exhaust Fan to be fitted at after end of present Admiral's Office, Port sidesft, No. 2 deck".

Compensating Weight Required: 590 lbs. at Hangar Deck Level.

References: (a) Flag Officer Commanding, H.M.A. Fleet message 200803 December, 1954.

(b) General Manager, Garden Island message 210725 December, 1954.

(c) Naval Board message 300302 December, 1954.

2. Proposals to meet compensating weight requirements are to be forwarded by H.M.A.S. SYDNEY.

(4278/3/615)

435.

H.P. Air Compressing Equipment and Spare Gear.

With reference to Navy Order 223 of 1952, the Chief of Construction is responsible for the storage and custody of H.P. air storage reservoirs used in connection with ships' services and weapons, except where H.P. air storage reservoirs are an integral part of a weapon.

2. The Director of Ordnance and Underwater Weapons is responsible for H.P. air storage reservoirs which form an integral part of a weapon, e.g., torpedo firing reservoirs which form an integral part of a submarine's torpedo firing system.

3. The words "Chief of Construction" are to be substituted for the words "Director of Engineering (Naval)" in paragraph 1 of Navy Order 223 of 1952.

(4068/25/44)

436.

Naval Stores (General) (Class E, Group 10) - Scissors, Pattern 50 - Allowances to H.M.A. Ships.

Advice has been received from Admiralty that the present ship allowances of scissors, Pattern 50, for general and engineering purposes and for use in sick bays are to be cancelled, observing that (a) such scissors are included in the tool-kits of various types of Engine Room Artificers and (b) scissors for medical purposes are provided in the outfits of Medical Stores. (The allowances of two pairs of scissors to Depot Ships for use in electrical rewinding workshops in accordance with B.R.359 (2) - Establishment of Sea Stores for Electrical Purposes - is not affected.)

2. Exceptionally, in the case of Aircraft Carriers, one pair of scissors, Pattern 50, should be provided for each first aid cabinet, Pattern 5932, held, in order that Airmen's trousers, over which flying boots are strapped, may be cut off in an emergency.

3. Allowances of scissors, Pattern 50, for Engineering and Medical Purposes will accordingly be deleted from the Admiralty Establishments of Sea Stores, which are also applicable to H.M.A. Ships.

4. In view of the fact that in the Royal Australian Navy Petty Officer Mechanicians (E) and Leading Mechanicians (E) are now trained to do simple maintenance jobs, such as repacking valves and making joints, a special allowance of scissors, Pattern 50, for Engineering Purposes in H.M.A. Ships has been approved as follows :-

Aircraft Carriers	2 Prs.
Daring Class	2 Prs.
Destroyers (all Classes) Frigates (all Classes) and O.M.S.	1 Pr.

5. Ships in commission concerned, other than Carriers, should return surplus scissors to the appropriate (Superintending) Naval Store Officer.

6. Carriers in commission should demand sufficient additional scissors to equip first aid cabinets, due allowance being made for existing holdings which are to be re-allocated.

(4514/1/94)

437.

Naval Stores (General) (Class F, Group 2B, Part 2) - Dimmer for Instrument Lights, Pattern 18956 - Re-introduction.

H.M.A. Ships concerned

It has been decided to re-introduce 24 volt dimmer, Pattern 18956, rated at 1.32 amps., 25 ohms, for instrument lighting on S.T.A.A.G. Mountings. This dimmer will be dealt with under Class F, Group 2B, Part 2, and is to be accounted for in accordance with the procedure approved for portable fittings.

2. The relevant publications will be amended.

(The foregoing is the text of A.F.O. 564/1955 altered to meet R.A.N. conditions)

(4518/25/107)

SECTION 4 - DENTAL STORES, MEDICAL STORES, VICTUALLING STORES

438.

First Aid Stores for Lifefloats - Scale "G".

The equipment described above has been repacked with fresh stores, and sets are now ready for issue by the Medical and Dental Store Officer, 24 Shed, Bundock Street, Randwick, N.S.W., on whom demands should be placed for requirements, and the replaced sets returned for survey.

2. The allowance will be on the basis of one set per 10-man lifefloat and two sets per 20-man lifefloat.

3. Each set comprises four waterproof crimp sealed tins numbered 1, 2, 3, and 4, and a waterproof package of cramer wire splinting. Each tin is fitted with a wire ring, which tears the lid open when pulled. A spare push-on lid is attached for reclosing the tin, which is not then waterproof.

4. The tins have the contents printed on the outside in order that the desired tin only need be opened as and when necessary. No instruments are necessary to open the tins or to apply the contents.

5. Details of the set are as shown hereunder, and instructions in their use, should conform to this standard -

Tin No. 1 -	Burn Cream, (Sterile) Pyropax, 2 oz. tubes	3 No.
	Dressing, First Field	1 No.
	Dressing, Shell	1 No.
Tin No. 2 -	Dressings, Shell	2 No.
	Mosquito Repellent Lotion	4 Ozs
Tin No. 3 -	Dressing, Shell	1 No.
	Dressing, First Field	1 No.
	Tourniquet, Samway's, 3 ft.	1 No.

Tin No. 4 -	Tourniquet, St. John	1 No.
	Bandage, Triangular, Compressed	2 No.
	Outfit, Hypodermic, Individual, Morphine $\frac{1}{4}$ gr. (Omnopon Syrette)	4 No.
	Burn Cream, (Sterile) Pyropax, 2 oz. tubes	2 No.
	Guttae Cocaine 1% in Castor Oil (Eye drops) 1 oz. bottle	1 No.
	Matches, Wax Vestas	1 Tin
	Tablets, Oral Benzendrine (Energy)	50 No.
	Tablets, Oral, Atebrin (Anti-Malaria)	100 No.
	Vaseline, 1 oz. tubes	1 No.
Parcel -	Cramer Wire Splinting, 15 inches x 3 inches	2 Pcs.

6. In ships where a medical store account is maintained, the Scale "G" sets are to be shown on charge in that account as complete sets. In other ships the sets are to be taken on charge by the Commanding Officer.

7. The stores are not normally expendable except during an emergency requiring the use of the lifefloats. When no longer required they are to be returned to the Medical and Dental Store Officer and a receipt obtained.

8. Only sufficient sets to equip the number of lifefloats carried are to be drawn.

9. These sets are not to be drawn for lifeboats, for which Scale "H" is available.

10. Navy Order 272 of 1945 is hereby cancelled.

(4482/1/220)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

439.

Form A.S.271 - Punishment Warrant - Revision.

A revised version of Form A.S.271 - Punishment Warrant - has been introduced, and is available on demand from the (Superintending) Naval and Air Store Officer, Sydney.

2. Only the revised version is to be used after 30th September, 1955.

(3526/12/1363)

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C.N.Os. 440 - 457

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(FOR OFFICIAL USE ONLY.)

COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.
23rd June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0088

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SECTION 1 - ADMINISTRATIVE AND GENERAL

440.

Diving - Shallow Water Divers - Use of Shallow Water Breathing Apparatus, Pattern 5562A.

Shallow water divers when using Shallow Water Breathing Apparatus, Pattern 5562A are always to have the reducer in the circuit. The flow is to be set to 1·5 litres per minute.

2. For practical purposes the endurance of the apparatus when rigged in this manner is as follows :—

Bottles Charged	*Flow*	*Depth*	*Time*
200 Atmospheres, 3,000 lb. p.s.i. ..	1·5 l.p.m.	0 to 33-ft.	80 mins.
150 Atmospheres, 2,250 lb. p.s.i. ..	1·5 l.p.m.	0 to 33-ft.	56 mins.

(The foregoing is the text of A.F.O. 639/1955 altered to meet R.A.N. conditions)

(4512/50/221)

SECTION 2 - PERSONNEL

441.

Discipline - Restoration of Good Conduct Badges - Date of Commencement of Qualifying Period of "Very Good" Conduct.

A scrutiny of Forms S.1130 (Awards and restorations of Good Conduct Badges) has revealed some failures to apply correctly the rules about the date of commencement of " Very Good " conduct, in that restoration is being granted one day too early.

2. Attention is therefore drawn to Queen's Regulations and Admiralty Instructions, Article 1868, Clause 5, which contains the rules about the date of commencement of " Very Good " conduct after a break has become necessary ; particular attention is drawn to clause 5(*a*).

3. When a rating is simply deprived of a good conduct badge, the period of " Very Good " conduct necessary to qualify for the restoration of that badge begins not on the date of the punishment warrant but on the day after the date of the warrant. Thus a man deprived of a badge on 1st January, who is not being deprived of a badge for the second time within three years, may be eligible to have the badge restored on 2nd July, " Very Good " conduct having begun on 2nd January.

(The foregoing is the unaltered text of A.F.O. 730/1955)

(3593/2/73)

442.

Promotion to Commissioned Master-at-Arms - Sea Service Qualification for.

Their Lordships have decided that while the present small proportion of sea billets in the Regulating Branch continues, the sea service qualification for promotion to Commissioned Master-at-Arms shall be reduced from four to two years.

2. Q.R. and A.I. Article 0525 will be amended in due course.

(The foregoing is the unaltered text of A.F.O. 819/1955)

(4008/4/108)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES.

443.

Radio Hazards.

As a result of operational experience in Korean waters it has become necessary to reconsider the regulations and safety precautions covering the dangers generally termed " Radio Hazards ". The problem is complex, the difficulty, in general, being to achieve a realistic balance between safety to ship and personnel and the necessity for a reasonable freedom of action. The preceding regulations on this subject have proved to be over-exacting and when rigidly applied have had the effect, notably in carriers, of becoming a serious obstacle to the operation of the ship.

2. Revised regulations now in course of promulgation as amendments to B.Rs. 1754 (Regulations for the Storage and Handling of Gasoline, Kerosine, etc.) and 862 (45) (Naval Magazine and Explosive Regulations) strike a more practical balance between remote contingencies and real dangers. It will be noted that in some instances they permit a certain discretion to Commanding Officers so making some allowance for the differing physical arrangements and layouts in different ship classes. It is of the utmost importance, however, that detailed instructions are laid down in individual ships' Standing Orders.

3. *Radio and Lightning Hazards directly affecting Personnel.*—(*a*) *Shock or Burn.*—Persons touching live conductors carrying directly fed or induced radio frequency energy are liable to suffer electric shock and/or burns, but over the range of frequencies generally used in H.M. Ships, " electric shock " in the normally accepted sense of the term, does not occur, nor is there any danger of electrocution. The effect is of some degree of burning, coupled with " a shock " to the nervous system due to the unexpected occurrence, but is different to the possibly lethal shock resulting from contact with ship's main supply voltages.

(*b*) *Sources of Radio Frequency Shock.*—Primary sources of radio frequency shock will be from open wire feeders and radar and wireless transmitting aerials of all forms. Secondary sources, from which shock is also liable to be received, will be from voltages in metallic structures, unenergised aerials, mast stays, guard rails, gun barrels, dressing lines, etc., energised by induction from the ship's transmitters, or in extreme cases from transmitters in ships alongside.

As far as physical injury from contact with a primary radio frequency source is concerned, transmitters having outputs in excess of 50 watts mean, unmodulated power should be considered to be potentially dangerous, whilst transmitters with power outputs of 50 watts or below may be considered to be safe. Shocks or burns arising from induced voltages are considerably less severe and in many instances can be eliminated as indicated in subsequent paragraphs of this Order.

(*c*) *Elimination of Radio Frequency Shock.*—The risk of shock or burn arising from induced voltages can frequently be eliminated by suitable earthing of items liable to be affected by radio transmission.

The earthing can frequently be achieved by the use of a portable flexible clip-on earth lead.

As an example, an instance has been reported of a gun barrel being affected at the muzzle by radio transmissions from Type 603, despite the fact that the mounting is a major part of the ship's structure and therefore earthed.

The use of a portable flexible earth connection at the muzzle, fitted during the time men were working on the barrel cured this effect.

(*d*) *Injury due to High Frequency Radiation.*—A further potential source of danger lies in direct exposure, at close range, to the centimetric radiation of certain high power radars of the future.

The possible dangers may be due to either thermal or voltage effects. Considering thermal effects the danger lies in the heating of body tissue. The effect, in general, is a raising of the tissue temperature to a degree where, in the case of delicate tissues such as the eye structure, it may be destroyed by a process closely analogous to radio frequency cooking.

A feature of this type of heating is that under certain conditions of tissue and frequency the initial temperature rise may occur internally, rather than at the surface of the skin, by way of a " burn " or " scorch ". As a result damage may be done before the victim is aware of any discomfort.

Considering voltage effects the potential gradient of the electric field in the mouth of a matched horn of the future, may be of the order of 5,000 V/Cm. which might well be hazardous to say, the human eye exposed to it. This high power density is, however, only maintained at very close ranges and gradients in the aerial field are likely to be of the order of 500 V/Cm. which, so far as is known, is likely to be harmless. Little data is, actually, available on such steep voltage gradient effects, which have not, hitherto, occurred.

It is important that the danger of these effects should not be over exaggerated and with current radars it can be said that it is negligible provided that commonsense is used and that exceptionally close contact with a radio frequency field, such as looking down a sparking waveguide during an investigation, is avoided.

For future equipments, however, the hazard may be sufficient to warrant the precautions indicated in paragraph 5 below being enforced. In general radars liable to radiate at a hazardously high level will have due attention drawn to the fact in the relevant handbooks.

(*e*) *Injury other than shock or burns.*—A danger exists, even though the voltage producing a shock is insufficient to cause physical harm, that a man who has received a shock may fall, through momentary loss of hand-hold or balance. The degree of danger from this cause is likely to vary with the type of person. Electrical and Communications personnel who are continually working on radio equipment will not view small shocks and sparks with the same apprehension as those who are not. The basic remedy is clearly to restrict all Radio Transmissions when men are working aloft on masts, funnels, or superstructures to which Radio Aerials are secured. Consideration, however, of the transmitters now fitted, their functions, and of arrangements in modern ships will make it apparent that too stringent a transmission embargo, when men are so employed, may either seriously affect the operational efficiency of the ship, or alternatively, interfere with maintenance or other routine work.

In some cases work aloft while transmission is in progress may well be entirely safe and permissible. In modern aircraft carriers for instance, the foremast and mainmast are all welded structures bonded to earth, the main potential source of primary or induced voltages being the wireless aerials themselves, which normally cannot be reached by a man on the foremast.

In other instances it may be necessary to restrict transmissions from certain aerials. The restrictions to be enforced must largely depend on the layout of the ship and the nature of the desired work aloft.

(*f*) *Risks from Moving Aerials.*—A further danger to men aloft is from falls caused by radar and other aerials which rotate or move *unexpectedly*. An aerial which is continuously rotating normally presents little danger since men will keep clear of it, and in many cases such work as painting of masts and superstructures can well take place without restriction to operation of radars or other remotely controlled moveable aerials.

It is apparent from all the above that the possible combinations of circumstances are large and that these are matters best dealt with in Ships' Standing Orders in the light of a clear understanding of the problem rather than on a mandatory basis of universal application.

4. *Radio and Lightning Hazards Directly Affecting Material.*—(*a*) *Ignition of Explosives.*—The premature ignition by Radio transmissions of explosives is improbable when ammunitioning ship, and handling on deck, or when explosives are stored in ready-use lockers or loaded in gun breeches.

The maximum danger arises when an explosive is brought within a sufficiently high field strength area of a radio transmission and for a sufficiently long period of time to create heat or induce current of such a value as would cause premature ignition of the explosive.

Percussion initiated explosives are less susceptible to pre-ignition from this cause than are the electrically initiated type, where consideration has to be taken both of power and frequency aspects of radio transmission, on the effect upon igniter heads, priming wires and fusing systems of such explosives.

Orders to minimise the risk from this source are contained in Revised Article 72 of B.R. 862(45) (Naval Magazine and Explosives Regulations).

(*b*) *Ignition of Inflammable Stores.*—Ignition of inflammable stores such as aviation spirit due to radio transmissions, is dependent upon the simultaneous creation of two conditions : (i) a certain minimum wattage of R.F. power dissipated in an arc in the presence of (ii) the correct combustible petrol/air mixture. This is normally only possible in the immediate vicinity of open tanks, filling orifices and vents. Whilst this combination is not impossible to achieve, it is a reasonably remote contingency and orders to minimise this possibility are contained in Clause 3.3 (ii) of B.R. 1754 (Regulations for the Storage and Handling of Gasoline and Kerosine, Anti-Freeze Fluid, Dope and Hydrogen).

5. *Precautions to be taken to reduce Radio Hazards.*—The following precautions are indicated as guidance for the preparation of Ship's Standing Orders.

(*a*) *Men Aloft.*—The term " Man Aloft " from the radio aspect is applied to all masts, funnels or ship's superstructures to which aerials are secured, and should be clearly defined in Ship's Standing Orders.

(i) *Wireless.*—No wireless transmissions with power outputs in excess of 50 watts should be made on those sets whose aerials are secured to the structure on which a man is required to go aloft, if he can in any way come in contact with the transmitting aerial, or adjacent aerials within 20 feet distance of the transmitting aerial. " Safe to Transmit " controlling devices should be removed to ensure this restriction.

(ii) *Radar.*—Transmissions from metric radar sets (Types 79, 281, 960) should cease when a man is going aloft and will come within reach of adjacent whip aerials or wires from which induced current shocks may be received. Centimetric radar transmitters having mean powers exceeding 1 kilowatt, are not to be switched on when working in the immediate vicinity of the aerial structure (*i.e.*, painting, etc.) except under direct supervision of an electrical officer.

" Safe to Transmit " controlling devices should be removed to ensure this restriction.

(iii) *Mechanical Dangers.*—Where personnel are working on, or within reach of, rotatable aerials, the "Safe to Rotate" controlling device should be removed from the parent equipment.

(iv) Personnel should be warned to avoid touching whip and wire aerials, dipoles and open wire feeders or to exposing themselves at close range to direct centimetric radiation from waveguides or waveguide horns.

(*b*) *Explosives.*—Refer to Revised Article 72 of B.R. 862(45) (Naval Magazine and Explosive Regulations).

(*c*) *Fuel.*—Refer to revised Clause 3·3 of B.R. 1754 (Regulations for the Storage and Handling of Gasoline, etc.).

(*d*) *Reduction of Risks from Induced Current Sources.*—Iron ladders should, wherever possible, be welded to masts and superstructures. Wire ladders, mast stays, wire rigging, etc., should be well bonded to earth. Where required, gun muzzles should be earthed during cleaning and maintenance routines.

(*e*) *Dressing Ship.*—In ships which dress overall the following points should be observed :—

(i) *Wireless.*—Transmission on communication equipments with outputs of 500 watts and above should be avoided.

(ii) *Radar.*—Transmissions should be avoided from radar sets employing open wire feeders which may be adjacent to dressing lines and wire downhauls. Precautions should also be taken to avoid the use of rotating aerials which may foul flags and dressing lines.

(iii) Where possible wire downhauls and dressing lines should be well bonded to earth if wireless transmitters with outputs exceeding 50 watts are to be used.

(*f*) *Lightning.*—Due to the possibility of being struck by lightning or of induced discharge from metallic structures due to a close lightning discharge, strict precautions should be taken in the event of a thunderstorm and all loading or unloading of explosives or handling of inflammable stores is to cease from the time the first thunderclap is heard until the storm has passed. Hoisting whips are to be moved at least six feet from explosives or inflammable stores.

6. *Responsibilities of Officer of Watch.*—The Officer of Watch is responsible that the relevant restrictions laid down in Ships' Standing Orders are imposed. To ensure proper observance of the restrictions the Officer of Watch is to obtain, and retain until the completion of the restriction period, "Safe to Transmit" and "Safe to Rotate" controlling devices of the wireless and radar sets concerned.

A rack is to be constructed to provide stowage at the Officer of the Watch position for the above controlling devices, and is to be marked in such a way that it will provide rapid identification by the Officer of Watch of the devices applicable to the different sets.

7. *Radio Transmission in an Emergency.*—(*a*) If it is essential to send a man aloft when restrictions on radio transmission cannot be accepted, particularly if high power wireless or metric radar transmissions are taking place, the man should be sent aloft with rope protection.

(*b*) If it is essential to carry out radio transmissions on normally restricted transmitters during the handling of explosives and/or inflammables, work is to be suspended and all handling cease.

8. Navy Order 369 of 1954 is hereby cancelled.

(The foregoing is the text of A.F.O. 408/1955 altered to meet R.A.N. conditions)

(4181/1/1)

444.

Machinery - Refrigerating and Air Conditioning Machinery - Service Cylinders.

H.M.A. Ships

Complaints have been received that water has been found in Arcton 6 and methyl chloride refrigerant cylinders which has contaminated the refrigerating plant circuits in H.M. ships.

2. The chances of transferring the moisture to the refrigerant circuit during charging can be reduced to negligible proportions by charging the refrigerant in gaseous form into the low pressure side of the plant. As an additional safeguard an activated alumina drier is to be used in the charging line. The refrigerant plant drier also should always be used when charging.

3. To ensure that moisture does not enter discharged cylinders during transit, used cylinders are not to be vented to atmosphere before return to store. Care is to be taken to close the stop valve securely and fit the protection cap.

(The foregoing is the unaltered text of A.F.O. 857/1955)

(3768/1/35)

445.

Ammunition - Care in Embarking.

An accident, which might have had extremely serious results, occurred recently when one of H.M. Ships was hoisting ammunition on board, as a direct result of disregarding Naval Magazine and Explosives Regulations, Article 58.

2. This article orders the use of two handles of a multi-handled box when ammunition is being hoisted ; the accident was directly caused by the use of only one handle for this purpose.

3. Armament stores and their containers are designed with a high safety margin, Safety cannot, however, be ensured unless these stores are handled in the proper manner.

4. The attention of all concerned is called to Naval Magazine and Explosives Regulations, Article 58.

(The foregoing is the unaltered text of A.F.O. 833/1955)

(4433/1/767)

446.

Ammunition - Pyrotechnics - Instructions for the use of Service Pyrotechnics for Display Purposes.

During a recent pyrotechnic display given by H.M. ships abroad an accident occurred in which one rating was seriously injured, another received minor injuries and a civilian spectator on shore was also hurt.

2. The attention of Commanding Officers and all concerned with pyrotechnic displays is drawn to the instructions contained in paragraph 670A of B.R. 932, Ammunition Handbook, as amended by A.F.O. P.19/55.

(The foregoing is the unaltered text of A.F.O. 105/1955)

(4433/91/794)

447.

Compass Corrector Coils - Necessity for Re-adjustment if D.G. Coil Arrangements are Altered as a Result of Ranging.

In ships which are degaussed by coils, and in which magnetic compasses are installed, compensation for the normal adjustment of current in the D.G. coils on change of latitude and/or course is automatically provided by the compass corrector coils, in which the current alters proportionally.

2. If, however, as a result of D.G. ranging, or for any other reason, it becomes necessary to make alterations to the D.G. coil arrangements by reversing turns in any D.G. coil or part of a coil, or, in ships where the compass corrector coils are energised from across the ballast resistance and D.G. coil, the ballast resistance is altered, the correction applied by the compass corrector coils will no longer be valid and a readjustment of these latter coils (involving a further swing to obtain a deviation table for the condition of D.G. " On ") will be necessary. It should be noted that in ships where the compass corrector coils are energised from across a fixed resistance in series with the D.G. coil (i.e. ships with 6V compass correction) changes in the ballast resistance will not affect compass correction.

3. The D.G. Range Officer and/or local D.G. Officer should be consulted in any case of doubt as to the need for re-adjustment of compass corrector coils in the circumstances envisaged herein.

(The foregoing is the unaltered text of A.F.O. 753/1955)

(4518/37/167)

448.

Diving - Emergency Drill for Divers Using Self Contained Equipment.

Confusion has arisen in the past over the term " Ditching Drill " for divers using self contained equipment. In order to avoid any possible ambiguity the following terms are to be strictly adhered to :—

(a) *Emergency Surfacing Drill.*—This is taught to Shallow Water Divers and is to be used in an emergency when underwater swimmers are wearing life lines. The correct procedure is to slip the back weights so gaining positive buoyancy. On surfacing the face mask is removed (retaining the mouthpiece in the mouth), and the split-cock turned to " atmosphere ". The counter-lung can then be fully topped up with gas and used as a lifebelt.

(b) *Ditching Drill.*—Ditching drill is taught to all Clearance Divers as a means of building up confidence. It can also be used in an emergency when free swimming and consists of discarding the breathing set underwater and doing a " free ascent " to the surface. It is stressed that unless this drill is carried out correctly (i.e., exhaling during the ascent) it can be highly injurious to the diver's lungs.

(The foregoing is the unaltered text of A.F.O. 919/1955)

(3386/50/8)

449.

Torpedo History Sheets - Care in Making Up.

Attention is drawn to the necessity of strict adherence to the Instructions for the writing up of Torpedo History Sheets. Recently there has been a large increase in the numbers found to be incorrectly or incompletely filled in, particularly when the History Sheet accompanies a report of a loss.

2. The regulations are contained in Chapter 1 of B.R. 1699 (3/51) and are self-explanatory.

(The foregoing is the unaltered text of A.F.O. 1000/1955)

(4431/11/57)

450.

Naval Stores - Fuelling Equipment - Accounting.

It has been decided that certain items of fuelling equipment, as shown in the Appendix to this Order, now held under Vote 8/II K, are to be accounted for under the Classes and Groups of Vote 8/II A indicated. Transfers should be arranged accordingly. H.M. ships and Fleet Establishments complying with B.R. 4 (Naval Storekeeping Manual), Article 109 (a).

(The foregoing is the unaltered text of A.F.O. 607/1955)

(4501/6/59)

APPENDIX

Pattern No.	*Description*	*Transfer to : Class/Group*
	Hoses, gasoline resisting, flexible armoured rubber with Admiralty Standard screw connections, 11 threads per inch :—	
3591	1-in. bore × 10-ft. length	B.8 Part E
3592	1-in. bore × 20-ft. length	
3593	1-in. bore × 30-ft. length	
3594	1-in. bore × 40-ft. length	
3595	1¼-in. bore × 10-ft. length	
3596	1¼-in. bore × 20-ft. length	
3597	1¼-in. bore × 30-ft. length	
3598	1¼-in. bore × 40-ft. length	
3599	1½-in. bore × 10-ft. length	
3600	1½-in. bore × 20-ft. length	
3601	1½-in. bore × 30-ft. length	
3602	1½-in. bore × 40-ft. length	
3603	2-in. bore × 10-ft. length	
3604	2-in. bore × 20-ft. length	
3605	2-in. bore × 30-ft. length	
3606	2-in. bore × 40-ft. length	
	Hoses, gasoline resisting with B.S.P. connections (for pressure refuelling of aircraft) :—	
3611	1½-in. × 10-ft. length	B.8 Part E
3612	2-in. × 15-ft. length	
3613	2-in. × 30-ft. length	
3614	2½-in. × 15-ft. length	
3615	2½-in. × 30-ft. length	
	Connections, screw, Admiralty Standard (G.M.) :—	
5000	1-in. Male	B.9 Part B
5001	1-in. Female	
5002	1½-in. Male	
5003	1½-in. Female	
5004	1½-in. Male	
5005	1½-in. Female	
5006	2-in. Male	
5007	2-in. Female	
	Connections, screw, B.S.P. thread :—	
5010	2½-in. Male	B.9 Part B
5011	2½-in. Female	
5012	2-in. Male	
5013	2-in. Female	
5014	1½-in. Male	
5015	1½-in. Female	
5021	Nozzles, Zwicky, improved type for 1½-in. gasoline hoses.	B.8 Part E
—	Nozzles, Zwicky, for 1½-in. hoses	
—	Adaptors, 1½-in.-1½-in. (for fitting Pattern 5021 to 1½-in. hoses) (G.M. or brass castings).	B.9 Part B
7707	Adaptors, 2-in. double Male	
7708	Adaptors, 2-in. double Female	
7709	Adaptors, 2-in. Male-1½-in. Female	
7710	Adaptors, 2-in. Female-1½-in. Male	
7711	Adaptors, 2-in. Male-1½-in. Female	
7712	Adaptors, 2-in. Female-1½-in. Male	
7713	Adaptors, 2-in. Male-1-in. Female	
7714	Adaptors, 2-in. Female-1-in. Male	
7715	Adaptors, 1½-in. double Male	
7716	Adaptors, 1½-in. double Female	
7717	Adaptors, 1½-in. double Male	
7718	Adaptors, 1½-in. double Female	
7719	Adaptors, 1-in. double Male	
7720	Adaptors, 1-in. double Female	

Pattern No.	Description	Transfer to : Class/Group
	Plugs for gasoline hose connections :—	
7722	2-in. (G.M.)	B.9 Part B
7723	1½-in.	
7724	1¼-in.	
7725	1-in.	
	Caps for gasoline hose connections (G.M.) :—	
7727	2-in.	B.9 Part B
7728	1½-in.	
7729	1¼-in.	
7730	1-in.	
	Spanners, bronze	
7732	2-in.	B.11 Part E
7733	1½-in.	
7734	1¼-in.	
7735	1-in.	
7744	Adaptors, 2½-in. Female-1½-in. Male (G.M.)	B.9 Part B
7736	Washers, Leather, for 3-in. hose connection	E.11
7737	Washers, Leather, for 2-in. hose connection	
7738	Washers, Leather, for 1½-in. hose connection	
7739	Washers, Leather, for 1¼-in. hose connection	
7740	Washers, Leather, for 1-in. hose connection	

451.

Naval Stores (General) (Class B, Group 8) Allocation of New Pattern Numbers to Avoid Duplication within Class and Group.

To avoid duplication of pattern numbers within the same Class and Group of the Rate Book for Naval Stores, it has been decided to re-number the items detailed in the Appendix to this Order.

2. The Naval Store account in H.M. Ships and Fleet Establishments should be adjusted in accordance with Article 109 (g) of B.R. 4, Naval Storekeeping Manual.

3. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 844/1955)

(4505/80/155)

APPENDIX

Part of Class/Group	Current Pattern	Description	New Pattern
A	1844	Four-way pieces (steel) :— Without feet, 1½-in. (4,000-lb.)	13318
	1846	Three-way pieces (steel) :— With feet, 1½-in. (4,000-lb.)	13319
	1848	Without feet 1½-in. (4,000-lb.)	13320
B		Cocks, brass and metal :—	
	1	Blow down double, asbestos packed each consisting of a pair of cocks as per pattern or sketch	13301
	2	Spanners, steel, for cocks, Patterns 1 and 3	13302
		Drain, gun-metal, asbestos packed, for high pressure :—	
	370	right-angled, ½-in., X	13303
	371	right-angled, ¾-in., X	13304
	372	right-angled, ¼-in., X	13305
	373	right-angled, ½-in., X	13306
	374	right-angled, ¾-in., X	13307
	375	straightway, ½-in.	13308
	376	straightway, ¾-in.	13309
	377	straightway, ¼-in.	13310
	378	straightway, ½-in.	13311
	379	straightway, ¾-in.	13312

Part of Class/Group	Current Pattern	Description	New Pattern
		Drain gun-metal, asbestos packed, of light design, for high pressures :—	
		for cylinders of small auxiliary engines :—	
	375A	straightway, ½-in.	13313
	376A	straightway, ¾-in.	13314
	377A	straightway, ¼-in.	13315
	378A	straightway, ½-in., X	13316
	379A	straightway, ¾-in., X	13317
E	3	Handles, wrought iron, crank with key complete, for 4½-in. × 5-in. pumps	13321
	9	Valves, iron return, gun-metal, for suction pipes, for 4½-in. × 5-in. pumps	13322
G		Valves, gun-metal :—	
	611	Screwdown, right-angled, ¾-in.	13323
	612	Straightway, 1-in.	13324
	616	Feed check, 1-in.	13325
	619	Fresh water, pillar, ¾-in.	13326
	621	Safety, 2-in.	13327
H		Stoves, gear for and parts of :—	
	901	Ashpans for 18-in. stoves	13328
	904	Ashpans for 13-in. stoves	13329
	4721	" Esse Vista ", No. 22, P.A., overall width 20¼-in.	13330
	4722	" Esse Vista ", No. 23, P.A., overall width 22¼-in.	13331
I	9	Engine, foot, portable, in wooden travelling case	13300

452.

Naval Stores (General) (Class B, Group 11, Part E, etc.) - Spanners and Wrenches - Reduction of the Number of Patterns in the Rate Book and Authorised List of Naval Stores.

It has been decided to reduce further the number of different patterns of Spanners and Wrenches of which stocks are at present held. The patterns detailed in Appendix A to this Order are obsolescent and will be deleted from the Rate Book and Authorised List of Naval Stores in due course.

2. No further purchases will be made of these items. They should, however, continue to be demanded but demands should indicate an alternative pattern which will be acceptable in lieu when stocks have been exhausted.

3. As indicated in paragraph 1, this action is being taken to reduce the number of different patterns of Spanners and Wrenches in use and thus simplify storekeeping and store accounting. Future requirements of the patterns made obsolescent are not to be obtained by local purchase when stocks are exhausted, except in very exceptional circumstances which should be reported to the Admiralty accompanied by full reasons for the necessity for supply together with an estimate of the future scale and duration of requirements.

4. All Spanners and Wrenches will in future be accounted for under Class B, Group 11, Part E, and stocks held under other Classes and Groups, with the exception of Class K, should be transferred as detailed in Appendix B. The date of this Order should be taken as the date of transfer. The Spanners for Oil Hoses held under Class K will be the subject of a separate Order.

5. Spanners, single ended, pin, Pattern 54476, will be marked X and the patterns annotated in Appendix B will be marked X or N in accordance with B.R. 810, Section 1.

6. The Rate Book and Authorised List of Naval Stores will be amended.

(The foregoing is the unaltered text of A.F.O. 567/1955)

(4506/12/289)

APPENDIX A

Pattern	Description
	Class B, Group 11, Part E
	Spanners :—
53384	⅜-in. × $\frac{5}{16}$-in. Whit. × 4½-in. long, box double ended, non-magnetic.
54270	2¾-in. tube.
54271	1 $\frac{5}{16}$-in. radius, "C" type.
54996	2 $\frac{5}{16}$-in. × 1 $\frac{5}{16}$-in., "C" type, double ended.
56671	3½-in. diam., "C" type.
58441	Ratchet to suit bolt head.
58473	1 $\frac{13}{16}$-in. × 1½-in., "C" type, double ended.
59756	1½-in. diam., "C" type, single ended.
59757	1 $\frac{5}{16}$-in. diam., "C" type, single ended.
59758	1½-in. diam., "C" type, single ended.
65423	2½-in. diam., "C" type, single ended.
65453	Non-magnetic.
65454	Non-magnetic.
65455	Non-magnetic.
65456	Non-magnetic.
65459	Non-magnetic.
65460	Non-magnetic.
W.2020	For ⅞-in. gland nuts, double ended.
W.4686	6 B.A. × 8 B.A., flat, double ended.
W.5832	4 B.A. × 6 B.A., 3-in. long, box double ended.
W.5833	6 B.A. × 8 B.A., 3-in. long, box double ended.
W.5834	4 B.A. × 6 B.A., flat, double ended.
W.5835	6 B.A. × 8 B.A., flat, double ended.
W.5979	1½-in. jaw, special.
W.8331	0 B.A. ring, with 4-in. handle.
55513	Wrench, steel.
5913	¾-in. B.S.W., single ended, special.
6075	¼-in. × ½-in. B.S.P. double ended, wrench.
6076	¼-in. × ¾-in. B.S.P. double ended, wrench.
5856	½-in. B.S.P. single ended, wrench.
	Double ended, for hydraulic and pneumatic systems :—
10163	¼-in. × ½-in. B.S.P. R.A.F. Ref. 1C/6075.
10164	¾-in. × ¼-in. B.S.P. R.A.F. Ref. 1C/6076.
	Single ended, for hydraulic and pneumatic systems :—
10165	½-in. B.S.P. R.A.F. Ref. 1C/5856.
10166	¾-in. B.S.P. R.A.F. Ref. 1C/5861.
	Single ended, 4-in. long, 15° right of head :—
6913	$\frac{5}{16}$-in. B.S.W., ½-in. B.S.F.
6914	$\frac{5}{16}$-in. B.S.W., ¾-in. B.S.F.
	Class B, Group 11, Part F
	Wrenches :—
C.3015A	Chains for Pattern C.3015.
C.3017A	Chains for Pattern C.3017.
C.3018A	Chains for Pattern C.3018.
C.3030	For 0 B.A. and 2 B.A. nuts, T.
C.3031	For 0 B.A. nuts, T.
	Class B, Group 8, Part 1
	Spanner :—
7415	Chain.
	Class F, Group 1A, Part 1
	Spanners :—
2458	Toggle for M.A. type 1.
7660	2¾-in., B.S.W., box.
W.1879	Tubular, D.E. for 0 B.A. autobrushing nut and 0 B.A. round nut for types 282 to 285.
W.3016	Single ended, special, for Pattern W.2903 for diode switch, etc. for A.T.R., A.T.T. and A.P.T.
W.2020	For ⅞-in. gland nut, double ended.
W.4686	6 B.A. and 8 B.A., double ended.
W.3933	2 B.A. and 4 B.A., double ended for types 282–285.
W.2387	4 B.A., single ended, with handle for types 282–285.
W.4162	For control units, 20D (box of).
W.4291	To fit 3½-in. diam. circular nut.
W.4292	To fit 2¾-in. diam. circular nut.
W.4293	To fit 1½-in. Whit. nut.
54270	Tube 2¾-in. diam. (A.S.E. Drawing No. 21404).
54271	1 $\frac{13}{16}$-in. radius, "C" type, for R.H.2.
55471	5-in. for nut 2 $\frac{13}{16}$-in. diam., "C" type.

APPENDIX A—*contd.*

Pattern	Description
	Class F, Group 1A, Part 2
	Spanners :—
7486	2 B.A. and 6 B.A. nuts, double ended.
A.1803	$\frac{5}{16}$-in. × ⅞-in., double ended, N.U.B.O. cranked ring.
A.2665	⅞-in. × $\frac{5}{16}$-in., double ended, B.S.W.
7478	For nut 4½-in. diameter.
A.3605	2 B.A. key for Allen type screws.
A.2694	⅞-in. × $\frac{5}{16}$-in. B.S.W. double ended ring, B.U.B.O.
2307	⅞-in. B.S.W. nuts, single ended.
2926	1⅛-in. B.S.W. nuts.
2088	1½-in. B.S.W. nuts with tommy ends.
2207	1-in. Whitworth nuts.
2209	⅞-in. Whitworth nuts.
A.2740	1⅛-in. B.S.W. hexagonal nuts.
A.2635	0 B.A. single ended, special.
A.2355	2½-in. O.D.X. 1½-in. I.D. slotted ring special.
A.898	Special for Unit A/S 236.
2210	"Tee" special.
A.1782	10 B.A., double ended.
A.923	⅞-in. × ⅞-in. Whitworth nuts, double ended, special.
A.2967	⅛-in. Allen type key.
A.2991	⅛-in. diam. pin × 1⅛-in. diam. pin, special.
A.2992	⅛-in. diam. pin × 2⅛-in. diam. pin, special.
A.1009	"C" for stuffing boxes.
	Class F, Group 1C, Part 4
12278	Spanner, bent.
	Class F, Group 1C, Part 5
	Spanner :—
24017	For Flexotube equipment, part 12 (sets).
	Class F, Group 2C, Part 1
	Spanners :—
16537	Extractor.
16984	Special.
16985	No. 6161.
22000	Spanner, special.
16634	$\frac{5}{16}$-in. × ⅞-in. B.S.W., box.
16635	⅞-in. B.S.W.
16708	0 B.A. × 7½-in. long, tube.
16709	2 B.A. × 7½-in. long, tube.
16710	⅞-in. B.S.W., 15-in. long, tube.
16711	4 B.A., 2-in. long.
16725	Tube.
16858	$\frac{5}{16}$-in. B.S.W.
16883	$\frac{5}{16}$-in. B.S.W. tube.
	Class F, Group 3, Part B
	Spanners :—
3770	Pump inlet valve, Brown Gyro Compass (G.496).
3748	Switchboard terminal box, Brown Gyro Compass (G.447).
	Class F, Group 7, Part A
	Spanners :—
23418	Flat No. 1.
23419	Flat No. 2.
23420	Flat No. 3.
23421	Flat No. 4.
23422	Flat No. 5.
23423	Flat No. 10.
	Class F, Group 7, Part C
	Spanners :—
22230	2 B.A. × 3 B.A.
22229	4 B.A. × 6 B.A.
22231	8 B.A. × 10 B.A.
23926	Special, thin nut.
23933	4 B.A., box.
23934	6 B.A., box.
23938	2 B.A. × 4 B.A. × $\frac{1}{16}$-in. thick.
23937	6 B.A. × 8 B.A. × $\frac{1}{16}$-in. thick.
22556	¼-in. × $\frac{5}{16}$-in. Wrench.
22557	⅜-in. × $\frac{5}{16}$-in. Wrench.

APPENDIX B.

Pattern	Description	Category
	Class B, Group 8, Part 1	
	Spanners :—	
7413	"C" spanner for hydraulic ram and nut for Torpedo Bomb Trolley.	
7414	"C" spanner for hydraulic ram and gland nut for Torpedo Bomb Trolley.	
	Class F, Group 1A, Part 2	
	Spanners :—	
A.924	Double ended, ¼-in. B.S.F. and 0 B.A. nuts	
A.1717B	Tube for 1¼-in. diam. slotted nuts	N
A.1765	Tube for rise and fall lampholder	N
2089	Tube for 1¼-in. B.S.W. with Tommy ends	
A.2108	Tube special, 1 1/16-in. diam.	N
A.2132	Pin, p.c.d. of pin holes, 3-in. diam. of pin 3/8-in.	X
A.2148	Tube, 5/8-in. O.D. × 3/8-in. I.D. for slotted nuts	N
A.2150	Special for single oscillators, Pattern A.2163	N
A.2168	Ring, with 2 pins, 3-in. p.c.d.	N
2200	Double ended claw for 3¼-in. and 2 3/16-in. ext. diam. nuts	N
2201	Double ended claw for 1 29/32-in. and 15/16-in. ext. diam. nuts	N
2202	Double ended claw for 1 1/16-in. and ¾-in. ext. diam. nuts ..	N
2203	Pin, p.c.d. of pin holes, 1⅝-in.	X
A.2229	Tube, special, for ring nuts 1⅝-in. O.D. × 1 1/16-in. I.D. ..	N
A.2230	Tube, special, for ring nuts 15/16-in. O.D. × 3/8-in. I.D. ..	N
A.2231	Box, ⅝-in. nuts × 9-in. long.	
2257	Tube for 2¼-in. diam. slotted nuts	N
2308	For 1⅝-in. B.S.W. nuts	N
2309	Single ended for 2⅝-in. B.S.W. nuts	N
2312	Double ended, pin, p.c.d. of pinholes, 4 7/16-in. and 3¼-in.	X
A.2319	Special, 5⅝-in. across flats	N
A.2320	Tube, special, ⅞-in. I.D. × 1/16-in. O.D.	N
A.2321	Pin, 3-in. p.c.d.	X
2339	Pin, ⅛-in. diam. pin.	
A.2390	3/16-in. radius.	
A.2391	Pin, 11/16-in. p.c.d.	N
A.2410	Special.	
A.2460	Special	N
A.2477	Ring, special, for 12 sided nuts	X
A.2478	Tube, double ended, ½-in. × 5/16-in. Whit., with tommy bar.	
A.2636	Special, 0 B.A.	
A.2695	Double ended, ¼-in. × 3/16-in. B.S.W.	
A.2696	Double ended, ¼-in. × 3/16-in. B.S.W.	
2714	Special for 1¼-in. B.S.W. nuts	N
2715	For stuffing boxes.	
A.3604	Tube for 1 11/16-in. slotted nuts.	
6071	Pin, p.c.d. of pin holes 3·187.	
7132	Tube for 1⅛-in. B.S.W. nuts.	
7371	For 2⅝-in. B.S.W. nuts	N
7385	For 1⅝-in. B.S.W. nuts	N
7471	Pin, 11/16-in. diam., pin 2-in. p.c.d.	X
7675	Box tube for ⅞-in. B.S.W. nuts.	
	Class F, Group 2A, Part 3	
	Spanner :—	
8026	Pin for retaining ring of Lantern Pattern 7950.	
	Class F, Group 2A, Part 4	
	Spanners :—	
X.28	Open type for terminal nut.	
X.73	Box type insulated for terminal nut.	
X.89	Insulated, cranked handle box type.	
X.91	Reversible ratchet.	
	Class F, Group 2B, Part 3	
	Spanners :—	
6654	For use with fuseholder, Pattern 6639.	
6654A	For use with fuseholder, Pattern 6639, with adjustable jaws for ⅝-in. and ¾-in. B.S.F. nuts to B.S. Spec. 1083/42.	

APPENDIX B—*contd.*

Pattern	Description	Category
	Class F, Group 3, Part B	
	Spanners :—	
8066	Box, ½-in. B.S.F. for master unit, Pattern 8050.	
6031	Box, for Mark 5 Gyro-compass rotor nut.	
5149	Box, for generator spindle nut.	
6032	Pin for Mark 5 Gyro-compass bearing retainer.	
4676	Double ended, ½-in. × 5/16-in., for Gyro-compass.	
4677	Double ended, ⅝-in. × 3/8-in., for Gyro-compass.	
4678	Double ended, ¾-in. × 7/16-in., for Gyro-compass.	
4679	Double ended, ⅞-in. × 1-in., for Gyro-compass.	
3408	For contractor, Pattern 3400.	
3744	Oil and air pipe union, Brown Gyro-compass (G.439).	
3745	For damping valve, Brown Gyro-compass (G.442).	
3746	E. & W. case balance, Brown Gyro-compass (G.443).	
3747	For gimbal ring balance, Brown Gyro-compass (G.445).	
	Class G, Group 6, Part A	
6406D	Spanner "C".	
	Class F, Group 7, Part C	
	Spanners :—	
22232	Special 2 B.A.	
22546	Box.	
23943	And split screwdrivers.	
22245	Tommy bars.	
22246	Tommy bars.	

453.

Naval Stores (General) (Class 3, Group 2d) - Asbestos Cloth for Sound Insulation, Pattern 8703 - Deletion.

It has been decided to delete Asbestos Cloth, Sheeting K.920, 32-in. wide by ⅛-in. thick, for Sound Insulation, Pattern 8703, from the Rate Book and Authorised List of Naval Stores (B.R. 810). Stocks should be utilised until exhausted and subsequent requirements met by the use of Asbestos Cloth, ⅛-in. thick, Pattern 8700.

2. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 610/1955)

(4512/23/74)

454.

Naval Stores (General) (Class E, Group 2d) - Rings, Packing for Crane Type Fittings for Condenser Tubes - Amendment of Description.

In order to facilitate identification of Rings, Packing for Crane Type fittings for condenser tubes, it has been decided to amend the descriptions of certain patterns as follows :—

Pattern 2835 as shown "Taper" *to read* "Brass cone for ⅝-in. tubes".
Pattern 2836, *insert* "3/16-in. thickness".
Pattern 2982 as shown "Style CN 601" *to read* "Style 601 CN".
Pattern 2983 as shown "Style 601" *to read* "Style 601 C".
Pattern 2985 as shown "Style CN 601" *to read* "Style 601 CN".

(The foregoing is the unaltered text of A.F.O. 682/1955)

(4512/23/75)

455.

Naval Stores (General) (Class E, Group 5) - Breathing Apparatus, Pattern 5665 - Amended Description.

It has been decided that Breathing Apparatus, without hose, Pattern 5665, will, in future, be described as Mask, Smoke, Pattern 5665.

2. The relevant publications will be amended.

(The foregoing is the unaltered text of A.F.O. 611/1955)

(4512/50/219)

456.

Replenishment at Sea - Jackstay Transfer of Personnel between Darkened Ships.

Recent experience of night transfers by light jackstay between darkened ships has shown that turns which may be present in the hauling over line are often not detected before the first transfer is made.

2. A number of turns prevents the traveller moving its full scope, and with a man on the traveller this could well be hazardous.

3. When transferring men at night by jackstay between darkened ships, therefore, a dummy run with the traveller is first to be carried out to check that the hauling over line is clear of turns round the jackstay

4. B.R. 1742 will be amended.

(The foregoing is the unaltered text of A.F.O. 617/1955)

(3384/98/4)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY.

457.

Forms - Analysis of Surface Practices - Omission of Information on Form S.1148.

In order to avoid unnecessary work in the completion of analyses of surface firings, information under the following headings may be omitted on Form S.1148. Ships must continue to forward this information under the appropriate headings on Form S.1148A.

Top Group
- Nature of Practice.
- Target.
- Settings Applied to Fire Control Instrument.

Second Group
- Fire Control Equipment Fitted and Methods Used.
- Conditions for the firing.
- Particulars of Gun Charge and Shell.
- Calculation of M.Vs.

Remainder of Form
- Details of Output.
- Rate of Fire.
- Hitting Results.
- Spreads.
- Summary of Errors of Estimation.
- Index Corrections.
- Straddle Correction.
- Error of the Day.
- Analysis of Speed and Inclination.
- Details under " Emergency Procedure ".

Back of Form
- Plan of Run.

2. When calculating the Rates and Hitting results for insertion on Form S.1148A, the formulae shown on Form S.1148 are to be used, unless independent fire was employed under the provisions of C.A.F.O. 94/53, when the calculations should be made in accordance with A.F.O. 3887/53.

(The foregoing is the unaltered text of A.F.O. 748/1955)

(3325/3/278)

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COMMONWEALTH NAVY ORDERS

Navy Office, Melbourne.

28th June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

N.0092

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SECTION 1 - ADMINISTRATIVE AND GENERAL

458.

ACTING SECRETARY, DEPARTMENT OF THE NAVY.

Mr. F.G. Cummins has been appointed Acting Secretary, Department of the Navy, during the absence on a tour of duty abroad of the Secretary.

2. Correspondence should be addressed to the "Acting Secretary" instead of the "Secretary" until further notice.

(3031/13/260)

459.

OCEAN PASSAGE OBSERVATIONS BY THE FLEET.

Navy Order 100 of 1955 is to be amended as follows :-

Paragraph 4 - Delete sub-paragraph (c) and substitute new sub-paragraphs (c) and (d) -

(c) Full instructions for operating the bathythermograph are given in B.R.1891. Used slides together with completed log sheets (Form S.1181d) should be forwarded to Senior Officer, Hydrographic Service.

(d) Gridded charts of Australian waters showing positions of bathythermograph dips obtained by H.M.A. ships during each of the 12 months of the year are kept up-to-date at Hydrographic Office and should be inspected by Commanding Officers of H.M.A. ships prior to undertaking ocean passages in order that future series of bathythermograph observations may be planned to expand the area of ocean already covered by bathythermograph stations.

Add new paragraph 6 -

6. CONCLUSION.

To draw the attention of H.M. Australian Fleet to the greater efforts required in these directions, it is intended to promulgate annually by Navy Order a statement showing, under ship names the number of -

(a) tracings of oceanic soundings obtained;

(b) bathythermograph slides;

(c) magnetic variation observations; and

(d) hydrographic notes (Form H.102);

forwarded by each ship during the year.

(4232/111/5)

SECTION 2 - PERSONNEL

460.

CONDITIONS OF EMPLOYMENT OF RESERVE AND EMERGENCY LIST OFFICERS. FILLING VACANCIES IN PERMANENT NAVAL FORCES ESTABLISHMENT.

Whilst the present shortage of Permanent Naval Force Officers exists the Naval Board has a requirement for the services of officers of the Reserves and the R.A.N. Emergency List.

2. A limited number of these officers may be selected and appointed to serve in a vacancy in the establishment of the Permanent Naval Forces for a period of 4 years, and other Officers may be selected to serve under conditions providing for the termination of their services at 3 months' notice given on either side.

3. Those officers who are selected to serve on 4 year appointments in establishment vacancies of the Permanent Naval Forces are eligible for the credit of Active Pay and allowances at R.A.N. rates and may acquire eligibility for Removal Expenses, Accommodation and Rental Allowances under similar conditions.

4. On discharge on completion of appointment on a 4 years' basis or extension thereof, a gratuity will be payable at either of the following rates; in respect of each completed year of service performed under their appointment :-

(a) £50 a year - if officer agrees, if requested, to remain on the Reserve.

(b) £30 a year - if officer, upon request, does not agree to remain on the Reserve.

This gratuity is not payable to an officer of the Emergency List who is a beneficiary under the D.F.R.B. Act.

5. Officers who are at present serving on 4 year appointments may now apply to the Naval Board through the usual Service channels for their appointments to be extended at the expiration of their existing appointments. The period of extension of appointment will be 2 years.

6. Officers, whose appointments are extended will continue to serve under the conditions now applying regarding pay, allowances and other benefits.

Gratuity will be payable only on discharge at the expiration of combined periods of appointment at the rates shown above. Pro rata payment in respect of completed years and months of service will be made, however, in any case where the officer's appointment is terminated by the Naval Board for reasons other than disciplinary reasons, during the currency of the officer's extended period of service.

7. Officers selected for appointments to serve under conditions prevailing for termination of their services at 3 months' notice given on either side will be eligible for the credit of R.A.N. rates of pay and allowances during the period of appointment, but will be ineligible for the Gratuity, and having regard to the terms of appointment would in most circumstances be ineligible for Removal Expenses and Accommodation and Rental allowances applicable to 4 years' appointees.

(4002/121/38)

461.

EDUCATIONAL TESTS - E.T.2 - ABOLITION.

The Educational Test 2 has been abolished in the Royal Australian Navy. As from 1st April, 1955, alternative educational qualifications replace E.T.2 for the purposes indicated in the following paragraphs.

2. All ratings who pass one subject of the Higher Educational Test within two years from date of entry will be awarded two months' "time gained" for advancement to the Able Rate. For this purpose the date of passing will be taken to be the date on which the H.E.T. examination was held. A.B.R.10, "R.A.N. Advancement Instructions", will be amended in due course.

3. Ratings who have passed paper V or Va, Mathematics, and paper VIII, English Expression, in the Higher Educational Test, but who are not fully qualified educationally to proceed to Upper Yardmen Courses, may appear before a Fleet Selection Board if qualified in other respects and recommended by their Captains. Such candidates, if recommended by the Fleet Selection Board, will be required to obtain the full educational qualifications prescribed for their branch in current instructions before proceeding to Upper Yardmen Courses.

4. The syllabus of instruction for junior ratings at sea is unaffected by the abolition of the E.T.2 examination.

5. Navy Order 79 of 1952 and Navycirc 218 Item of 12th April, 1955, are hereby cancelled.

(4017/7/154)

462.

FLAG OFFICERS AND COMMODORES FIRST CLASS - ISSUE OF CEREMONIAL SWORDS AND SWORD BELTS.

On promotion to Commodore, First Class, or to Flag Rank an officer will be issued gratuitously with the following items of distinctive pattern appropriate to his rank :-

1-No. sword
1-No. scabbard
1-No. belt, sword, undress.

2. In exchange therefor, he will be required to surrender the corresponding items already in his possession.

3. Should an officer to whom these items have been issued be subsequently reverted in rank they are to be withdrawn and replaced by items appropriate to the lower rank.

4. Interim Pay Instructions 170/2 will be amplified accordingly.

(4716/51/2)

463.

ROYAL AUSTRALIAN NAVAL SKI CLUB.

With reference to Navy Order 50 of 1953, a general meeting of the Royal Australian Naval Ski Club was held in Melbourne in March, 1955, and the following office bearers for the current year were selected :-

Chairman	- Commander (E) G. Hood
Secretary	- Leading Wran P. Collins
Treasurer	- Commander J.P. Stevenson
Committee Members	- Mr. P.B. Cooper
	Mr. T.E. Kilburn
	Mr. C.S. McLaren
	Lieutenant-Commander D. Nicholls

Local Liaison Members

Sydney	- Wran M.F. Stainfield
Melbourne	- Leading Wran P. Collins
Flinders Naval Depot	- Lieutenant-Commander D.L.H. Dyke
Kure	- Lieutenant (E) P.T. Edwards.

2. The Club has been active throughout the past year with the emphasis being placed on efforts to raise sufficient money to commence building a ski hut at Mount Buller. Some £500 has still to be raised but it is hoped building may commence late in the year.

3. The Kure Branch has been very active and they have had a full season on the snow.

4. A good liaison has been established with the Royal Naval Ski and Mountaineering Club in England.

5. Present membership stands at 57, being made up of 25 officers, 20 ratings, 8 W.R.A.N.S. and 4 civilians (ex Navy).

(3473/21/56)

464.

RATINGS - WEARING OF PLAIN CLOTHES.

Navy Order 203 of 1955 is to be amended as follows :-

Paragraph 5 - For "eyes lift" read "eyes left".

(4716/1/198)

465.

UNIFORMS - PLASTIC RAINCOATS - WEAR BY NAVAL PERSONNEL.

Naval personnel in uniform may wear plastic raincoats made of semi-transparent, unbacked film.

2. It is not intended that stocks of this item will be maintained in Victualling Yards at this juncture, but it is nevertheless regarded as important that there should be no marked lack of uniformity in the coats worn, particularly as regards colour. For this purpose the only acceptable colours are dark grey and black.

(4532/94/29)

SECTION 3 - HULL, MACHINERY, EQUIPMENT AND STORES

466.

RADIO - POWER SUPPLIES - PATTERN W891R MOTOR GENERATOR - REPLACEMENT.

The above generator is fitted in Power Supply Outfits DTC, DXA/F, DXE and with Radar, Types 281, 279/B. It was introduced as a war time emergency measure as an alternative for A.P. W891 Motor Generator. Consequent on reports from sea it has been found that this machine suffers from poor regulation when operated on heavy loads at a power factor better than 0.7 lagging.

2. Where difficulty is experienced with the voltage regulation of A.P. W891R Motor Alternator fitted in H.M.A. ships and establishments, the load power factor should be investigated. If this is found to be appreciably better than the rated power factor of the machine of 0.7 lagging and it is considered that this power factor remains sensibly constant, the Pattern W891R Motor Generator should be returned to the nearest (Superintending) Naval Store Officer and an A.P. W891/A Motor Generator should be demanded in lieu quoting this Order as Authority. The A.P. W891R Motor Alternators should be disposed of in accordance with current procedure.

(The foregoing is the text of A.F.O. 331/1955 altered to meet R.A.N. conditions.)

(4519/11/982)

467.

AMMUNITION - PROPELLANT - LANDING - DESTRUCTION - REPORTS.

Propellant of the following lots and sub-lots is due for withdrawal from service and any cartridges containing these lots or sub-lots 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 specially to Navy Office for instructions.

Propellant Lot or Sub-lot No.	Propellant Nature and Size	Nature of gun ammunition which may be involved
RNC 264	SC 140	B.L. 6-in.; Impulse torpedo.
RNC 898 RNC 899 RNC 1425XD RNC 1437XD	HSC/T 124-058 HSC/T 124-058 HSC/T 124-058 HSC/T 124-058	Q.F. 12-pdr.; Q.F. 3-pdr.; Q.F. 2-pdr.
RNC 2148XR	SC 109	
RNC 2148XR	SC 109	Q.F. 4.7-in. (S.L.).
RNC 2149XR RNC 2395XS	SC 103 SC 103	B.L. 6-in.; Q.F. 4.5-in.; Q.F. 4-in.
RNC 2926XA	NF 059	Q.F. 4.7-in. (S.L.); Q.F. 4.5-in.; Q.F. 4-in.; Q.F. 12-pdr.
RNC 3655XC RNC 4002XD	NF/S 164-048 NF/S 164-048	B.L. 6-in.; Q.F. 4.7-in.; Q.F. 4-in.
WA 13721	NA 029	Q.F. 4-in.
WA 13876XA	NA 042	Q.F. 4-in.

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

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

(The foregoing is the text of A.F.O. 834/1955 altered to meet R.A.N. conditions.)

(4433/51/228)

468.

GUN MOUNTINGS - 40-MM. BOFORS, MARK 9 AND 9* - TRAINING BUFFER BRACKET - RE-DESIGN - MODIFICATION NO. 6.

(a) *Ships, Establishments and Authorities concerned*	Ships and Shore establishments in which these mountings are held.
(b) *Types and Marks of Gun Mounting*	40-mm. Bofors, Mark 9 and 9*.
(c) *Parts of Gun Mounting affected*	Training Buffer Bracket.
(d) *Purpose of modification*	To ensure that the mounting is fitted with a training buffer bracket capable of withstanding the full training inertia.
(e) *Nature of modification*	To replace the buffer bracket at present fitted with one of more robust design. Before fitting the new bracket it will be necessary to increase the size of the 4 in number existing holes tapped 0.375-in. diameter B.S.F. 0.8-in. deep by holes tapped 0.50-in. diameter B.S.F. 0.8-in. deep, in the training base plate.

(f) *Drawing or Navy Order Diagram*	Nil.
(g) *By whom to be done*	Ships' staff.
(h) *When to be done*	As and when necessary to replace a bracket damaged in service.

NOTE:- For mountings in service it is not intended to fit the redesigned bracket retrospectively. Supplies will only be issued on a replacement basis.

(The foregoing is the text of A.F.O. 917/1955 altered to meet R.A.N. conditions.)

(4429/41/183)

469.

NAVAL STORES (GENERAL) (CLASS F, GROUP 2 (PARTS a AND c), 1 (PARTS 1 a/i, a/ii), 3 (PARTS a AND b), 5, 6 AND 7, (PARTS a AND b)) - CARBON BRUSHES - REDUCTION OF THE NUMBER OF PATTERNS IN THE RATE BOOK AND AUTHORISED LIST OF NAVAL STORES.

It has been decided to reduce the number of different patterns of Carbon Brushes of which stocks are at present held. The patterns detailed in Appendix A to this Order are obsolescent and will be deleted from the Rate Book and Authorised List of Naval Stores.

2. No further purchases will be made of these items. They should, however, continue to be demanded, but demands should indicate an alternative pattern which will be acceptable in lieu when stocks have been exhausted.

3. As indicated in paragraph 1, this action is being taken to reduce the number of different patterns of Carbon Brushes in use and thus simplify storekeeping and store accounting. Future requirements of the patterns made obsolescent are not to be obtained by local purchase when stocks are exhausted, except in very exceptional circumstances which should be reported to Navy Office accompanied by full reasons for the necessity for supply together with an estimate of the future scale and duration of requirements.

4. All Carbon Brushes will, in future, be accounted for under Class F, Group 2A, Part 1, and the patterns detailed in Appendix B should be transferred from the Classes and Groups indicated, quoting this Order as the Authority. The date of transfer should be taken as the date of this Order.

5. Patterns M493 and 53054, referred to in Appendix B, will be marked X.

6. The Rate Book and Authorised List of Naval Stores and the Alphabetical List of Consumable Naval Stores will be amended.

(The foregoing is the text of A.F.O. 767/1955 altered to meet R.A.N. conditions.)

(4518/1/925)

APPENDIX A

Pattern	Description	Alternative Pattern
	Class F, Group 2A/1	
	Brushes, carbon :—	
352	⅝-in. × 5/16-in. × 1½-in., quality C.4, circular top ..	—
791	½-in. × 3/16-in. × 1½-in., quality 2	—
1328	⅝-in. × 3/16-in. × 1½-in., link C.4	6801
1328B	⅝-in. × 3/16-in. × 1½-in., link C.4	14049
1573	3/16-in. × 7/16-in. × 1-in., quality H.M.5	—
1681	Copperplated for Siemens 6 pole dynamos, quality A	—
1772	1½-in. × 1½-in. × ⅝-in., Battersea link A generator ..	—
4762	1 3/16-in. × ½-in. × 1½-in., quality EG	—
8686A	Link B6 for motors, Patterns 4375, 4376 and 4376A ..	—
8908	3/16-in. × 3/16-in. × ⅝-in., link A, for motor, Pattern 8907	—
9666	for switch transmitter, Pattern 9522	—
9725	Link C.M.9	—
9870	for clutch brake	—
14020	5/16-in. × ⅝-in. × ⅝-in., quality C.M.	—
14039	1½-in. × 1½-in. × ⅝-in., quality C.M.3H, marked A.P.B.X.	—
14146	1½-in. × ½-in. × ½-in., grade E.G.3, with spring ..	—
14147	11/16-in. × ½-in. × ⅝-in., with pigtail and spring grade C.M.3H.	—
14148	11/16-in. × ½-in. × ½-in., link B.O., with pigtail spring and terminal.	—
14173	3/16-in. × ⅝-in., H.M.8, for use with motor for boiler cleaning apparatus.	—
14179	Brush and link, C.M.2., without hole	—
14181	½-in. × ⅝-in. × 1-in., Type 80	—
14183	½-in. × ½-in. × 13/16-in., link EG, with pigtail	—
	Class F, Group 2C, Part 2	
	Brushes, carbon :—	
26604	1½-in. × ½-in., generator dynamo	14034
26606	1½-in. × ½-in., exciter	14034
20781	For 108 kW. generators (English Electric Co.) ..	14023
20780	For 54 kW. generator (English Electric Co.)	14023
20786	For 54 kW. generator (General Electric Co.)	14034
20792	For 54 kW. generator (Electric Construction Co.) ..	14033
	Class F, Group 1A/1	
	Brushes, carbon :—	
W.7539	Silver Carbon, 3/16-in. × 5/16-in. × 1½-in., with pigtail 2-in. long (85 per cent. silver).	—
W.8048	(Set of 2), ½-in. × ⅝-in. × 1-in., with pigtail 2-in. long	—
54272	Brush assembly	—
55519/A	Grade S.M.25, 0·187-in. diam., with spring, 1 5/16-in. long overall.	—
58571	(Set of 2) (Marconi ref. W.18754, ref. 6)	14113
M.489	L.T. for Pattern M.453 supply unit	—
M.490	With spring for H.T., for Patterns M.453 and M.454A supply units.	—
Z.A.30209	Dynamo for motor No. 40	—
Z.A.30210	Dynamo for motor No. 41	—
Z.C.2881	No. 1	—
Z.C.2880	No. 2	—
45	Brush arms for switch, Pattern 8350	—
7301	Brush arms with laminated brush, spare for switch, Pattern 7299.	—
54653	Brush holders for brush, ⅝-in. × 3½-in. × ½-in. ..	—
100185	Brush holder, ⅝-in. × 5/16-in. (Morgan miniature tropical)	—
54654	Spring, right hand	—
54655	Spring, left hand	—
	Class F, Group 1A/2	
	Brushes, carbon :—	
A.995	For converter, L.T. end	A3928
A.996	For converter, H.T. end	A3929
A.1778	⅝-in. × ⅝-in. × 1½-in.	—
A.1779	⅝-in. × ⅝-in. × 1½-in.	—
A.1780	⅝-in. × 5/16-in. × ⅝-in.	—
A.1855	⅝-in. × ⅝-in. × 1½-in.	—
A.2239	½-in. × ⅝-in. × 5/16-in., grade C.M.6	—
A.2240	1½-in. × ½-in. × ⅝-in., grade link E.C.5937	—
A.2241	1½-in. × ½-in. × ⅝-in., grade O.M.9	—
	Class F, Group 2C, Part 1	
16823	Brushes, carbon, for controlled mining	—

APPENDIX A—*contd.*

Pattern	Description	Alternative Pattern
	Class F, Group 3B	
	Brushes, carbon :—	
1923	5/16-in. × ½-in. × 1½-in., grade A	—
1924	5/16-in. × ½-in. × 1½-in., grade H.M.6	—
8117	L.T. for rotary converter, Pattern 8116	8155
8118	H.T. for rotary converter, Pattern 8116	8156
2020	Bronze graphite, for speed governor, Pattern 2019 ..	59214
2977	Spring, tensioning, for brush, Pattern 2020	59214
7354	½-in. × ⅝-in. × 1½-in., grade H.M.6	6800
	Class F, Group 5	
		Air Ministry Ref. No.
	Brushes, carbon :—	
5728	Grade 5, for drums, film drying, RAF. 14B/521.	5P/1021 —
5729	Grade E.C.3860, for drums, film drying, RAF. 14B/521.	5P/1020 —
5730	Grade E.C.5937, for drums, film drying, RAF. 14B/521.	5P/1019 —
	Class F, Group 6A	
	Brushes, carbon :—	
7544	(Set of 2), for motor, Pattern 7533	—
2710D	With springs	—
8410	Complete with springs	—
	Class F, Group 7A	
23008	Brushes, carbon, creed M.B. 3001/E.G.5937	—

APPENDIX B

Pattern	Description	Category
	F1A/1	
	Brushes, carbon :—	
M.493	L.T., grade H.M.6, for Pattern M.454A supply unit ..	X
W.1481	Spare for transformer, Pattern W.1360 (in sets) ..	—
W.2313	Spare for transformer, Pattern W.2312	—
W.2629	·87-in. × ·25-in. × ·75-in., grade C.M.6, with insulated flexible lead and terminal.	—
W.4012	Spare for motor, electric, 220V, 11/16-in. × 5/16-in. square (in sets).	—
W.5791	Spare for transformers, Patterns W.4085 and W.2864	—
W.6635	½-in. × ½-in. × ½-in., C.M.6, with pigtail connections and spring, grade C.M.6.	—
W.6762	3/16-in. × 3/16-in. × ⅝-in., with spring, grade B.6222 ..	—
W.7162	20-mm. × 6-mm. × 6-mm., with spring	—
W.7415	13/16-in. × 13/16-in. square, with pigtail	—
W.7539	3/16-in. × 5/16-in. × 1½-in., with pigtail	—
W.8058	½-in. × ½-in. × 5/16-in., with pigtail connection and spring, grade C.M.15.	—
W.8852	½-in. × ½-in. × ½-in., with pigtail and spring, grade H.M.6.	—
W.9815	½-in. × ½-in. × 1½-in., grade 7M (Morgan grade E.G.8101).	—
53054	0·218-in. × 0·156-in. × 5/16-in., with pigtail and spring, grade C.M.3H.	X
54651	3/16-in. × 0·4-in. × 5/16-in., grade C.M.2	—
54652	⅝-in. × ⅝-in. × ½-in., grade C.M.2	—
54691	3/16-in. × 3/16-in. × 41-mm., with pigtail and spring, 5/16-in. diam. × 1½-in. long.	—
54751	⅝-in. × 11/16-in. × 11/16-in., with spring, grade C.M.6 ..	—
55520/A	0·11-in. diam. × 5/16-in. long, with spring, grade J.S. ..	—
55926	3/16-in. × 3/16-in. × 1½-in., with pigtail and spring, grade C.M.6.	—
56149	3/16-in. × 3/16-in., with pigtail and spring, grade E.G.12	—
56462	Creed part No. M.B.2003 (set of 2)	—
57623	3/16-in. × 3/16-in. × ½-in., with spigot and spring grade N.1.	—
58273	0·186-in. × 0·186-in. × 0·375-in., grade C.M.H., with pigtail connection.	—
58982	½-in. × 5/16-in., with spring link, 6M6	—

APPENDIX B—*contd.*

Pattern	Description	Category
	F1A/1—contd.	
	Brushes, carbon :—	
39457	For transformer, Pattern 37703 (box of 10)	—
65265	½-in. × ½-in. × 1½-in., with flexible lead and terminal tag, link E.G.8101.	—
65563	11/16-in. × 5/16-in. × 5/16-in., with grade E.G.12	—
65804A	½-in. × ½-in. × ½-in., with spring and link, I.M.6	—
65805	11/16-in. × ¼-in. × ⅜-in., with pigtail spring and terminal tag, C.M.3H.	—
66064	11/16-in. × ½-in. × ½-in., with pigtail and terminal tag, grade E.G.12.	—
66082	1 1/16-in. × ⅝-in. × 3/16-in., with pigtail and terminal tag, grade E.M.6.	—
66090	½-in. × ½-in. × ½-in., with spring, grade C.M.1S	—
66112	1½-in. × 5/16-in. × ½-in., with pigtail spring and terminal tag, C.M.3H.	—
66113	1¼-in. × 5/16-in. × 5/16-in., O.L. 1·58, with pigtail spring, grade I.M.7.	—
66114	1½-in. × 5/16-in. × 5/16-in., O.L. 2·08, with pigtail spring and terminal tag, I.M.7.	—
100028	Silver graphite (Morgan crucible), S.E.6	—
100029	(Crompton Parkinson, K.P.3991)	—
100030	(Creed 1360/41B)	—
100031	(Croydon Engineering 20427)	—
100186	(Morgan Crucible, H.M.6)	—
100269	(Crompton Parkinson, K.P.4446)	—
	F1A/2	
	Brushes, carbon :—	
A.755	½-in. × ½-in. × 5/16-in., with spring	—
A.756	1-in. × ½-in. × 3/16-in., with spring	—
A.904B	5/16-in. × 5/16-in. × ½-in.	—
A.1098	11/16-in. square × 5/16-in., with spring, grade link, C.M.4	—
A.1126	0·185-in. diam. × 5/16-in., with spring	—
A.1128	5/16-in. square × ½-in., with spring, grade I.M.5	—
A.1718	0·15 × 0·2 × 0·69, grade O.M.5H	—
A.1723	½-in. × 5/16-in. × 1-in., with spring	—
A.1724	38-mm. × 10-mm. × 38-mm., grade E.G.11	—
A.1856	½-in. × 1½-in. × 1½-in., grade link A	—
A.1968	½-in. square × 3/16-in., grade link C.M.	—
2173	½-in. × ½-in. × ½-in.	—
A.2287	Morganite, 11/16-in. × 5/16-in. × ½-in.	—
A.2288	Morganite, 1 5/16-in. × 5/16-in. × 5/16-in.	—
A.2339	⅝-in. × ⅝-in. × ⅝-in., grade E.G.3	—
A.2340	⅝-in. × ⅝-in. × ⅝-in., grade C.2T	—
2537	1-in. × 5/16-in. × 5/16-in.	—
A.2692	½-in. × ½-in. × ½-in., with spring, grade link A	—
A.2937	½-in. square × ½-in., with spring, grade link H.M.6	—
A.2939	5/16-in. square × ½-in., with spring, grade link C.M.1S	—
3117	5/16-in. × ½-in. square	—
A.3227	1½-in. × ½-in. × 1½-in., grade E.G.11	—
3254/B	0·111 diam. × 5/16-in., with spring, 32 S.W.G.	—
A.3928	With spring, L.T., ½-in. × ½-in. × ½-in., grade C.M.5H, copper, flexible, 1½-in. long.	—
A.3929	With spring, H.T., 5/16-in. × 0·156-in. × 0·218-in., grade I.M.6.	—
7983A/B	0·111 diam. × 5/16-in., grade C.M.5H	—
9959	½-in. × ½-in. square, with spring	—
A.3243	·31 × ·25 × ·87, long	—
	F.1B	
	Brushes, carbon :—	
12836	For transmitter, Pattern 12828	—
	F.2A/2	
	Brushes, carbon :—	
15060	For table fan, Pattern 15042 (in sets of 2)	X
15232	For table fan, Pattern 15229 (in sets of 2)	—
	F.3A	
	Brushes, carbon :—	
2148	For Pitometer Log	—
2259	For follow-up motor	—

APPENDIX B—*contd.*

Pattern	Description	Category
	F.3B	
	Brushes, carbon :—	
225	Silver morganite, tipped	—
226	Silver morganite, tipped for motor, Pattern 2744	—
1416	For motors, Patterns 2722 and 2722V	—
3503	Silver morganite, contact roller gyro transmitter	—
3729	For PM/g—G.250B	—
4552	Silver morganite, erection control, for A.G.T.U., Pattern 6200.	—
8061	L.T. for generator, Pattern 8057	—
8062	H.T. for generator, Pattern 8057	—
8155	½-in. × 5/16-in. × 5/16-in., with 1-in. pigtail and eyelet, grade C.M.6-HAM.	—
8156	½-in. × ½-in. × 11/16-in., grade M.C.6-HAM	—
5132	Generator end, 5/16-in. × ½-in., grade E.G.6345, for voltage regulator, Pattern 5304.	—
5232	Generator end, 5/16-in. × ½-in., grade E.G.6345, for motor generator, Pattern 1919A and dynamotors, Patterns 5200 and 5201.	—
5332	Motor end, 5/16-in. × ½-in., grade E.G.6434, for motor generator, Patterns 5304, 5100 and 5101 and dynamotor, Patterns 5200 and 5201.	—
	F.6A	
	Brushes, carbon :—	
2714	For driving motor	—
7558	For blower motor (in pairs)	—
7676	For motor (in pairs)	—
7756	For governors	—
	F.7B	
	Brushes, carbon :—	
27240	Creed AB.1/2	—
27683	Creed 1360/41B	—
27684	Brush and brushholder, Creed 1360/42B	—
27685	Creed AA/3/1	—
27702	And spring, Creed AA/1/1	—
23451	Commutator	—

470.

TABLE FANS AND LAMP FITTINGS - ACCOUNTING FOR AS FURNITURE AND FURNISHINGS - H.M.A. SHIPS.

It has been decided that, as from the date of this Order, table fans and standard lamp fittings (e.g. Pattern 9009) are to be regarded as furniture and furnishings for the purpose of accounting and distribution in H.M.A. Ships. They will become the responsibility of the Executive Officer and are to be dealt with in accordance with the instructions contained in Navy Order 86 of 1950.

2. The Appendix to Navy Order 86 of 1950 is to be amended by the addition of the following :-

Class and Group	Description
F.2A	Table Fans
F.2B	Lamp Fittings.

(The foregoing is the text of A.F.O. 3188/1954 altered to meet R.A.N. conditions.)

(4518/1/870)

SECTION 5 - BOOKS, CORRESPONDENCE, FORMS, STATIONERY

471.

FORMS - TRADE CERTIFICATES FOR RATINGS OF THE SUPPLY AND SECRETARIAT BRANCH.

The following Trade Certificates for use in the Supply and Secretariat Branch have been introduced :-

A.S.1247	Cook (S)
A.S.1247A	Cook (O)
A.S.1247B	Stores (S)
A.S.1247C	Stores (V)
A.S.1247E	Stewards.

2. These Certificates are to be completed in lieu of the existing Trade Certificates on the back of the current History Sheets and are to be demanded from the (Superintending) Naval and Air Store Officer, Sydney, as necessary by ships and establishments to meet the requirements for ratings borne in the various categories. These forms are to be inserted in each rating's documents. In future, insertion of forms is to be effected at H.M.A.S. CERBERUS at the Recruit stage.

3. The preparation of these Trade Certificates is to be in accordance with Q.R. and A.I., Article 1061.

(3526/12/1282)

SECTION 7 - CANCELLED LIST

472.

CANCELLATION OF NAVY ORDERS.

Confidential Navy Order 33 of 1951, and Navy Orders 67 of 1949, 177 of 1950, 32 of 1951, 22 of 1952, and 412 of 1953, having been sufficiently promulgated or no longer applicable, are hereby cancelled.

(3712/120/8)

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RESTRICTED

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.
29th June, 1955.

The following 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,
and Commanding Officers of H.M.A. Ships,
Officers in Charge of H.M.A. Naval
Establishments, and others concerned.

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N.0091

473.

Books - Distribution of Non-accountable Publications and Amendments during April, 1955.

The undermentioned non-accountable publications and amendments to A.P's, B.R's, have been distributed to Ships and Services during April, 1955. Navy Order 110 of 1954 is relevant.

(4139/3/102)

MAGAZINES, PAMPHLETS, ETC.

Title.	Date.
Aircraft, Volume 33 No. 6.	March, 1955.
Aircraft, Volume 33 No. 7.	April, 1955.
Fibres, Natural and Synthetic, Volume 16 No. 1.	January, 1955.

AMENDMENTS TO AIR PUBLICATIONS.

A.P. No.	A.L. or Leaflet.
113.	A.L.99.
1086 Book 2 (2nd Edition).	A.L.45 and 46.
1086 Book 3 Pt. 2 (2nd Edition).	A.L.37, 38, 39, 40, 41 and 42.
1086 Book 4 Pt. 1 (2nd Edition).	A.L.55, 56 and 57.
1086 Book 5 (2nd Edition).	A.L.36 and 37.
1086 Book 8 (2nd Edition).	A.L.27 and 28.
1086 Book 11 (2nd Edition).	A.L.63 and 64.
1086 Book 15 (2nd Edition).	A.L.61, 62, 63, 64, 65 and 66.
1095B, Volume 2 Pt. 3.	A.L.24.
1181, Volume 6 Pt. 3.	A.L.4.
1182A, Volume 1.	A.L.109, 110, 111, 112, 113, 114, 115 and 116.
1182E, Volume 2 Pt. 1.	(A.L.28) - B.4.
1186, Volume 2 Pt. 1.	F.3.
1275A, Volume 2 Pt. 1.	(A.L.223) - B.18, (A.L.227) - J.28 (Alt. 2), (A.L.224) - L.6, (A.L.225) - L.7, and (A.L.226) - L.9.
1275B, Volume 2 Pt. 1.	(A.L.138) - A.27 (Alt. 1), (A.L.137) - C.42, (A.L.136) - C.43 and (A.L.135) - Z.7 (Alt. 1).
1275E, Volume 1.	A.L.53.
1275E, Volume 2 Pt. 1.	(A.L.105) - D.24, (A.L.107) - D.26, (A.L.104) - E.1 and (A.L.106) - H.25.
1275G, Volume 2 Pt. 1.	(A.L.39) - B.1 (Alt. 1), (A.L.57) - C.2 and (A.L.56) - E.7.
1275T, Volume 1.	A.L.9.
1355, Volume 2 Pt. 1.	(A.L.81) - D.120, (A.L.79) - G.124 (Alt. 1) and (A.L.80) - G.125.
1355C, Volume 1.	A.L.41 and 42.
1374A, Volume 2 Pt. 1.	(A.L.16) - A.2 (canc.).
1374B, Volume 2 Pt. 1.	(A.L.50) - Z.13.
1374C, Volume 2 Pt. 1.	(A.L.46) - Z.12.

1374E, Volume 2 Pt. 1.	(A.L.14) - Z.8.
1374G, Volume 1.	A.L.24.
1455, Volume 1.	A.L.223, 224, 225, 227, 230, 231, 232, 233, 234, 235 and 236.
1492A, Volume 2.	(A.L.29) - D.17.
1500, Volume 2 Pt. 1.	M.8.
1538D, Volume 1 and 6 Pt. 1.	A.I.L.3/54.
1538D, Volume 2 Pt. 1.	No. 200, 202, 203 and 204.
1641F, Volume 2 Pt. 1.	M.20, C.12 - (A.L.1), Z.1 - (A.L.3) and Z.2 - (A.L.2).
1641H, Volume 2 Pt. 1.	E.1.
1641S, Volume 1 Pts 1 and 3.	A.L.11.
1661, Volume 2 Pt. 1.	B.12.
1661C, Volume 1 (2nd Edition).	A.L.49.
1664A, Volume 2 Pt. 1.	A.41, D.8 and E.3.
1803, Volume 2 Pt. 1.	B.27, D.64, D.65, D.70, F.46, F.48, F.49, P.3, S.4, S.5 and Z.26 (A.L.2).
1803A, Volume 1.	A.L.40 and 41.
1803C, Volume 2 Pt. 2.	A.L.26 and 27.
1803C, Volume 2 Pt. 3.	A.L.39 and 40.
1803E, Volume 1.	A.L.67 and 68.
1803R, Volume 6.	A.L.30.
1803T, Volume 1.	A.L.14.
2102F, Volume 2 Pt. 1.	C.24, C.24 (A.L.1), F.15 - (A.L.1), K.19, Q.15 - (A.L.1) and Q.17.
2102H, Volume 1.	A.L.38.
2102H, Volume 2 Pt. 1.	C.15, C.15 (A.L.1), F.8 (A.L.2), K.12, Q.13.
2240A, Volume 2 Pt. 1.	No. 55.
2240A, Volume 6 Pt. 2.	A.L.55.
2276F, Volume 1.	A.L.42.
2337, Volume 1.	A.L.109.
2337, Volume 2.	(A.L.53) - B.8, (A.L.54) - C.15 and (A.L.55) - Z.2 (Alt. 2).
2337, Volume 6.	A.L.22.
2463, Volume 1.	A.L.87.
2528H, Volume 2 Pt. 1.	No. 8.
2533C, Volume 2 Pt. 1.	No. 3 (A.L.2 incorp.).
2538H, Volume 2 Pt. 1.	No. 21 and No. 22.
2538HA, Volume 2.	(A.L.27) - B.17, A.L.2, (A.L.28) - B.21 and (A.L.29) - B.22.
2538HA, Volume 2 Pt. 1.	(A.L.30) - B.23 and (A.L.31) - B.24.
2544P, Volume 2 Pt. 1.	No. 54 and No. 55.
2550B, Volume 2 Pt. 1.	No. 18.
3275A.	A.L.4.
4018B, Volume 2 Pt. 1.	B.21 - (A.L.1 incorp.).
4099J, Volume 2.	(A.L.113) - J.9 (Alt. 1).
4099J, Volume 2 Pt. 1.	(A.L.114) - D.5.
4117A, Volume 2 Pt. 1.	B.1, C.1, C.2 and Z.2 (A.L.1 incorp.).
4121C, Volume 2 Pt. 1.	(A.L.57) - Z.2.
4146, Volume 2 Pt. 3.	A.L.72.
4146B, Volume 1.	A.L.60.
4167B, C, D, Volume 1 Pts. 1, 2 and 3.	A.I.L. 1/54.
4167B, C, D, Volume 6 Pt. 1.	A.L.5.
4208T, Volume 1.	A.L.17 and 18.
4282B, Volume 1.	A.L.9.
4293A and B, Volume 1.	A.L.39 and 40.

4300A, Volume 2.	C.4 and Z.2.
4300A, Volume 6 Pt. 1.	A.I.L. 2/54.
4300C, Volume 6 Pt. 1.	A.L.19.
4301A, Volume 2.	G.1 and J.10.
4301A, Volume 2 Pt. 1.	J.21 and V.1.
4303B, Volume 2.	(A.L.5) - B.1 and (A.L.6) - Z.2 (Alt. 2).
4320A, Volume 1.	A.L.43, 44, 45.
4320B, Volume 2.	(A.L.31) - F.3, (A.L.25) - G.6, (A.L.27) - G.7, (A.L.29) - G.8, (A.L.30) - M.1, (A.L.26) - M.2 and (A.L.28) - Z.2.
4340, Volume 2.	(A.L.4) - B.1.
4343A, Volume 1.	A.L.23.
4343G, Volume 1.	A.L.21.
4361, Volume 6.	A.L.7.
4343S, Volume 1.	A.L.18 and 19.
4389A, Volume 6 Pt. 1.	A.L.12.
4487A, G, H, Notes	A.L.2 and 3.
4487A, Volume 5 Pt. 2 (N).	A.L.2.
A.P.(N) 377.	A.L.73.
A.P.(N) 377 Pi.	A.L.62.
A.P.(N) 378.	A.L.73.
A.P.(N) 383.	A.L.78.
A.P.(N) 1024.	A.I.L. No. 1 with Marker leaf to December, 1954.
A.P. (RAN) 7 - P.N.	A.L.3.
N.A.M.O. Engines.	A.L.16 (2 leaves) dated 7.2.55, M.2 Issue 13, dated 4.2.55, M.10 Issue 4 dated 31/1/55, STI/Python/7 dated 31/1/55 SI/Centaurus/6 dated 31/1/55, E/AS/6 dated 29/1/55, E/DeH/8 Issue 4, dated 24/1/55, X.37 dated 24/1/55, STI/Nene/5A dated 19/1/55, and SI/Nene/3A dated 1/1/55.
N.A.M.O. Firefly.	X.38 Issue 2 dated 24/1/55, STI/116A dated 24/1/55, STI/121 dated 26/1/55, STI/121 Diagram, STI/122 dated 24/1/55, SI/RAN/12 February, 1955, SI/RAN/13 February, 1955, STI/RAN/17 March, 1955, RANAMO/X.4 March, 1955, A.L.12 (two leaves) dated 13/1/55, A.12 Issue 2 dated 13/1/55, X.1 Issue 3 dated 12/1/55, STI/73 Issue 2 dated 13/1/55, STI/118 dated 19/1/55, STI/120 dated 3/1/55, STI/120 Figs. 1 and 2 Diagram STI/Power Plant/Index dated 13/1/55, SI/17 Issue 2 dated 13/1/55, SI/18 Issue 2 dated 13/1/55, SI/Power Plant/1 Issue 2, dated 13/1/55.
N.A.M.O. General.	A.L.30 (2 leaves) 24/1/55, A.L.31 dated 4/2/55, I.65 dated 24/1/55, I.66 dated 29/1/55, R.42 dated 5/2/55, R.43 dated 5/2/55, STI/Electrical/82 dated 7/2/55, STI/Electrical/82 Diagram, STI/Miscellaneous/215 Issue 3 dated 5/2/55,

N.A.M.O. General.	L.65 dated 8/1/55, L.66 dated 8/1/55, W.36 (two leaves) dated 24/12/54, X.63 dated 24/1/55, X.66 dated 10/1/55, X.68 dated 24/1/55, STI/Ejection Seat/11 dated 8/1/55, STI/Electrical/77A dated 18/1/55, STI/Armament/Index (two leaves) dated 30/12/54.
N.A.M.O. Miscellaneous.	Whirlwind/G2 dated 27/1/55, STI/Meteor/75B dated 1/1/55 and SI/Meteor/60 dated 24/1/55.
N.A.M.O. Sea Fury.	STI/77 dated 8/1/55.
N.A.M.O. Sea Venom.	A.L.2 dated 31/1/55, SI/25 dated 31/1/55, SI/26 dated 29/1/55, SI/27 dated 4/2/55 and SI/30 dated 4/2/55.
Air Clues.	December, 1954.
Air Pictorial.	January, 1955.
D.C.A. Airways Operations Instructions, Volume 1.	A.L.22.
A.A.P. No. 2 Group E, Section 22.	Sub. A.L.20 (A.L.6839).
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R.A.A.F. Radio Facility Charts Aust. and N.Z. Area 'D'.	Military Aviation Notice :- Serial No. 13D dated 28/3/55, " " 14D " 4/4/55, " " 15D " 11/4/55 and " " 16D " 18/4/55.

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COMMONWEALTH NAVY ORDER

Navy Office, Melbourne.

30th June, 1955.

The following 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, and Commanding Officers of H.M.A. Ships, Officers in Charge of H.M.A. Naval Establishments, and others concerned.

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N.0093

474.

RAPID SIGHT REDUCTION METHOD.

It has been approved to introduce into the Fleet a new and rapid method of sight reduction for stars and planets entitled the "Rapid Sight Reduction Method", to supplement the standard method which uses Tables of Computed Altitude and Azimuth (H.D.486).

2. By this method a position line may be plotted within one minute of the observation and a fix obtained within two minutes of the last observation. The ability to obtain a fix so quickly is of immense importance operationally, but all concerned are cautioned that the positions obtained are not as accurate as those observed by the Standard Method (see paragraph 23 of Appendix).

3. The Rapid Sight Reduction Method requires the use of "Sight Reduction Tables for Air Navigation", Volume I - Selected Stars - A.P. 3270, Volume I - and the working is greatly facilitated by the use of a stop watch adjusted to read Sidereal Time and a special Rapid Sight Reduction Form - H.494.

4. Arrangements have been made for the supply without demand of the undermentioned items Nos. 99 and 100 and watches, when available from the Hydrographic Office, Sydney, to H.M.A. ships in which a qualified N or ND Officer is borne :-

Item No. 99 - Sight Reduction Tables (A.P. 3270), Volume I - 1 copy.

Item No. 100 - Sight Reduction Form - 20 copies.

Pattern H.S.7 - Sidereal Stop Watch - 1 copy.

The abovementioned items will also be supplied on demand addressed to the Senior Officer, Hydrographic Service, to destroyers, frigates and ocean minesweepers without specialist navigating officers, in which it is desired to use the Rapid Sight Reduction Method.

5. Details of the theory of the Rapid Sight Reduction Method, with a completed example, are given in the Appendix to this Order, but any further information may be obtained from The Captain, H.M.S. DRYAD.

6. Formal instruction in this method will be introduced only into courses for specialist officers at H.M.S. DRYAD. Cadets and Midshipmen will, for the present, continue to be taught the Standard Method only, but may obtain practical experience in the Rapid Method when required to assist the Navigating Officer.

(The foregoing is the text of A.F.O. 882/1955 altered to meet R.A.N. conditions)

(3858/1/8)

APPENDIX

RAPID SIGHT REDUCTION METHOD

Theory

The heavens appear to move past an observer on the Earth in a westerly direction, i.e. heavenly bodies rise in the east and set in the west, at an angular rate of 1° every 4 minutes of sidereal time.

The position of a body in the heavens relative to the observer is given by its Local Hour Angle and Declination which can be obtained from the Abridged Nautical Almanac. For stars, the L.H.A. of First Point of Aries is used ; this is local sidereal time in arc.

2. L.H.A. Aries will increase by 1° for each 4 minutes of elapsed sidereal time, it will also decrease by 1° for every shift of position 1° to the west ; therefore as time increases L.H.A. Aries of X° corresponds to increasing west longitudes. A scale drawn 270° from a position " A " can thus be graduated in time to represent the position at which L.H.A. Aries will be X°.

3. To relate the time of observation to the nearest whole degree of L.H.A. Aries, a sidereal stop watch is started as a whole degree of L.H.A. Aries crosses a " Selected Meridian ", and continues to run throughout the twilight period, each whole 4 minutes representing the next whole degree of L.H.A. Aries.

4. Up to 69 degrees north and south for arguments of whole degrees of L.H.A. Aries and Latitude, A.P. 3270, Volume I tabulates the altitude and true bearing of six selected stars, which when compared with the true altitude of an observation, will give an intercept. For latitudes greater than 69 degrees, north or south, the L.H.A. argument is every two degrees. Data are extracted from these tables so that the computed and observed altitudes can be compared to obtain intercepts in the usual way.

5. The intercept is laid off in the direction of the true bearing of the star (or its reciprocal) from the position on the E/W time axis representing the instant of the sight. The position line is drawn in at right angles to this. Allowance for ship's run is made as described in paragraph 10.

6. With the Standard Method (HD486) the sextant altitude (plus or minus index error) is corrected for Dip and Refraction to give True Altitude, which is compared with the Tabulated Altitude to obtain an intercept. Using the rapid method these corrections are applied, with their signs reversed, to the Tabulated Altitude to give Tabulated Sextant Altitude which is compared with Sextant Altitude to obtain an intercept. Index error in the rapid method is normally applied to the Sextant reading by the observer.

7. As the passage of L.H.A. Aries is measured in Sidereal as opposed to Solar Time, stop watches adjusted to read Sidereal Time should be used. The maximum error in a position line through using an accurate meantime stop watch would be 1.2 miles on the equator and 0.6 miles in latitude 60 degrees north in an easterly direction over a period of half an hour.

General description

8. The L.H.A. Aries for the D.R. or chosen longitude is found for a time shortly before Civil Twilight at which observation of stars and planets (if available) can start, and the time determined at which L.H.A. Aries will be a whole number of degrees. This G.M.T. forms the time basis for all observations. To this G.M.T. apply Deck Watch Error and a two minute correction to centralise the four minute scale. This produces " deck watch time to start watch ". This two minute correction reduces the lengths of the intercepts which would otherwise result if the time of observation was near the western end of the time scale.

9. A plotting sheet is prepared showing the intersection of the D.R. or chosen longitude with the chosen latitude (the nearest whole degree of latitude to the D.R. position). On either side of the centre is plotted thirty minutes of longitude corresponding to the scale of the chosen latitude. The point 30 minutes of longitude to the east is called the Zero point, and from here in a 270° direction is drawn a time scale from 0 to 4 minutes, corresponding to one degree of longitude, hence the D.R. or chosen longitude will always lie on the two minute mark. The advantage of using a chosen longitude (nearest whole degree to the D.R. longitude) is that if plotting on a Mercatorial plotting sheet (or chart) then the longitude scale converted into time can conveniently be used. If using a chosen longitude it is recommended that the D.R. position be inserted as a direct comparison with the observed position.

10. Since all position lines must be related to a common time to obtain a position, they must all be run back to the time of starting the stop watch. This can be done by displacing the time point from the time scale by an amount equal to the run in the reciprocal direction. Rapid measurement of the run can be made by plotting from any convenient position the reciprocal of the course showing time graduations appropriate to ship's speed.

11. The tabulated altitudes and bearings of the six selected stars are extracted from A.P. 3270, Volume I for arguments of chosen latitude and L.H.A. Aries and succeeding values are extracted to cover the period of observation. Planet data are extracted from HD 486. Corrections for Dip and Refraction are applied to the tabulated altitude *with signs reversed* to give tabulated sextant altitude thus allowing the sextant reading (plus or minus index error) to be compared direct with the tabulated sextant altitude to obtain an intercept.

12. The stop watch is started at the time determined and the times of observations are now referred to as Stop Watch Time. As each four-minute period finishes, the next degree of L.H.A. Aries crosses the Zero Point and the time scale starts again from zero on a "fly-back" principle; thus the Zero Point on the time scale represents 0, 4, 8, 12, 16, etc., minutes.

13. As each sight is taken the time is marked on the time scale, the sextant altitude compared with the Tabulated Sextant Altitude *for the corresponding* L.H.A. Aries, an intercept obtained and plotted, ship's run being allowed for as already explained, and the position line drawn. This process is repeated for each body and an observed position obtained.

14. Since A.P. 3270, Volume 1 is designed to cover a number of years a small adjustment* should be made to this position for the Precession and Nutation for the year in question. The correction is given on pages 322–3 as a direction and distance, but for practical purposes may generally be ignored for 1955, and accurate corrections will be made available to marine users by 1956. The adjusted position is the Observed Position.

15. The G.M.T. used as the time basis for all observations as described in paragraph 8 must be related to a tabulated phenomena, e.g. Civil Twilight, in such a way that L.H.A. Aries is a whole degree.

There are many variations in establishing this relation between selected solar time and sidereal time (L.H.A. Aries). The standard method is given as follows :—

(*a*) From the A.N.A. extract L.M.T. Civil Twilight.

(*b*) Choose a suitable interval from C.T. when observations can start—(normally about 10 minutes for first magnitude stars, or, in the evening, 18 minutes for Planet, depending on latitude and season)—and subtract this from the L.M.T. Civil Twilight.

(*c*) Enter A.N.A. with the adjusted time of L.M.T. Civil Twilight and extract the corresponding value of G.H.A. Aries which can be regarded without serious error as L.H.A. Aries. This value is rounded off to the nearest whole degree as the chosen L.H.A. Aries.

(*d*) Apply the chosen or D.R. longitude to the chosen L.H.A. Aries to obtain G.H.A. Aries and extract the equivalent G.M.T. from the A.N.A.

Note.—Use Aries interpolation table for conversion of sidereal to solar time entering with the earlier hour of G.M.T. so that interpolation for minutes and seconds is always additive.

(*e*) Apply the Deck Watch Error to (*d*).

(*f*) If the time in (*e*) is used, the zero of the time scale will be on the chosen or D.R. longitude and large intercepts may occur when the time interval is near the four minute (western) end of the time scale, especially in low latitudes.

To avoid this, two minutes should be subtracted from the time in (*e*), thus putting the chosen or D.R. longitude at the centre of the time scale. This is the "D.W.T. to Start Sidereal Stop Watch". (*See* example.)

16. *Preparing the Star data.*—(*a*) From A.P. 3270 for arguments of chosen latitude and L.H.A. Aries and subsequent whole degrees to cover the period of observation, extract the Tabulated Altitude and True Bearings of the six selected stars.

(*b*) From the Abridged Nautical Almanac evaluate a mean correction for Refraction for each star and combine this with the Correction for Dip to give a Total Altitude Correction. Apply this correction, *with the sign reversed*, to the Tabulated Altitude to give Tabulated Sextant Altitude, which can be compared with Sextant Altitude to obtain an intercept.

(*c*) Enter the Tabulated Sextant Altitude and True bearing of the stars in appropriate columns against L.H.A. Aries and the corresponding Stop Watch time on the sight form.

(*d*) From A.P. 3270, Volume 1, pages 322–3, for arguments of latitude, L.H.A. Aries and year, extract the correction for Precession and Nutation and enter it on the sight form.

17. *Planets.*—If suitably placed, planets can and should be used to supplement the stars given in A.P. 3270 Volume 1, by tabulating their altitudes and azimuth against time in the same way as the pre-computed stars. This can be done by taking out the altitudes and azimuths for integral degrees of L.H.A. Aries by standard methods. This should be done if great accuracy is required and when necessary as a check on the following shorter method. This abbreviated method has been found suitable for the integration of planet and star observations on a single plot, and is explained as follows :—

* This correction applies *only* to the selected six stars in A.P. 3270, Volume 1.

Over the twilight period it can be assumed for all practical purposes that a planet has a constant declination ; a mean value of which can be determined by inspection of A.N.A. A mean value for Δd and Δt can be determined by inspection of HD.486 for the L.H.A. of the planet over the twilight period. Thus by using these mean corrections (which may be biased towards daylight) and the standard corrections for dip and refraction (with signs reversed), a total correction can be applied to the tabulated twilight planet altitudes. In extracting data from HD.486, care must be exercised in interpreting altitudes with increasing or decreasing HA for twilight—this can be determined by inspection for a rising or setting body. This gives a string of altitudes against L.H.A. Planet/Stop Watch Time, thereby giving calculated sextant altitudes in a similar way to the Star Data. Planet altitudes may then be available for direct plotting with Star times. (Any Precession and Nutation correction must be applied to confirmed Star position lines for direct comparison). It has been found that Planets can normally be observed with about 8 to 10 minutes extra daylight to the Stars and the time of starting the watch when Planets are planned in the observations should be adjusted accordingly.

Using the planets in this way may appear rather complex but operational experience has shown that the Planets are a most valuable addition to be combined with the six tabulated Stars—especially in the evening, when the observed position, using one or two Planets and one or two first magnitude stars, has been plotted before twilight, thereby permitting the observed position to be passed out to the force before dark.

18. *Preparing the Planet data.*—(*a*) From the G.M.T. of time to start watch, enter A.N.A. to extract G.H.A. Planet, then apply chosen or D.R. longitude to obtain L.H.A. Planet.

(*b*) Obtain by inspection mean dec. of Planet over twilight period.

(*c*) Enter HD.486 with lat., nearest dec. and L.H.A. to obtain by inspection mean Δd and mean Δt for L.H.A. values over twilight period. Extract corrections for mean Δd and mean Δt.

(*d*) Extract correction for Ht. of eye, and refraction and evaluate total correction for (*c*) and (*d*).

(*e*) With total correction tabulate string of twilight altitudes on sight form against Stop Watch/L.H.A. times.

19. *Preparing the Plotting Sheet.*—(*a*) On a convenient scale, graduate the North-South line.

(*b*) Determine the length of 1° of longitude in the chosen latitude on the time scale. Mark off 30′ of longitude either side on the East–West line. The centre point is the 2 minute mark, the point to the East the zero point and the point to the West the 4 minute mark. Graduate the time scale from 0–4 minutes in convenient intervals of seconds.

(*c*) The above procedure is simplified if a chart or Mercatorial plotting sheet is used.

20. *To use the Plotting Sheet.*—A plotter is generally trained by the ship's navigator as a member of the Rapid Astro team, to plot observations whilst the sight is being shot. In fact team work between an Astro Plotter and Observer is essential to achieve the full potential of this technique, whereby the sight is generated and evaluated for position line stability, abnormal refraction and errors whilst the bodies are being observed.

Procedure.

(*a*) At the calculated D.W.T. start the Stop Watch.

(*b*) Note the Stop Watch time and Sextant Altitude of the observation and enter them on the form.

(*c*) Compare Sextant Altitude with the Tabulated Sextant Altitude to obtain an intercept and interpolate True Bearing for Stop Watch time.

(*d*) From the point on the Time Scale corresponding to the Stop Watch time of the observation, plot the run and intercept and obtain the position line.

Note.—After plotting the initial position line of a star or planet, a second shot is taken which, if it lies within one mile of the previous sight, is reported by the plotter as "checked"—who then cons the navigator on to the next star or planet—thereby generating a pattern of "checked" or "confirmed" position lines.

21. *To plot Bodies (Moon, Planets and Stars) other than those previously selected.*—(*a*) Reduce the sights using HD.486 and the Standard Method to obtain an intercept.

(*b*) Determine the d'long between the selected meridian and the chosen longitude used in (*a*) above and mark the chosen longitude on the E–W time scale.

(*c*) Determine the run from the "Time to start Stop Watch" to the time of observation and apply this to (*b*) above.

(*d*) Plot the intercept and draw in the position line.

22. *Position Line Stability.*—Apart from the speed, the rapid sight reduction technique enables the navigator to achieve a high degree of consistency and reliability in sight evaluation.

Reliability is based on the fact that the direct plotting of a family of position lines enables the observer to achieve better control of the errors inherent in sight taking *whilst the sight is being shot.*

Mistakes or blunders in observation are virtually eliminated by direct comparison of two independent lines of the same body. This consistency is referred to as " position line stability ".

In dealing with random errors especially from a poor horizon, it is well to remember that the evaluation of four lines is twice as accurate as one.

The opening out of confirmed lines of different stars indicates the existence of some constant error such as index error, abnormal refraction or personal error.

23. *Accuracy.*—Operational practice has shown that the Observed Position obtained from the Rapid method of Star Sight Reduction should normally be within two miles of the true position.

24. *Time Factor.*—The approximate time taken to prepare the Plotting Sheet and Sight Form for stars is about 12 minutes; the Plotting Sheet, once prepared, can be used again when the chosen latitude is the same. If this data are prepared by an assistant, the navigator must take care to check the preparation of the time data.

The approximate time from taking the sight to the position line being plotted is about 15 seconds.

The observed position is available as soon as the last sight is plotted, and a preliminary position as soon as the second sight has been plotted.

25. *Very High Latitudes.*—In very high latitudes (above 69° N. or S.) when the time movement is very much less—the time scale fly back can be based on 8 minute intervals (every 2° L.H.A. Aries) and the star/planet data prepared accordingly.

26. *Astraplot.*—A mechanical solution to the Rapid Sight Reduction method is undergoing trial at sea during 1955. A description of the first model appeared in the N.D. Bulletin for December, 1954.

27. *Example.*—(Illustrating a typical pattern of position lines obtained from an analysis of this method over the past few years.)

Evening Sight on May 22nd, 1955.

A ship expects to be in D.R. 10° 13 N. 43° 49 W. at evening twilight.

Course 240—15 knots.

Index Error + 0·8. Ht. of eye 38 ft. D.W.E. 17 secs. fast on G.M.T.

(The plotting of this sight is shown in A.F.O. Diagram 25/55.)

NOTES ON SIGHT EXAMPLE WITH " WRINKLES " ON PREPARATION AND PLOTTING

Preparation

1. Jupiter, a setting planet, has increasing (westerly) HA whilst Saturn is a rising star with decreasing (easterly) HA. Care has to be taken in interpolating planet data in HD.486 to note this.

2. It will be noted that for the preparation of the star data the latitude only need be known—so that, if patrolling or on passage in a certain latitude, the data may be prepared at a convenient time well before twilight or even before leaving harbour. This may be particularly useful in such cases as submarine patrol.

3. In order to generate a fix as rapidly as possible, the navigator has planned his observations to start with the eastern planet and 1st Magnitude stars. This gives him an observed position before the time of Civil Twilight.

Plotting

4. The plotter has used a " widger " to assist plotting consisting of a scale in miles (2 degrees graduated in minutes/miles). Thus, by setting the dividers with one point on the basic altitude for the four minute " window " and the other point adjusted to the sextant altitude, then the actual value of the intercept need not be evaluated.

(*Note.*—For a greater sextant reading, intercept is " towards " and vice versa.)

5. It may be assumed from plotting the observations of Saturn and Jupiter that there is probably a small amount of uncorrected refraction between the two horizons.

6. The plotting of Arcturus shows that the first position line was probably a bad shot, since it is inconsistent with the other position lines.

7. Good teamwork between navigator and plotter ensured that each string of sights was taken in a single " window ", i.e. in a single four minute period, thereby facilitating plotting.

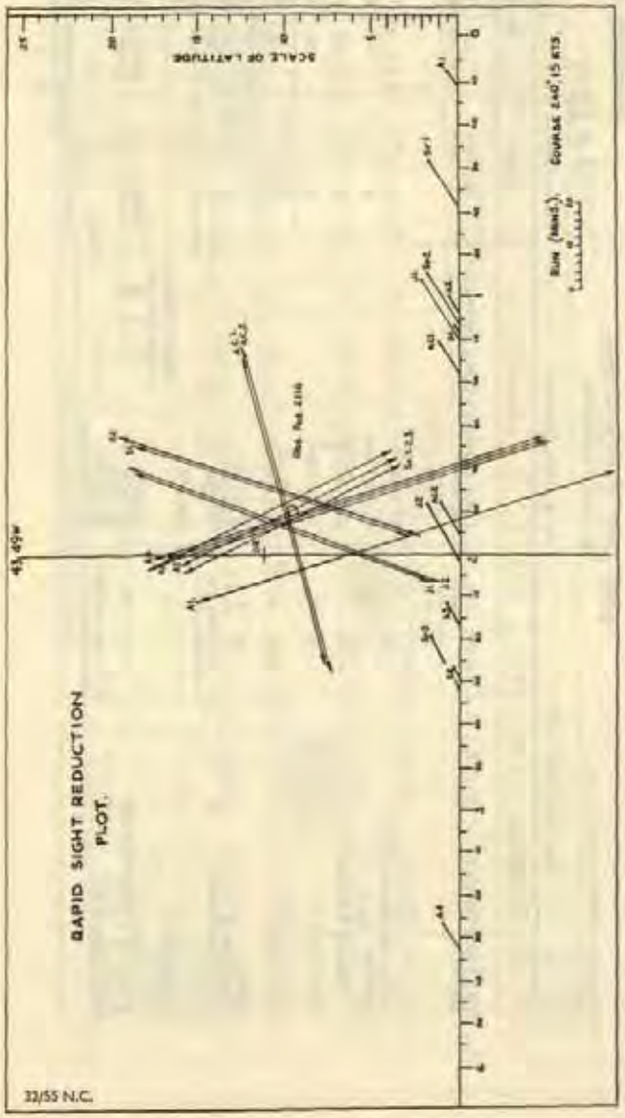
8. Sirius was observed with a poor horizon which is shown up in the spread of this star's position lines.

9. All these altitudes were mentally corrected by the navigator for index error before passing them to the plotter.

10. The plotter has also used a split second hand stop watch which has aided the plotter to retain temporarily a time record without interfering with the plotting or recording of the previous observation. This has assisted the plotter in keeping up with the observing rate.

11. For increasing the accuracy of the position line pattern, the precession and nutation correction—in this case 110° 1′—has been taken into account. (N.B.—This is only applicable to stars.)

Navy Order 474 of 1955 Diagram.



H.494
(Revised March 1955)

RAPID SIGHT REDUCTION FORM
TWILIGHT—EVENING

D.R. 10 13N
43 49W

Date : May 22nd, 1955 — Co. and Spd. 240—15 — Index Error + 0·8

Time Data		Planets		Jupiter	Saturn
L.M.T. Civil Twilight	18h 38m	G.H.A. Planet (from G.M.T. Start Watch)		° ′ 76 26·8	° ′ 329 34·4
Interval	−18	Increment		4 05·8	4 05·8
	18h 20m				
	° ′	v Correction		0·6	0·7
G.H.A. Aries (from L.M.T.)	149 35·2	G.H.A. Planet		80 33·2	333 40·9
Increment	5 00·8				
	154 36·0	D.R. Long W —		43 49·0	43 49·0
∴ Choose L.H.A. Aries	155	E +			
D.R. Long W + ...	43 49	L.H.A. Planet		36 44·2	289 51·9
E —					
G.H.A. Aries	198 49	H.A. Planet		36 44·2 W	70 08·1 E
		Tab. H.A.		37	70
Hour 21	194 42·6	H.A. Diff.		15·8	08·1
Mins 16 Sec 23	04 06·4	Mean Dec.		21 25·2 N	14 28·6 S
G.M.T. Start Watch	21h 16m 23s	Tab. Dec.		21 30	14 30
D.W.E. Slow —	+ 17	Dec. Diff.		4·8	1·4
			Planet 1 / Planet 2		
Fast + ...		Mean △d	18 / 28	Corrn. + 0·8	Corrn. + 0·4
Adjustment to Centre Time Scale	— 2 00	Mean △t	92 / 93	Corrn. + 14·5	Corrn. — 7·5
		Ht. of Eye		+ 6·1	+ 6·1
D.W.T. Start Watch	21h 14m 40s	Refraction		+ 0·8	+ 2·7
		Total Correction		+ 22·2	+ 1·7

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RAPID SITE REDUCTION FORM

Star/Planet		Dubhe	ARCTURUS	SPICA	ACRUX	SIRIUS	POLLUX		JUPITER		SATURN	
Total Corrn. (Refraction and Dip)		+ 7·3	+ 7·5	+ 7·1	+ 9·9	+ 6·9	+ 7·0		+ 22·2		+ 1·7	
S.W. Time	L.H.A. Aries	Bg. Alt.	Bg. Alt.	Bg. Alt.	Bg. Alt.	Bg. Alt.	Bg. Alt.	HA	Bg. Alt.	HA	Bg. Alt.	S.W. Time
0–4	155	006 37 35·3	073 33 06·5	114 40 05·1	166 13 29·9	244 30 14·9	302 49 00	37	292 53 03·9	70	109 16 26·7 S1 0110 16 14·3 S2 0230 16 33·5	0–4
4–8	156	005 37 41·3	073 34 03·5 A1 0412 33 36·2 A2 0505 33 53·5 A3 0617 34 11·0 A4 0732 34 28·8	114 40 39·1	166 13 43·9	244 29 21·9	301 48 10	38	292 52 09·2	69	109 17 22·7	4–8
8–12	157	005 37 47·3	073 34 59·5	115 41 33·1	166 13 57·9 Ac1 0919 13 46·9 Ac2 0956 13 48·9	245 28 28·9	301 47 19	39	292 51 14·5	68	109 18 18·6	8–12
12–16	158	004 37 51·3	073 35 56·5	115 42 47·1	167 14 10·9	245 27 34·9 Sr1 1240 27 50 Sr2 1307 27 43·2 Sr3 1431 27 24·4	301 46 28	40	292 50 19·6	67	109 19 14·4	12–16
16–20	159	004 37 55·3	073 36 52·5	116 43 40·1	167 14 23·9	246 26 40·9	300 45 37	41	291 49 24·6 J1.1710 49 41·2 J2.1802 49 28·2	66	110 20 10·1	16–20
20–24	160	003 37 59·3	073 37 49·5	116 44 03·1	168 14 35·9	246 25 46·9	300 44 46	42	291 48 29·5	65	110 21 05·7	20–24
24–28	161											24–28
28–32	162											28–32

Precession and Nutation Correction 1′ 110″

Observed Position 10 09·6 N
at 1816 (+ 3) 43 46·5 W

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