

RESTRICTED(FOR OFFICIAL USE ONLY)*Not to be communicated to anyone outside H.M. Service***ADMIRALTY FLEET ORDERS**ADMIRALTY, S.W.1,
13th September. 1945.

The following Orders having been approved by My Lords Commissioners of the Admiralty are hereby promulgated for information and guidance and necessary action.

A list of these Orders is enclosed.

By Command of Their Lordships,

H. V. Markham

To Commanders-in-Chief, Flag Officers, Senior Naval Officers, Captains and Commanding Officers of H.M. Ships, Vessels and C.O. Craft (See A.F.O. 1628/45), Superintendents or Officers in Charge of H.M. Naval Establishments, and Admiralty Overseers concerned.

NOTE:—The scale of distribution is shown in the Admiralty Fleet Order Volume, 1941, Instructions, paragraph 10.

ADMIRALTY FLEET ORDERS

No. Subject.

13th September, 1945.

SECTION 1.—ADMINISTRATION OF THE FLEET, CEREMONIES, FOREIGN PORT REGULATIONS, ETC.

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5266. Books of Reference—B.R. 321, Establishment of Naval Stores for Engineering Purposes—List of Errata No. 2 and Form D.127B—List of Particulars—List of Errata No. 14.
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(Orders marked* have been reprinted for posting on Notice Boards; marked † may be communicated to the Press.)

Section 1

ADMINISTRATION OF THE FLEET, CEREMONIES, FOREIGN PORT REGULATIONS, etc.

5153.—A.I.O. Internal Communications—Procedure and Discipline

(D. of N.—13 Sep. 1945.)

Introductory

The objects to be achieved with any system of communications are:—

- (a) That all messages passed reach their correct destination and are clearly and rapidly understood.
 - (b) That the line of communication is occupied for the shortest possible time consistent with clarity.
2. In order to achieve the above objects a standard procedure and discipline are essential. Frequent practice and exercise is necessary in order that officers and ratings become so familiar with the procedure that its correct use is automatic.
3. The procedure and rules to be used in A.I.O. internal communications are set out below.

Classification

4. Internal communications can be broadly classified into three groups, which require slightly different procedures.

- | | | |
|---------|-----|--|
| Group A | ... | Group telephone systems.
Direct telephones not constantly manned.
Voice pipes. |
| Group B | ... | Constantly manned direct telephones. |
| Group C | ... | Loudspeaker systems, such as the command intercom., on which a large number of stations may be required to transmit and receive. |

Standard Rules for all Groups

5. (a) *Standard Form of Message.*—Information of the same nature must always be passed in the same manner and arranged in the order in which the receiver is required to act upon it.

Example.—Surface teller passing information to B.P.R. to be plotted on the L.O.P. says: "Jig three—two seven zero—fourteen—course one two five".

(b) *Standard Phonetic Alphabet and Numerals.*—(i) The standard phonetic alphabet and numerals are always to be used. These are given below for ease of reference.

(ii) Do not say "M for Mike" and "Z for Zebra".

(iii) Well-known groups of letters such as B.P.R., A.D.R. cannot be confused phonetically and do not require translation.

Standard Phonetic Alphabet

A Able	J Jig	S Sugar.
B Baker	K King	T Tare
C Charlie	L Love	U Uncle
D Dog	M Mike	V Victor
E Easy	N Nan	W William
F Fox	O Oboe	X X-ray
G George	P Peter	Y Yoke
H How	Q Queen	Z Zebra
I Item	R Roger	

Standard Phonetic Numerals

1 Wun	6 Six	11 Eeelev-en
2 Too	7 Sev-ven	13 Thirteen
3 Thuh-ree	8 Ate	30 Thirty
4 Fo-wer	9 Niner	
5 Fy-yiv	0 Zero	

(c) *Standard form for certain common information:*—(i) *Bearings.* Three figures, each one separately. Omit word "bearing".

(ii) *Distance.*—In miles in one word as normally spoken. Omit word "distance".

(iii) *Course.*—Three figures, each one separately after word "Course".

(iv) *Speed.*—One word as normally spoken after word "speed".

(v) *Height.*—In thousands of feet as normally spoken after word "height." Omit words "thousands feet". If under a thousand feet say, for example, "five hundred".

(vi) If reports are required to greater accuracy than whole numbers, use point not half or quarter.

Examples—

(a) "Five—Zero four five—Twenty-two—Course one nine six—Speed twelve".

(b) "Number six—One two three—Eighteen—Height twelve point five".

(d) *General Instructions.*—(i) Sound-powered units: With the lips $\frac{1}{2}$ in. from the transmitter speak clearly and as loudly as possible without shouting.

(ii) Carbon transmitters or microphones on amplified systems: With the lips $\frac{1}{2}$ in. from the transmitter speak clearly and deliberately without raising the voice.

(iii) Telephones are delicate instruments. Treat them carefully and hang them up when not in use.

(iv) If a message is not heard or understood say "say again".

(v) If a message has been wrongly transmitted say "correction" and start again.

(vi) Omit all unnecessary words including "sir" and "please".

(vii) THINK WHAT YOU WANT TO SAY BEFORE YOU SPEAK.

Special Rules for Group "A" Communications

6. (a) *Calling Up.*—Name the station calling followed by the name of the station called. Acknowledge the call with the name of the station.

Example—

Ops. room calls up: "Ops. room—A.D.P."

A.D.P. replies: "A.D.P."

(b) *Acknowledging Messages.*—(i) If the message is addressed to a particular station, acknowledge with the name of the station and the word "Roger".

Example—

Surface visual position passes information to L.O.P. Officer. L.O.P. Officer says: "L.O.P.—Roger".

(ii) Messages from a source passing information to a number of stations require no acknowledgment unless specified by the caller in the form "..... acknowledge".

(c) *Ensuring Correct Receipt of Important Messages.*—To ensure that an important message has been correctly received by the listener most directly concerned, conclude with the listener's name and the words "Repeat back". The listener addressed then repeats back the message in full, thus rebroadcasting the information to the other listeners.

If the message is repeated incorrectly, say "Wrong" and pass the message or part of the message, again emphasizing the portion that was incorrectly repeated.

Special Rules for Group "B" Communications

7. (a) *Calling up.* The call-up is unnecessary and can be omitted.

(b) *Acknowledging Messages.*—Acknowledge a message with word "Roger" or a repetition of its essential contents.

Example—Surface Teller to B.P.R. L.O.P. Plotter—

(i) "I am shifting plot in five minutes' time. Stand by to take over" Reply "Roger".

- (ii) "Check position number three."
 "One four seven—eight point five." Reply.
 "One four seven—eight point five."

(c) *Ensuring Correct Receipt of Important Messages.*—The instruction "Repeat back" may be given at the conclusion of the message, which should then be repeated in full.

Special Rules for Group "C" Communications

8. The use of the Command intercom. is confined to the passing of immediate information or orders. A modified form of the standard R/T procedure is adopted. A similar procedure is desirable for other broadcast systems.

Command Intercom. Procedure

- (a) A station initiating a report gives its name. This is a warning.
 (b) Message is finished with the word "over".
 (c) The Command only acknowledges receipt of the message with the words "Bridge—Roger—out".
 (d) Messages originated from the bridge are made in the same form but require no acknowledgment by outstations unless specifically ordered.

Examples—

- (i) A.D.R. calls: "This is A.D.R.—Group of low-flying aircraft closing from zero six zero—fifteen miles—over".
 Bridge replies: "Bridge Roger out".
 (ii) Bridge calls up: "This is bridge.—Enemy in sight one three zero—out."
 (There is no reply.)
 (iii) Bridge calls up: "This is bridge.—Enemy in sight one three zero—Ops. room acknowledge—over".
 Operations room replies: "Ops. room—Roger—out".

***5154.—Enemy Aircraft Shot Down or Damaged by Ships' Gunfire or Naval Aircraft**
 (G.D. 0683/45.—13 Sep. 1945.)

Casualties to enemy aircraft by ships' gunfire are as follows from 12th April, 1940, to the end of hostilities:—

	Confirmed	Probable	Damaged
*By H.M. ships	716	228	340
*By H.M. ships and merchant ships jointly ...	164	28	23
By merchant ships and fishing vessels ...	158	51	120
	1,038	307	483

In addition to the above, three aircraft confirmed as destroyed have been shared between H.M. ships and the other services.

* Including units of the Netherlands, Norwegian, Greek, Polish and French naval forces serving with the Royal Navy.

It will be noted that the above totals, which are based on a revision of Admiralty records, differ in some respects from those published in A.F.O. 3716/45.

Brief details of recent assessments are:—

Confirmed	Probable	Damaged
	<i>H.M. Ships</i>	
H.M.S. "Redwood" (1) ...	4th Destroyer Flotilla (1).	Nil
Task Force 63 (1) ...		
Task Force 63 and Fleet Air Arm (1).		
H.M.S. "Sussex" (2) ...		
H.M. Ships "Ameer" and "Empress" (1).		
H.M.S. "Howe" ...		

Enemy Aircraft Shot Down by Naval Aircraft

The results are as follows from the beginning of the war to the end of hostilities:—

	Confirmed	Probable	Damaged
Present totals	391	58	176
Last reported totals (30th June, 1945) ...	383	58	176
Increases July	6	0	0
August	2	0	0

2. Casualties are assessed in the Admiralty in accordance with the rules laid down in C.A.F.O. 1898/40, which are the same as those employed by the Royal Air Force and the Army.

(C.A.F.O. 1898/40.)

(A.F.O. 3716/45 is cancelled.)

5155.—H.M.S. "Turnstone"—Closing Down

(A. 01934/43.—13 Sep. 1945.)

A.F.O. 5017/45 is to be amended as follows:—
 Reference at end of Order—for A.F.O. 2472/42 read A.F.O. 2724/42.

(A.F.O. 5017/45.)

†5156.—Congratulatory Message from King of Norway

(M. 07958/45.—13 Sep. 1945.)

The following message was received by the First Sea Lord from H.M. the King of Norway:—

"On the occasion of the end of the war I want to congratulate the British Navy which has taken its full share of the burden of this terrible war. I am proud that Norway has been able to help in this struggle for freedom.

HAAKON R."

The following reply has been sent:—

"On behalf of the officers and men of the Royal Navy I desire to thank Your Majesty for your gracious message.

We have been proud to have units of the Royal Norwegian Navy serving with us in the war at sea, and greatly appreciate the valuable part they have played.

ANDREW CUNNINGHAM."

Section 2.—PERSONNEL, PAY, SERVICES, DISCIPLINE, etc.

5157.—H.M.S. "Mount Stewart"—Pay Account

(M. 07719/45.—13 Sep. 1945.)

Pay accounts of H.M.S. "Mount Stewart," Teignmouth, were transferred from H.M.S. "Dartmouth" to H.M.S. "Mount Stewart" as from 1st September, 1945.

5158.—Vessels not Carrying their own Accounts and Manned by General Service or Patrol Service Ratings—Pay and Victualling Accounts and Service Certificates

(M. 06677/45.—13 Sep. 1945.)

The following amendments are to be made to A.F.O. 2396/45 :—

Add paragraph 4(i)(c) :

Pay and victualling accounts of vessels manned from the three home ports (excluding fleet minesweepers) already in commission and preparing for overseas service are to be retained where they are until vessels leave U.K. Any case of doubt is to be referred to Admiralty.

Add to paragraph 4(v) after "transfers" : ENG.6 [redacted] in vessels allocated for service on the far shore are to be paid, and their wages accounts kept, on Form C.9F by the B.S.O. at the port of employment.

Paragraph 5(b).—Add note at end : (See paragraph 6(f) below for vessels manned by R.N.P.S. proceeding to U.K. from abroad to reduce to reserve.)

Add paragraph 5(c) :

Vessels manned by boom defence personnel proceeding to the United Kingdom from abroad for refit, paying-off or re-allocation.—Accounts are to be transferred to H.M.S. "Rooke" in the case of vessels returning to U.K. for refit or to pay off. When vessels return to U.K. for re-allocation accounts are to be transferred to the new operational base when this is known, otherwise to the Supply Officer, H.M.S. "Rooke," who will transfer the accounts to the new operational base when this has been allocated.

Paragraph 6(b) : Delete existing paragraph.

Add new paragraph 6(b) :

"Accounts of such vessels are, therefore, whether manned by general service or R.N.P.S. personnel, to be retained by the previous base, where this is a home one, until the date when the ship is accepted into reserve. They should then be transferred to the reserve fleet parent ship carrying accounts at the paying-up port, or if there be no such parent ship present, to the shore base (see paragraph 6(d)). The date of acceptance will be reported by Senior Officers, Reserve Fleet, to the Supply Officers concerned."

Paragraph 6(c) : Delete existing paragraph.

Renumber existing paragraph 6(d) as 6(c).

Renumber existing paragraph 6(e) as 6(d) and delete the following words in that paragraph : "Pay and victualling accounts of reserve fleet personnel, at present carried in the shore bases in each of these places, are to be transferred to the respective reserve fleet parent ship, dates being reported."

Add new paragraphs 6(e) and 6(f) as follows :—

6(e). Accounts of vessels manned by general service personnel returning to U.K. from abroad for reduction to reserve are to be transferred to the respective manning depots on arrival and then transferred as in paragraph 6(b) above after vessels have been accepted into reserve.

6(f). Accounts of vessels manned by R.N.P.S. personnel returning to U.K. from abroad for reduction to reserve :—

- (i) During period of reduction to categories B and C pay accounts are to be transferred to H.M.S. "Europa." Officers and ratings are to be lent for victuals to the base ship at the port of reduction, or to the reserve fleet parent ship if there is one present (see paragraph 6(d) above). Supply Officers at these ports (or in the reserve fleet parent ship) are to close final victualling accounts when vessels pay off.

- (ii) After reduction if entering category B, pay accounts of personnel remaining in reserve complement are to be transferred from H.M.S. "Europa" to the base ships at the ports where vessels are to remain in reserve (or to the reserve fleet parent ship if there is one present (see paragraph 6(d) above)) after acceptance of vessels into reserve.
- (iii) Vessels reducing to category C retain no personnel after acceptance into reserve.
- (iv) If the ports at which vessels reducing to reserve (manned by R.N.P.S. personnel) are not known at the time of sailing from ports abroad, pay and victualling accounts are to be forwarded to H.M.S. "Europa," victualling accounts then being re-forwarded to the base ship at the port of reduction when this is known (or to the reserve fleet parent ship if there is one present at this port. (See paragraph 6(d) above.)

Cancel existing paragraph 7.

Insert new paragraph 7 as follows :—

7(i).—Pay and victualling accounts of vessels paying off (manned by R.N.P.S.) (excluding Fleet Danlayers).—When vessels manned by R.N.P.S. personnel are to be paid off, accounts are to be transferred to the paying-off base. The date of transfer should be the day, or a day or two prior to the date, of sailing from the operational base. This procedure may be modified to the extent that, provided these accounts are already carried in an accounting base at home, they need not be transferred to the paying-off port, if both the B.S.Os. concerned agree that such a course is more convenient.

(ii) Pay and victualling accounts of vessels paying-off (manned by boom defence personnel).—When vessels manned by boom defence personnel are to be paid off accounts are to be transferred to H.M.S. "Rooke."

Note.—For vessels manned by R.N.P.S. or boom defence personnel proceeding to the U.K. from abroad to pay off (see paragraph 5(b) and (c)).

(A.F.O. 2396/45.)

See AFO 7034/45
See AFO 6244/45
See AFO 6091/45
5159.—Supply Duties—Simplification of Accounting
See AFO 578/45
(M. 9256/45.—13 Sep. 1945.) See AFO 385/45.

The pay accounting system in the Royal Navy has been under review. It is not the intention of Their Lordships that any fundamental alterations shall be made to the system at present, but consideration has been given to measures to simplify and expedite the work.

2. Alterations in procedure as shown below have been approved as temporary measures. The new rules should be put into effect on receipt of this order, except where a specific date for introduction of the change is stated.

3. Ships' Ledgers. Notations in "Remarks" column.—Notation of the following particulars is suspended :—

- (i) Dates of issue of free travelling warrants to officers.
- (ii) When a rating is borne in lieu of another not available.
- (iii) Duties for which supernumeraries are borne.
- (iv) Average numbers victualled in tenders, for payment of allowance as cook or victualling rating.
- (v) Lamps on charge (for "Care of Lamps and Lamp Stores" allowance).
- (vi) Men sick on shore—whether treated by Naval Surgeon, etc.
- (vii) Non-substantive rates—dates of re-qualification.
- (viii) Business and private address of reserve officers.
- (ix) Whether recommended, etc., for R.F.R.
- (x) Date of last issue of galley boots.

4. Ledger and abstracts—(i) Leave allowance and provision allowance are to be shown as one total in the credit column of the ledger and also in the abstract of victualling (subhead H). Ratings are still to be checked to "Leave" or "Provision Allowance" in the victualling columns of the ledger.

(ii) Provisional rate of income tax is to be assessed to the nearest £ instead of as directed in A.F.O. 1160/44.

(iii) Separate totals are not required for extra pay credits, items 2 (submarine pay) to 14 (C.M.T.) on the present ledger sheet. Similarly, on the revised ledger

sheet, shortly to be issued, one total will suffice for items 1 to 10 in the taxable credits column. The nature of the particular item of extra pay must, however, continue to be shown against the individual account with a note of the supporting subvoucher.

(iv) Separate totals are not required for charges in respect of stores lost, that is (a) victualling, (b) naval or (c) armament stores, but a separate total is still required for library books.

5. *Victualling Accounts—Shore Establishments and Ships carrying Accounts of Tenders only.*—Comparison of numbers victualled per ledger and per victualling account.

Entry in the final victualling column of the ledger, proving of the victualling columns of the ledger and abstract, and the maintaining of *nominal* lists in Mess Books (S.81), Loose Leaf Mess Books (S.1057) or special card indexes, are suspended as a temporary measure for shore establishments and ships carrying accounts of tenders. Other ships will continue to use existing means of check. These records should be replaced by a numerical record of the men victualled and entitled to draw the spirit ration in the various messes, the figures being adjusted daily from victualling and check sheets. Such record should be kept in S.71a (Daily Issue Book of Spirit Rations) or, if this form is not available, Form S.1059 (Daily Issue of Spirit), amended to include a column for numbers victualled. To ensure that a practical check on victualling figures is maintained, Supply Officers of H.M. ships and establishments permitted under this Order to suspend existing methods are to arrange that a check is made on two uncertain days during each quarter of the numbers of officers and men actually being messed, and these numbers are to be compared with the numbers accounted for in the victualling account, any discrepancies being then investigated. The Supply Officer's certificate to this effect should be rendered as a supporting voucher to the provision account when the latter is forwarded into office, with an explanation of any difference.

It will be the responsibility of the Executive Officer to keep the Supply Officer informed of the numbers requiring meals, of seeing that the whereabouts of all officers and men in the establishment are recorded and of assisting the Supply Officer in carrying out the check referred to in the preceding sub-paragraph.

6. *Calculation of "Time."*—To simplify calculation of time required by the regulations, reckoning by the calendar, instead of by exact days under the scale on page xiii of K.R. and A.I., Vol. I, should be applied in the following matters:—

- (i) date of restoration of G.C. badges;
- (ii) date of restoration to 1st class for conduct and leave;
- (iii) qualifying service for advancement in substantive or non-substantive rating. Recommendations for advancement may, however, be included in Form S.507 when a man has completed the qualifying service by days (e.g., 6 months = 182 days) under page xiii, K.R. & A.I., although he may not have completed the time when reckoned by calendar.

7. *Charges for Mulcts.*—Commencing on 1st October, 1945, mulcts of pay when ordered to be made on leave-breaking and other occasions should be at the following fixed rates in lieu of the day's pay ordered by K.R. & A.I.:—

For Chief P.Os.	9s.
For Petty Officers	7s.
For Leading ratings	5s.
For A.B. ratings	3s.
For Ordinary Ratings	2s.
For Boy	1s.

The rates for W.R.N.S. will be:—

C.P.O. Wren	5s.
P.O. Wren	4s.
Leading Wren	3s.
Wren	2s.

8. *Forms S.161.*—Reports on S.161 of the grant of progressive pay to ratings are to be discontinued for the present.

9. *Periodical Payments.*—These should be made to the nearest ten shillings. Payment at settlement should be to the nearest two shillings.

10. *Sick Notes.*—In accordance with present practice, men who go sick on shore, forward a medical certificate to the Commanding Officer of their ship. If that ship does not carry her own accounts, considerable inconvenience may be caused through information being delayed in reaching the man's Supply Officer.

Ratings should be directed to send a duplicate medical certificate to the Supply Officer of the parent ship in all cases where they know that they are paid from such a ship. The leave pass will be amended to provide for the insertion of such information and directions.

11. Consideration is being given to the extended use of machines with the view to reducing labour in offices and various types are now under trial (see A.F.O. 2530/45).

(A.F.Os. 1160/44 and 2530/45.)

†5160.—Admiralty Surgeons and Agents—Subsequent Appointments

(C.E. 17987/45, C.E. 18519/45.—13 Sep. 1945.)

The undermentioned appointments as Admiralty Surgeons and Agents have been made:—

Place.	Name.	Address.	Remarks.
Dover ...	Surgeon Captain A. R. Fisher, M.R.C.S., L.R.C.P., R.N. (ret.).	Beech Grove, Kearsney, Dover. Telephone:— Kearsney 39.	—
Tring, Herts.	Mr. H. N. Knox, M.R.C.S., L.R.C.P.	23, High Street, Tring, Herts. Telephone:— 2051.	Vice Mr. C. E. O'Keefe,
Cambridge	Mr. E. C. Campbell, M.R.C.S., L.R.C.P.	Beechwood House, 41, Hills Road, Cambridge. Telephone:— 3397.	1st October, 1945, vice Mr. S. N. Pritchard.

(A.F.O. 2973/45.)

5161.—Air Signal Officers' Duties

(C.W. 40424/45.—13 Sep. 1945.)

Consequent on the policy laid down in A.F.O. 5162/45, the duties of Air Signal Officers have been revised and will in future be as follows:—

- (a) When appointed for communications duties to a Carrier or Air Station, duties as laid down in K.R. & A.I., Article 1248, Clauses 1, 4 and 7.
- (b) The organization of instruction for officers and ratings in air communications.
- (c) The co-ordination of air communications training ashore and afloat in conjunction with the Unit Commanders with whom the responsibility for the training of their personnel will continue to rest.
- (d) Advice on the operation and use of air communications equipment.
- (e) The general co-ordination from an operational aspect, of maintenance of airborne communications equipment in aircraft and at shore bases.
- (f) Staff and administrative duties concerned with air communications equipment, and duties in connection with the development of such equipment.
- (g) Responsibility for the maintenance of all ground W/T and R/T (including W/T beacons) at Naval Air Stations, except that where a W/T Officer is borne, this officer will be responsible for maintenance to the Air Signal Officer.
- (h) Responsibility for the operation of all Homing and Blind Approach Beacons and advice on the policy for operation of I.F.F.

(i) Responsibility for advice on the policy for operation of R.C.M. equipment when no officer qualified in HF/DF and R.C.M. is borne.

2. Section I, paragraph 4, of A.F.O. 917/44 is hereby cancelled.

(K.R. & A.I., Art. 1248.)

(A.F.Os. 3028/43, 917/44 and 5162/45 and C.A.F.O. 1509/44.)

See AFO 5161/45.
5162.—Responsibility for Advising the Command on the Operational Use of Airborne Radar

(C.W. 40424/45.—13 Sep. 1945.)

Their Lordships have approved the transference of the responsibility for advice on the operational use of Airborne Radar from the Air Signal Officer to the observer and pilot users. In future, Squadron Commanders will bear the responsibility for advising the command on the use and capabilities of the Airborne Radar carried in their squadrons. Squadron Commanders will nominate one Squadron officer to be responsible to them and whenever practicable this officer will undergo a course especially to fit him for these duties.

2. The establishment of a School of Airborne Radar is also approved. The School will be responsible for teaching all aspects of the operation of Airborne Radar to pilot and observer operators.

3. As a result of this transference of responsibilities the Naval Air Signal School will no longer be the authority on the teaching of Airborne Radar; the School of Airborne Radar will become the central authority for all matters concerning the use of Airborne Radar. Long courses at the Naval Air Signal School will continue to include training in a general knowledge of Airborne Radar, certain aspects of which such as I.F.F. and Radar Homing Aids are the close concern of the Communications Officer of a Carrier or Air Station.

4. Amendments to C.A.F.Os. and A.F.Os. affected by these decisions and further details, including the terms of reference of the School of Airborne Radar, will be promulgated in due course.

Note.—Design, development and maintenance of Airborne Radar Equipment are not within the sphere of the School of Airborne Radar.

5163.—Air Raid Casualties to Relatives of Naval Personnel—Next-of-kin Casualty Cards

(N. 16517/45.—13 Sep. 1945.)

There is no longer any necessity for the issue of the next-of-kin casualty cards, to which reference is made in A.F.O. 2133/41 and 3520/43, and these orders, with others related thereto, should be regarded as amended accordingly.

(A.F.Os. 3866/40, 2133/41 and 3520/43.)

See AFO 7010/45
***5164.—Wireless News and Entertainment Services**

H.M. Ships and Establishments

(D.P.S. 1087/45/S.C.—13 Sep. 1945.)

The following amendment is to be made to A.F.O. 4837/45, paragraph 6:—

Delhi Radio. European Programmes for the Forces

Power	Frequency	Times of Transmission (Indian Standard Time)
100 kW.	5.63 Mc/s.	0700—0830
	6.19 Mc/s.	
20 kW.	11.79 Mc/s.	1300—1430
	9.67 Mc/s.	2000—2300

(A.F.O. 4837/45.)

5165.—Cable Ship—Transferable Agreement—Introduction

(A/S.M. 482/45.—13 Sep. 1945.)

The following amendment is to be made to A.F.O. 251/44:—

Appendix II. After the table of approved capacities and rates of pay, add:—

"Note.—In cases where Cooks (Officers or Crews) hold, in addition to the Ministry of War Transport Certificate, a higher general cooking certificate, recognized as such by the National Maritime Board, the ratings will be entitled to receive £1 a month extra. No higher certificate which is more than three years old will qualify for the extra £1 unless the holder can show that he has passed a suitable refresher course within that period (as for T.124X ratings)"

(A.F.O. 251/44.)

***5166.—N.A.A.F.I. Rebate on Sales in Mobile Refreshment Vans**

(V2/5769/45.—13 Sep. 1945.)

As from 1st September, 1945, rebate on sales from mobile refreshment vans run by N.A.A.F.I. for Naval personnel, will be paid at the rate of 3 per cent.

2. A.F.O. 5080/43 is to be amended accordingly.

(A.F.O. 5080/43.)

See AFO 788/45.
5167.—Chaplains R.N.V.R. (Permanent and Temporary) and Temporary Chaplain R.N. (Non-Anglican)—Transfer to Permanent List R.N.

(C.W. 1811/44.—13 Sep. 1945.)

3509/46.
5523/46.
163/47 Their Lordships are now prepared to consider applications for transfer to the Permanent List of Chaplains R.N. from recommended applicants on the following lists:—

- Chaplains R.N.V.R.—Church of England (Permanent and Temporary).
- Temporary Chaplains R.N.—Church of Scotland and Free Churches.
- Temporary Chaplains R.N.—Roman Catholic.

2. Each application is to be accompanied by a report on Form S.206 as to the applicant's suitability for permanent service and should be forwarded to the Secretary of the Admiralty, together with a report of medical fitness. The medical examination can be held at any R.N. or R.N.A. hospital or large R.N. sick quarters.

3. The following conditions governing such transfers to the appropriate permanent list of Chaplains R.N. have been approved:—

- The number of Chaplains selected will be at Admiralty discretion;
- seniority on transfer will be given for full pay mobilized service and will reckon for purposes of full, unemployed and half pay.

4. On transfer to the permanent list Chaplains will forfeit all their rights and privileges as Temporary or Reserve Chaplains and, except as provided in paragraph 5 below, will be eligible for the rates of pay, retired pay, withdrawal gratuity and conditions of service of permanent Chaplains R.N., full details of which are given in the appropriate sections of the Appendix to the Navy List. For the purpose of the rules in Note (c) on page 51 of the Navy List Appendix for June, 1945, and also of assessing the rate of retired pay on retirement, the date of entry into the service will be the date of commencement of full pay mobilized war service. Chaplains invalidated for disabilities not attributable to the Service with less than four years' service (including mobilized war service) will be eligible for gratuities on the scale laid down in (IV) on page 54 of the Appendix to the Navy List for June, 1945.

5. For Chaplains with less than 10 years' service, as defined below, the amount of the gratuity on voluntary retirement or discharge will be at the rate of £50 for each complete year of service from the date of transfer to the permanent list. For this purpose service will be reckoned from the date of transfer to the permanent list or the official date fixed for the end of hostilities, whichever is later.

6. Chaplains who have been transferred to the Permanent List under these arrangements will receive, the amount by which £50 exceeds the total of

- Initial uniform grant received;
- any grant received towards the cost of a portable altar, etc., under

A.F.O. 6454/44.

(A.F.O. 6454/44.)

5168.—Civilian Clothing—Provision of—Army and R.A.F. Centres

(C.W.58820/45.—13 Sep. 1945.)

With reference to A.F.Os. 2559/45, 2560/45 and B.R. 1281 (1), paragraph 123, the following list gives details of Collecting Units and Civilian Clothing Depots:—

	Army	Civilian Clothing Depot
	Unit, Telegraphic address and Telephone No.	
London ...	No. 4 Military Collecting Unit, Duke of York's H.Q. Chelsea, S.W. (COLUNIT, Southkens, London; Sloane 0891).	Empire Hall, Olympia, W.14. (Shepherds Bush 4561, Extn. 29).
York ...	No. 2 Military Collecting Unit, Queen Elizabeth Barracks, Strensall. (COLUNIT, Strensall; Strensall 33).	Fulford Barracks, York. (York 53342).
Taunton ...	No. 6 Military Collecting Unit, Middleway Camp, Taunton. (COLUNIT, Taunton; Taunton 4461/5).	Nunsfield Camp, Taunton, (Taunton 4451/3).
Northampton ...	No. 3 Military Collecting Unit, Talavera Camp, Northampton. (COLUNIT, Northampton; Northampton 4771).	Drill Hall, Clare Street, Northampton. (Northampton 4771, Ext. 35).
Guildford ...	No. 5 Military Collecting Unit, Queen's Camp, Guildford. (COLUNIT, Guildford; Guildford 2391, Ext. 3).	Grange Road, Guildford. (Guildford 2342).
Oldham (Lancs.)	No. 7 Military Collecting Unit, Whittakers Mill, Ashton-under-Lyne. (COLUNIT, Ashton-under-Lyne; Ashton-under-Lyne 3051/5).	Earl Mill, Dowry Street, Oldham. (Oldham Main 2234/5).
Hereford ...	No. 8 Military Collecting Unit, Bradbury Lines, Hereford. (COLUNIT, Hereford; Hereford 2124, Ext. 67).	Bradbury Lines, Hereford. (Hereford 2124, Ext. 67).
Edinburgh ...	No. 1 Military Collecting Unit, Redford Barracks, Edinburgh. (COLUNIT, Edinburgh; Colinton 88231, Ext. 29).	Redford Barracks, Edinburgh. (Colinton 88231, Ext. 29).
Belfast ...	No. 9 Combined Military Col- lecting and Dispersal Unit, Victoria Barracks, Belfast. (PAKUP, Belfast; Belfast 28121).	Victoria Barracks, Belfast. (Belfast 28121).

Royal Air Force

	Civilian Clothing Centre	Telephone No.
London ...	Marshall Ward Building, Wembley.	Wembley 3601/6.
Kirkham (Lancs.)	No. 101 Personnel Dispersal Centre, R.A.F., Kirkham.	Preston 4213/4.

2. Communications should be made to the Naval representative at the Civilian Clothing Depot or Centre, but for convenience telegrams may be sent to the telegraphic address of the Army Units as shown above.

It has been found that insufficient notice has been given of the intended arrival of officers and ratings at some Centres, and attention is drawn to B.R. 1281 (1), paragraph 123D under which at least 48 hours' notice is required. It is desirable that as much warning as possible should be given to the Naval representative at the Centre concerned.

3. Officers and ratings being sent to Army Centres should in all cases be directed to report on arrival at the Military Collecting Unit address and not direct to the Clothing Depot.

4. The use of the R.A.F. Centres at Cardington and Hednesford will be discontinued from 1st October, 1945, and their addresses have accordingly been omitted from this Order. Also from this date, notice of attendance at the R.A.F. Centre at Kirkham should be made to the Naval Representative at Oldham, as no officer will be in residence at Kirkham.

(A.F.Os. 2559/45 and 2560/45.)

(A.F.O. 3133/45 is cancelled.)

5169.—R.N. Air Stations—Complement of Writer and Stores Ratings

(N. 20659/45.—13 Sep. 1945.)

The following amendment is to be made to A.F.O. 651/45, para. 2, Table D, Naval and Air Stores Staff:—

Under "Stores P.O., between 85 and 168 aircraft inclusive":—

Delete "1 Stores P.O."

Substitute "2 Stores P.O."

Under "L.S.A.":—

Delete "85-108 ... 5 L.S.A."

109-120 ... 6 L.S.A."

121-144 ... 7 L.S.A."

145-156 ... 8 L.S.A."

157-168 ... 9 L.S.A."

Substitute "85-108 ... 4 L.S.A."

109-120 ... 5 L.S.A."

121-144 ... 6 L.S.A."

145-156 ... 7 L.S.A."

157-168 ... 8 L.S.A."

(A.F.O. 651/45.)

5170.—Complement Amendments

H.M. Escort Carriers

(N. 17585/45.—13 Sep. 1945.)

The following amendments are to be made to schemes of complement:—

H.M. Escort Carriers "Smiler" and "Ruler" Class and "Tracker" Class (Admiralty Letter N. 9409/44 of 26 May, 44).

H.M. Escort Carriers "Smiler" and "Ruler" Class, as Assault Carriers when manned fully by G.S. personnel (Admiralty Letter N. 26702/44 of 31 Oct. 1944).

H.M. Escort Carriers "Smiler" and "Ruler" Class and "Tracker" Class when employed as Replenishment Carriers (Admiralty Letter N. 15925/45 of 15 June, 1945).

H.M. Escort Carriers "Tracker" Class, as Assault Carriers, when manned fully by G.S. personnel (Admiralty Letter N. 17762/45 of 6 July, 1945).

H.M.S. "Trouncer", as Assault Carrier Flagship (Admiralty Letter N. 13806/45 of 22 May, 1945).

H.M. Escort Carriers "Nairana", "Campania" and "Vindex" (Admiralty Letter N. 13319/44 of 9 June, 1944).

Insert :—“(p) Sailmaker's Mate” immediately below the Seaman (Met. rating, notation (p) against A.B. or Ord. Seaman and a new note as follows :—

“(p) If on foreign service, reduce 1 A.B. or Ord. Seaman and add 1 Sailmaker's Mate”.

H.M. Permanent Ferry Carriers (Admiralty Letter N/A.O.D. 411/44 of 22 March, 1945).

Insert :—“(g) Sailmaker's Mate” immediately below “A.B. or Ord. Seaman” notation (g) against “A.B. or Ord. Seaman” and a new note as follows :—

“(g) If on foreign service, reduce 1 A.B. or Ord. Seaman and add 1 Sailmaker's Mate”.

5171.—Complements—Dental Surgery Assistants

Naval Shore Establishments

(M.D.G. 35543/45.—13 Sep. 1945.)

In future only male dental ratings will be shown in schemes of complement for duty with dental officers, but V.A.Ds.(D) should be borne in lieu when they are available and can be suitably accommodated.

5172.—Qualifying Course for Signal Boatswain

(C.W. 30367/45.—13 Sep. 1945.)

The following ratings have been selected to undergo the qualifying course for Signal Boatswain at H.M. Signal School, Portsmouth, commencing on 3rd September, 1945.

A. E. Argent, Y.S. C/JX.134271, H.M.S. "Woolwich".
 F. W. Denny, C.Y.S. P/JX.131184, H.M.S. "Illustrious".
 H. E. Hales, C.Y.S. P/JX.138112, H.M.S. "Vega".
 W. A. Hardy, Y.S. C/JX.137609, H.M.S. "Sussex".
 G. F. C. Hollis, C.Y.S. C/JX.133158, H.M.S. "Talwar".
 R. G. N. Phillips, C.Y.S. P/JX.130394, H.M.S. "Collingwood".
 G. F. Short, C.Y.S. P/JX.130052, H.M.S. "Mercury".
 W. G. B. Payne, Y.S. D/JX.160181, H.M.S. "Drake".

2. The above-named ratings should join H.M. Signal School p.m. Sunday 2nd September, 1945.

(A.F.O. 3295/45 is cancelled.)

5173.—Manila—Reopening of British Consulate-General

(M. 07909/45.—13 Sep. 1945.)

The British Consulate-General at Manila has been re-opened.

*5174.—Adult Education and Vocational Training—The Forces Preliminary Examination

(N. 22122/45.—13 Sep. 1945.)

Object of Examination.—A new Inter-Service examination, to be called the Forces Preliminary Examination, has been established in consultation with the Universities, to meet the needs of men and women in the Services who wish to become eligible to be considered for entry to a University or to qualify for exemption from the preliminary examination of certain professional bodies. Candidates who pass the examination will also be eligible to sit for the Civil Service Reconstruction Competition (Clerical Class) or to apply for a Teachers' Training Course. It will be an alternative to existing means of qualification. It must be noted that success in the examination does not automatically confer on a candidate either the right of admission to a particular faculty or college of a University or to a professional body or the right to a grant under the Further Education and Training Scheme of the Ministry of Labour and National Service.

2. *Conduct of the Examination.*—The examination will be set and marked by the Civil Service Commission and will be conducted in accordance with their rules, on which this Order is based.

3. *Correspondence.*—All correspondence in connection with this examination, and all applications for forms, cards, question papers and answer books, and enquiries about results are to be addressed to the Director, Education Department (Forces Preliminary Examination), Admiralty, London, S.W.1.—Short title D.E.D. (F).

On no account are letters to be sent to the Civil Service Commission by either Supervising Officers or private individuals.

4. *Prospectus.*—A prospectus of the examination is being published by the Civil Service Commission and will be widely distributed. It contains :—

The detailed syllabus of the examination subject by subject :

Specimen examination papers :—

A list of Universities and Professional Bodies who will recognise the examination.

5. *Outline of Syllabus.*—The examination is divided into two parts. Part I consists of three compulsory subjects, in each of which a candidate must reach a pass standard :

(i) English or Welsh (a)

(ii) Mathematics or Latin (b) or in specially approved cases (c), a third optional subject from Part II.

(iii) General Knowledge.

Part II consists of optional subjects and a candidate must reach a pass standard in any two (d) of the subjects (i) to (v) below :—

(i) Natural Science (e) or Household Science or Latin (f).

(ii) History or Geography

(iii) French or German.

(iv) Social Sciences (g).

(v) Mathematics (Additional) or Geometrical and Mechanical Drawing.

Notes.

(a) Only candidates who intend to enter the University of Wales may take Welsh.

(b) There is a free choice between Mathematics and Latin, but candidates taking Latin will not be able to take Science in Part II, as the papers are held simultaneously.

(c) Permission to take a third optional subject instead of Mathematics or Latin is to be granted by Education Officers, in exceptional cases only, to candidates who have a real incapacity for Mathematics. A signed certificate to this effect is to be sent to the examination centre with the candidate's application.

(d) Two subjects only may be taken.

(e) This paper will be in three sections : Physics, Chemistry and Biology. Answers must be confined to any one or two of these sections.

(f) Provided Latin has not been taken in Part I.

(g) This paper will be in four sections :—Politics, Economics, Ethics, and Psychology, only one of which may be attempted.

To pass the examination a candidate must satisfy the examiners in Parts I and II, which may be taken separately.

6. *Examination Centres.*—Owing to the requirements of the Civil Service Commission, it will not be practicable to hold the examination in all fully seagoing ships. In particular, all worked papers must reach the Civil Service Commission within six weeks of the end of the examination. There must also be five feet between candidates. Administrative Authorities should therefore make arrangements to establish Examination Centres ashore and in ships where it is possible to fulfil the conditions laid down in this Order and the Civil Service Commission's Instructions to Supervising Officers. They should also appoint Supervising Officers to run the centres, and inform personnel in their Command about them.

It must be fully understood by the candidates that any deviation from the conditions laid down by the Civil Service Commission will render their work invalid.

7. *Nomination of Candidates.*—Candidates will not be allowed to enter for this examination until they have been nominated by an Education Officer and have obtained their Commanding Officer's permission to do so. They should be nominated for the examination as a whole, not separately for each part. Nominating officers should be satisfied that candidates are likely to reach the standard required to pass. Permission to enter should be granted only to men and women who intend to enter a University or Teachers' Training College or one of the professions which has a preliminary examination or other educational requirement for admission, or who wish to enter the Civil Service Reconstruction Competition (Clerical Class).

8. *Admission Cards.*—Commanding Officers are to issue admission cards to candidates who are given permission to enter for the examination.

These cards will be distributed without demand to Administrative Authorities abroad and to major war vessels. Other ships and authorities should apply for the number required to D.E.D. (F).

9. *Withdrawal of Admission Card.*—A candidate should normally retain his card until he has completed the whole examination and received a passing certificate, but if he fails twice in any one part of the examination his admission card is to be withdrawn. A new card should be issued only when he can provide further evidence that there is some likelihood of his passing.

10. *Application to Examination Centre.*—A nominated candidate wishing to take a specific examination is to apply through his Commanding Officer to the Supervising Officer of the Examination Centre at which he intends to sit. The following particulars must be sent :—

- (a) Date of examination for which candidate will sit.
- (b) Full name.
- (c) Rank or rating and official number.
- (d) Subjects the candidate will take.

Applications must reach the centres at least a month before the examination takes place.

11. The Supervising Officer, when acknowledging a candidate's application, is to inform him, through his Commanding Officer, of his index number, the times and dates of the papers he is taking, and, in large shore establishments, the precise location of the examination room. The candidate should write his index number (paragraph 12) and the dates of the examination on his admission card in the space provided.

12. *Index Numbers.*—The Admiralty will allot blocks of index numbers to individual examination centres at home, and large blocks to Commanders-in-Chief abroad, who will re-allocate them to examination centres. The same blocks of numbers will be used by the centres at all subsequent examinations.

Supervising Officers are to allot numbers consecutively to individual candidates as applications are received.

On no account is a candidate to write his name on his answer book. He must use instead the index number allotted to him. If he takes the examination a second time he will be given a new index number.

13. *Nominal Roll of Candidates.*—On a special form which will be provided, the Supervising Officer is to enter the name, rank or rating, official number and index number of each candidate. A horizontal line should be drawn through the columns of the subjects which are not being taken. Index numbers on this list are to be consecutive and names will not, therefore, appear in alphabetical order. This form is to be rendered in quadruplicate.

14. On closing the entry list, one copy of this nominal roll is to be sent by the quickest method to D.E.D.(F).

15. A second copy of the nominal roll is to be returned with the worked papers to D.E.D.(F). It must be marked to indicate the number of answer books issued to each candidate, in accordance with the Civil Service Commission's Instructions to Supervising Officers.

16. The third copy is to be sent to D.E.D.(F) under separate cover together with the result postcards (paragraph 31). The fourth is to be retained by the Supervising Officer.

17. *Closing of Entry List.*—At home the entry list for each examination is to be closed one month before the first day of the examination. Abroad the entry list should be closed by Commanders-in-Chief not later than the date specified for the home station and in sufficient time for the nominal rolls to be forwarded to the Admiralty and to reach the Civil Service Commission three weeks before the first day of the examination.

18. *Candidates taking the Examination at centres other than those to which they originally applied.*—Should it become clear that a candidate will not be able to take the examination at the centre to which he originally applied, the Supervising Officer of the centre should be informed. The candidate is then to be marked "Absent" on the nominal roll, but on no account is his index number to be allotted to a new candidate.

If the candidate is likely to be able to sit at another centre, he should at once inform the Supervising Officer of that centre, giving the particulars in paragraph 10 above, and the index number already allotted to him. This number will be retained by him. The names of all transferred candidates should be entered on the nominal roll, after those of the centre's own candidates, in numerical order of index numbers. Transfers necessary for service reasons may be made up to the day before the examination starts.

19. *Candidates released from the Forces.*—Candidates who are eligible to sit for the examination, but are released from the forces before they have satisfied the examiners, may take the examination during the six months following the date of their release. They should get in touch with the nearest Naval authority as soon as possible and request that the necessary arrangements be made. If they have already been given an index number for this particular examination they should say so.

20. Shore authorities receiving an application from a candidate who has been released are to make arrangements for him to take the examination at the Naval examination centre nearest to his home. He should be treated as a normal Naval candidate and, if he has not already received these, given a Naval admission card and index number. The candidate should be warned that he will have to produce his admission card, certificate of release and identity papers when entering the examination room.

21. In some circumstances it may be necessary for Naval authorities to seek the co-operation of the other services and to send a released Naval candidate to one of their centres for examination. Arrangements should be made for him to be given a Naval index number, and for the Supervising Officer to be supplied with all the necessary Naval forms and instructions for the conduct of the examination.

22. *Joint examination centres.*—As the examination is open to all men and women serving in the Royal Navy, Army, Royal Air Force, Merchant Navy and Voluntary Aid Detachments, administrative authorities may, if they wish, in co-operation with the other services, establish joint examination centres. The Supervising Officer should then be supplied with copies of all the relevant Naval, Army and Royal Air Force forms and instructions relating to this examination. Candidates are to have admission cards issued by their own service. Separate nominal rolls are to be drawn up for the candidates of each service, and these and the worked examination papers are to be forwarded through the service channels appropriate to the candidates.

Note.—Index numbers for Army candidates start with the letter A, those for the Royal Air Force with an F, and those for the Royal Navy with an N.

23. *Stationery required for the Examination.*—The following equipment will be required during the examination, and Supervising Officers are to be prepared to provide it, though candidates may bring their own :—pen, pencil, ruler, rubber, ink, drawing instruments for mathematics and science papers (minimum requirement—dividers, compass, protractor, set square) and for geometrical and mechanical drawing, a "T" square and drawing board.

In addition the Supervising Officer must provide standard four figure mathematical tables ("Clark" or "Godfrey and Siddons") and the official answer books. The following will be required:—

Description	Subjects for which required
(a) White answer form (S.401A)	Latin, French, German.
(b) Blue answer book (S.401B) (8 pages) ...	English, Welsh, general knowledge, household science.
(c) Pink answer book (S.401C) (12 pages)	Science, history, geography, social sciences.
(d) Green answer book (S.401D) (12 pages squared).	Mathematics, science, additional mathematics.
(e) Foolscap drawing paper (S.401E) ...	Geometrical and mechanical drawing.

Supervising Officers are to apply for these to D.E.D.(F). They should bear in mind that the initial supply to each candidate is to be on the following scale:—

Subject	Stationery
Additional mathematics	1 green answer book.
English	1 blue answer book.
French	1 white answer form.
Geography	1 pink answer book.
Geometrical and mechanical drawing	3 sheets foolscap drawing paper.
General knowledge	1 blue answer book.
German	1 white answer form.
History	1 pink answer book.
Household sciences	1 blue answer book.
Latin	2 white answer forms.
Mathematics	1 green answer book.
Science	1 green and 1 pink answer book.
Social sciences	1 pink answer book.
Welsh	1 blue answer book.

24. *Examination papers.*—The question papers for this examination will be prepared and printed by the Civil Service Commission and supplied to the Admiralty in bulk two months before the examination. Supervising Officers of examination centres are to apply to D.E.D.(F) as early as possible for the papers they will require.

25. *Dates of Examination.*—The first examination will take place on the 12th, 13th, 14th and 15th February, 1946.

Subsequent examinations will be held at approximately six-monthly intervals, at dates to be announced later.

26. *Time-table of the Examination.*—The time-table for the examination will as follows:—

Day	0930-1230	1400-1700
1st	English, Welsh ...	General knowledge (1400-1600).
2nd	Mathematics ...	Natural sciences, Latin, household science.
3rd	French, German ...	History, geography.
4th	Social sciences ...	Mathematics (additional), geometrical and mechanical drawing.

These times are to be strictly observed, except on foreign stations, where they may, at the discretion of the Commander-in-Chief, be altered to suit local climatic conditions. The Commanders-in-Chief of the other services should be notified of any proposed changes in order that, as far as possible, parallel action may be taken by all three services.

27. *Attendance of Candidates.*—Subject to operational requirements, candidates who have been properly nominated and accepted by an examination centre are to be given all the facilities necessary for them to attend at that centre and take the examination.

28. *Identification of Candidates.*—Supervising Officers at examination centres are to verify the identities of all candidates, that they have admission cards, and that they are using the index numbers allotted to them.

29. *Invigilation.*—The examination is to be invigilated by an officer of the rank of Lieutenant or above, who is to see that the Civil Service Commission rules for the conduct of the examination are scrupulously observed.

30. *Despatch of Candidates' Work.*—At the conclusion of the examination the Supervising Officer is to complete the report required by the Civil Service Commission (see their Instructions to Supervising Officers) and is to forward it with one copy of the nominal roll and all the Naval candidates' answer books, by the quickest available means to the Director, Education Department (F.P.E.), Admiralty, London, S.W.1. These forms and answer books must be received by the Civil Service Commission within six weeks of the last day of the examination. In no circumstances whatever will the Civil Service Commission accept answer books received after that date, and candidates should be warned that the Admiralty do not accept any responsibility if papers are not received within this time limit.

31. *Result Postcards.*—During the course of the examination, every candidate is to be given two special postcards. He should complete these, inserting the subjects taken and his permanent home address, and return them to the Supervising Officer.

32. At the conclusion of the examination these cards and a copy of the Nominal Roll are to be sent in a separate package to D.E.D. (F).

33. *Notification of Results.*—When the results are known, the Admiralty will send one Result Postcard to each candidate's Commanding Officer.

If the candidate has been drafted, the card should be forwarded to his new ship, if it is likely that he is still there. If the candidate is being, or has been, released the card should be sent to his home address.

The other card will be retained in the Admiralty for record purposes.

34. *Certificates.*—Candidates successful in both Parts I and II will, in due course, be awarded certificates. These will be prepared by the Civil Service Commission and distributed by the Admiralty. In order to reduce the chance of damage or loss they will be sent to the home address given by the candidate on his Result Postcard.

Appendix

The following codes have been established for use, when it becomes necessary to communicate by signal.

(a) To order question papers from the Admiralty.

For D.E.D.

F.P.E. Papers (followed by name of centre if necessary).

A (followed by no. of English Papers).

B (followed by no. of Mathematics Papers).

C (followed by no. of General Knowledge Papers).

D (followed by no. of Natural Sciences Papers).

E (followed by no. of Household Sciences Papers).

F (followed by no. of Latin Papers).

G (followed by no. of French Papers).

H (followed by no. of German Papers).

I (followed by no. of History Papers).

J (followed by no. of Geography Papers).

K (followed by no. of Social Sciences Papers).

L (followed by no. of Additional Mathematics Papers).

M (followed by no. of Geometrical and Mechanical Drawing Papers).

N (followed by no. of Welsh Papers).

(b) To order answer books from the Admiralty.

For D.E.D.

F.P.E. Books (followed by name of centre if necessary).

A (followed by no. of White Answer Forms).

B (followed by no. of Blue Answer Books).

C (followed by no. of Pink Answer Books).

D (followed by no. of Green Answer Books).

E (followed by no. of Sheets of Drawing Paper).

(c) When notifying a centre of an intending candidate in accordance with paragraph 9.

F.P.E. Application.

(i) Date of examination.

(ii) Candidate's surname.

(iii) Candidate's Christian names.

(iv) Candidate's rank or rating and official number.

(v) Subjects candidate will offer (use code "a", i.e., A for English, B for Mathematics, etc.).

- (d) When notifying a centre that a candidate is being transferred to it in accordance with paragraph 18.

F.P.E. Transfer.

- (i) Date of examination.
- (ii) Candidate's name.
- (iii) Candidate's examination index number.
- (iv) Subjects candidate will offer.

(A.F.O. 123/45.)

(A.F.O. 1393/45 is cancelled.)

See AFO 3522/46. 5175.—Foreign Languages—Annual Examination 1944—Result

(C.W. 52382/45.—13 Sep. 1945.)

Awards have been approved as shown below, on the result of the annual examination in foreign languages, held in December, 1944 :—

French

*Commander (E) G. Hearson, R.N. Certificate of Merit.
*Mr. C. McManus, Wt. Cook.O. Certificate of Merit.

German

Lieutenant (E) R. M. Inches, R.N. £30, Medal, Certificate of Merit.
*Mr. A. Dicker, Senior Master, R.N. Certificate of Merit.

Spanish

Lieutenant W. M. Harlock, R.N. £15 and Certificate of Merit.

*Not eligible for a prize.

2. The necessary authorities for the payment of the money prizes are being issued. The medal and certificates of merit will be forwarded.

3. The examination was also taken by a number of officers in Prisoner of War Camps in Germany, but the worked scripts have not been received and must now be presumed lost. Repatriated prisoners of war may, however, take the next examination in French, German or Spanish, to be held on 4th December, 1945. They will be considered eligible for prizes if their seniority when they were captured was within the limits laid down in K.R. and A.I. Appendix XII, Part 12, paragraph 1.

4. Two sets of prizes will be awarded as a result of the 1945 annual examination in foreign languages, one for the normal candidates and one for the ex-prisoners of war.

5. But for their capture, some of the officers who were prisoners of War might have been eligible for the Ryder Memorial Prize, (see Appendix to the Navy List page 177). This prize will be awarded to such an officer if his work is of sufficient merit.

See AFO 614/46. 5176.—Cinema Operators—Advancement

(N. 3015/45.—13 Sep. 1945.)

The following amendments are to be made to A.F.O. 5377/44 :—

Cancel second sub-paragraph of paragraph 91 and substitute :—

“Ratings with at least three years' experience in civilian life who are considered to hold technical qualifications which merit accelerated advancement may be recommended to the Admiralty for such advancement under Art. 32, B.R.1066 (Advancement Regulations).”

Paragraph 92 (i). Amend to read as follows :—

- (i) Cinema operators will be allowed to ships and establishments in accordance with the following scale :—

If supplied with 16-mm. projector only—1 Cinema Operator.

If supplied with 35-mm. projector—1 Leading Cinema Operator and 1 Cinema Operator.

(Ships supplied with both 16-mm. and 35-mm. projectors are entitled to one Leading Cinema Operator and one Cinema Operator.)”

This scale allowance will not, however, entitle Commanding Officers to effect advancements as these are governed by depot roster—see paragraph 91, first sub-paragraph, penultimate sentence.

Cinema Operators filling vacancies in complement will be eligible for difference of pay under the conditions laid down in K.R. and A.I., Article 1591

(ii) * * * * *

Paragraph 100, line 2.

Delete “ or their representatives ” and substitute “ or officer detailed by Admiralty.”

At end of paragraph 100 add the following note :—

“ On receipt of a request to test a Wren Cinema Operator for advancement, the C.I.F.O. or I.F.D.O. concerned should at once fix a date for the test which should not be later than six weeks from the date of receipt of the request. Should this be impossible, the request should immediately be forwarded to D.N.T., Admiralty, with full reasons why the test cannot be carried out in the time stated. D.N.T. will then make alternative arrangements.

(C.C.M.O., Lyness, is no longer operating and is not available to carry out further tests.)”

(A.F.O. 5377/44.)

5177.—Films—Exchange of R.N.F.C. Films with R.C. Navy and U.S. Navy

(N. 22458/45.—13 Sep. 1945.)

The following arrangements have been made with the Royal Canadian Navy and U.S. Navy for recreational films belonging to the Royal Naval Film Corporation to be exchanged for R.C.N.F.S. films and U.S. Navy recreational films.

- (1) An exchange can only be effected between two ships in company long enough for the films to be screened and returned.
- (2) An exchange must be on a one-for-one basis and the films must be returned to the exchanging ships.
- (3) Each ship will pay its normal dues to its own organization for every film screened, irrespective of the ownership of the film, i.e., (a) Canadian ships will pay the R.C.N.F.S. whether screening R.N.F.C., R.C.N.F.S., or U.S.N. films, at the normal rates, (b) R.N. ships will pay the R.N.F.C., whether screening R.N.F.C., R.C.N.F.S., or U.S.N. films, in accordance with the rates promulgated in A.F.O. 5580/43, and A.F.O. 4700/45 after 1st October, 1945.
- (4) Forms and Returns are to be completed as though all films belonged to the R.N.F.C., except that a note should be made showing the ownership of the films against the Programme No.
- (5) Each ship is to complete the History Sheet, etc. accompanying films, no matter to what authority the film belongs.
- (6) If a ship is unable to return a borrowed film for any reason, the film is to be returned to a representative of the organization to which the ship belongs, together with particulars of the programmes, numbers and the name of the ship effecting the exchange, i.e., (a) R.N. ships will return U.S.N. and R.C.N.F.S. films to the R.N.F.C. representative, (b) R.C.N. ships will return the R.N.F.C. films to the R.C.N.F.S. representative, (c) U.S.N. ships will return R.N.F.C. films to the U.S.N. film representative.
- (7) R.N.F.C. representatives will issue an R.N.F.C. programme in lieu of the borrowed film to make up the ship's complement of recreational films.
- (8) The representatives of the R.N.F.C., U.S. Navy Film Unit and R.C.N.F.S. will make local arrangements for films received by them under this A.F.O. to be returned to their respective organizations.

(A.F.O.'s 5580/43 and 4700/45.)

5178.—Instructional Films—Newsreels

(N/N.T. 5200/44.—13 Sep. 1945.)

The distribution of newsreels for instructional purposes will cease forthwith.

2. Holders of copies may retain them if required for historical purposes, but spare copies should be returned to the nearest instructional film library for disposal.

(A.F.O. 5377/44.)

(A.F.O. 4363/44 is cancelled.)

5179.—Film Strip "Eastern Sunset" (Serial No. S.A. 340)

(D.P.S. 1117/44/S.C.—13 Sep. 1945.)

The colour film strip "Eastern Sunset" and recorded commentary on two double-sided 12-in. records are now available. They will be distributed without demand to the authorities and film libraries listed below, from whom they can be obtained on temporary loan:—

	Records	Film Strips
Rosyth Library	5	10
Greenock Library	6	12
Liverpool Library	4	8
Chatham Library	10	20
Portsmouth Library	10	20
Devonport Library	10	20
London Library	5	10
Flag Officer-in-Charge, Southampton ...	6	12
Malta Library	5	15
Bombay Library	10	30
Colombo Library	15	45
Trincomalee Library	10	30
Sydney Library	25	75
Alexandria Library	5	15
Flag Officer, G.M.A.	2	6
Commander-in-Chief, S.A.	3	9
Commodore-in-Charge, Durban	1	3
Flag Officer Commanding Royal Indian Navy	10	30

2. The film strip is a review of the Japanese political system and of the aims of Japanese policy up to the time of the Japanese surrender, with a brief examination of the jobs still to be done in the Far East in the light of what is known about the defeated enemy. The running time is approximately 18 minutes.

3. As the life of a film strip is shorter than that of a record, the film strip is being issued to libraries and other authorities on the basis of two film strips per record to libraries at home and three film strips per record to libraries and authorities abroad.

(A.F.O. 2640/45.)

5180.—Use of Special Ensigns by Yacht Clubs

(N.L. 10685/45.—13 Sep. 1945.)

It has been decided that the use of special ensigns by members of yacht clubs under Admiralty warrant, which was discontinued at the outbreak of the war, may now be resumed.

5181.—Active List Officers Permanently Unfit for General Service—Invaliding

(C.W. 15038/45.—13 Sep. 1945.)

In accordance with the policy laid down in A.F.O. 2104/40 Active List Officers who became permanently unfit for general service during the War have been retained on the Active List as long as suitable employment within their medical category could be found for them. Their Lordships have now decided to revert as far as possible to the normal rule under which such officers are invalided from the Royal Navy if they are unfit for general service.

2. Active List officers who are permanently unfit for general service and do not wish to remain on the Active List until the end of the Emergency may apply to the Admiralty to be invalided. As far as possible such requests will be granted and arrangements made for the officer concerned to be surveyed, but it may not always be possible to permit an officer to leave when he applies.

3. Officers who wish to remain on the Active List until the end of the Emergency will be retained as long as suitable employment can be given them.

(A.F.O. 2104/40.)

5182.—Ratings Proceeding on Leave to the United Kingdom—Issue of Certificate

(N. 20498/45.—13 Sep. 1945.)

The Naval Pay and Identity Books (S.43A) of all ratings returning to the United Kingdom from abroad to proceed direct on leave (e.g., men on compassionate leave) are to be brought up to date before leaving the ship or establishment to which they are attached.

2. All such men are to be provided with a signed certificate in duplicate stating:—

(1) Name, rating and official number.

(2) Reason for return to the United Kingdom.

(3) (a) Where the rating is to report on expiration of leave.

(b) The number of days' leave which are to be granted from date of arrival in the United Kingdom, which should be noted by the Naval (or R.A.F.) Authority at the place of landing in the United Kingdom, this authority being requested to issue:—

Combined leave pass and travel warrant from the point of arrival to leave destination and return to the ship or depot mentioned at (a) above.

Ration card for — days.

(4) (a) Where the rating's pay account will be borne on the expiration of leave if not returning to his own ship.

(b) The amount of pay, including Leave Allowance, which may be advanced.

3. The duplicate form should be completed with the rating's leave address and forwarded to his depot by the authority referred to in 3 (b) above.

5183.—Honours and Awards—Royal Netherlands Navy

(H. & A. 674/45.—13 Sep. 1945.)

The King has been graciously pleased to give orders for the following Honorary Appointment and to approve the following award for distinguished service in H. Neth. M.S. "Tromp" on the conclusion of operations with the East Indies Fleet:—

Honorary D.S.O.

Captain Frederick Stam, R. Neth. N.

Distinguished Service Medal

Ordinary Seaman Karel Eduard Akkerman, 24416/D, R. Neth. N.

2. This appointment and this award will not be gazetted.

5184.—Honours and Awards—Royal Netherlands Navy

(H. & A. 813/45.—13 Sep. 1945.)

The King has been graciously pleased to approve the following awards for distinguished service in air operations carried out from H.M.S. "Emperor" leading up to the relief of Greece:—

The Distinguished Service Cross

Lieutenant (A) Herman De Wit, R.Neth.N.

Mention in Despatches

Sub-Lieutenant (A) William Anton Limque, R.Neth.N.

2. These awards will not be gazetted.

***5185.—Campaign Stars**

(H. & A. 770/45—13 Sep. 1945.)

A.F.O. 3115/45 is to be amended as follows:—

In Section III, paragraph 1A (C). *Insert* after sub-section (iii) a new sub-section:

“(iv) Service for Liaison duties in Allied seagoing ships of war.”

(A.F.O. 3115/45.)

***5186.—Clasp to Africa Star denoted by Silver Rose**

(H. & A. 991/45.—13 Sep. 1945.)

The following amendments are to be made to A.F.O. 3115/45:—

Appendix, paragraph 1 (A):

Insert H.M.S. “Destiny”*Delete* H.M.S. “Lariat”

H.M.S. “Mastadonte”

H.M.S. “Samsonia”

H.M.S. “St. Mellons”

(A.F.O. 3115/45.)

***5187.—Honours and Awards—“London Gazette” Supplement of 4th September, 1945**

(H. & A.—13 Sep. 1945.)

CENTRAL CHANCERY OF THE ORDERS OF KNIGHTHOOD,

St. James's Palace, S.W.1.

4th September, 1945.

The KING has been graciously pleased to give orders for the following appointments to the Most Honourable Order of the Bath:—

To be Additional Members of the Military Division of the Third Class or Companions of the said Most Honourable Order

Captain John Hughes-Hallett, D.S.O., R.N.

Rear-Admiral Fitzroy Evelyn Patrick Hutton.

Rear-Admiral Herbert Annesley Packer, C.B.E.

Commodore (First Class) William Rudolph Slayter, D.S.O., D.S.C.

For distinguished services during the European War.

The KING has been graciously pleased, on the occasion of the surrender of Japan, to give orders for the following promotion in the Most Excellent Order of the British Empire, for good services rendered whilst in command of the British Task Force operating in Japanese waters (to be dated the 2nd September, 1945):—

To be an Additional Knight Commander of the Military Division of the said Most Excellent Order

Vice-Admiral Sir Henry Bernard Rawlings, K.C.B., O.B.E.

The KING has been graciously pleased to give orders for the following promotion in, and appointments to, the Most Excellent Order of the British Empire:—

To be Additional Commanders of the Military Division of the said Most Excellent Order

Captain (S) Alan Edes Beall, R.N.

Acting Captain Hugh Christopher Browne, D.S.O., R.N.

Captain (S) John Rowley Cundall, R.N.

Acting Captain Martin James Evans, O.B.E., D.S.C., R.N.

Commodore (First Class) Hugh Webb Faulkner, D.S.O.

Commodore (Second Class) John Robert Sutherland Haines.

Commodore (First Class) Reginald Maurice Jones Hutton, D.S.O.

Captain John Hugh Lewes, D.S.C., R.N.

Captain Peveril Barton Reiby Wallop William-Powlett, D.S.O., R.N.

For distinguished services during the European War.

ADMIRALTY,

Whitehall.

4th September, 1945.

The KING has been graciously pleased to approve the following Awards:—

For gallantry and devotion to duty in H.M. Submarine “Terrapin” during three patrols in Far Eastern waters when fourteen enemy vessels were destroyed. In her last patrol H.M.S. “Terrapin” was severely damaged by depth charges in very shallow water and was forced to surface, but succeeded in eluding the enemy by night:

*Bar to the Distinguished Service Cross*Lieutenant Robert Henry Hugh Brunner, D.S.C., R.N. (Poulton Le Fylde, Lancs.).
Lieutenant (E) Nicholas Travers, D.S.C., R.N. (London).*The Distinguished Service Cross*

Temporary Lieutenant Ralph Allan Nixon, R.N.V.R. (Paisley).

Second Bar to the Distinguished Service Medal

Acting Chief Petty Officer Alfred James Mallett, D.S.M., D/JX.130986 (Loce).

Bar to the Distinguished Service Medal

Temporary Acting Chief Engine Room Artificer William Gerard Hornby, D.S.M., D/MX.55106 (St. Michaels-on-Wyre, Lancs.).

*The Distinguished Service Medal*Acting Temporary Leading Seaman John Carter, C/JX.195492 (Gateshead, Durham).
Acting Temporary Leading Stoker Gordon Henry Clulow, D/KX.86323 (Manchester).
Able Seaman Charles John Knight, P/JX.156627 (Portsmouth).
Able Seaman Albert Phillips, C/SSX.23848 (Leyton, Essex).*Mention in Despatches*

Temporary Petty Officer Telegraphist Simon Thomas Ould Symons, D/JX.156995 (Hebburn-on-Tyne).

Engine Room Artificer Fourth Class Anthony Francis Harry Puffett, D/MX.75385 (Swindon).

Telegraphist George Desmond Cuddon, P/JX.245787 (Fareham, Hants.).

Able Seaman Sidney Charles Welch, C/JX.378878 (Porth, Glamorgan).

For outstanding courage and devotion to duty in H.M.S. “Sikh” when she was disabled by fire from shore batteries during an attack on Tobruk in September, 1942. Although in a hopeless position fire was kept up against the shore batteries until it became necessary to abandon the sinking ship, scuttling charges being fired at the last moment to prevent any possibility of capture by the enemy:

The Distinguished Service Cross

Acting Lieutenant Carl David Scott Smith, R.N.

Bar to the Distinguished Service Medal

Chief Petty Officer Henry William Charles Seymour, D.S.M., C/J.109672.

The Distinguished Service Medal

Chief Engine Room Artificer Trevor Lewis, P/MX.49730.

Electrical Artificer Third Class Francis Edward Collins, D/MX.54866.

Mention in Despatches (Posthumous)

Lieutenant John Ronald David, R.N.

Mention in Despatches

Lieutenant-Commander John Bevan Cox, D.S.C., R.N.

Lieutenant-Commander Ninian Scott-Elliott, D.S.C., R.N.

Chief Yeoman of Signals Frederick John Thatcher, D/J.105346.

Stores Chief Petty Officer John William Evans, C/MX.47516.

Acting Temporary Petty Officer Andrew George Finn, C/SSX.17075.

Able Seaman Hugh Renny McManus, C/JX.147944.

Ordinary Seaman Gordon Jonathan Charles Rope, C/JX.181917.

For courage, resolution and skill in mine-sweeping operations clearing a channel from the Humber to Heligoland and thence along the North German Coast to Cuxhaven, Hamburg and Bremerhaven, during May, 1945:

The Distinguished Service Cross

Lieutenant (N) Thomas Michael Henry Collar, R.N. (Harrow).
Temporary Lieutenant Basil William Clayton Humphreys, R.N.V.R. (Grimsby, Lincs.).

The Distinguished Service Medal

Chief Engineman David McClure Sturgeon Gemmill, LT/KX.109701 (Girvan, Scotland).

Acting Chief Engineman Bertie William Giddings, LT/KX.120577 (Tottenham).
Leading Wireman Frederick Leslie Dando, C/MX.66658 (Tooting).

Able Seaman Albert Colin Austin Rogers, P/J.98867 (Hornbury, Bristol).

Mention in Despatches

Acting Temporary Lieutenant-Commander Ronald Fitzgerald Barton Beesley, R.N.V.R. (Southsea).

Acting Temporary Lieutenant-Commander Raymond Henry Pratt, D.S.C., R.N.V.R. (Grimsby).

Acting Temporary Lieutenant-Commander Ellis Gunn Selby, R.N.V.R. (Nottingham).

Lieutenant Laurence Robson, R.N. (Portsmouth).

Temporary Lieutenant Albert Green, R.N.V.R. (Sheffield).

Temporary Lieutenant Geoffrey Roy Hamblin, R.N.V.R. (Bristol).

Temporary Lieutenant Gordon Thomas Holden, R.N.V.R. (Fishponds, Bristol).

Temporary Lieutenant Thomas Frederick Sullivan, R.N.V.R. (London).

Temporary Lieutenant Douglas Gordon Worth, R.N.V.R. (London).

Temporary Lieutenant Fred Jackson, R.N.V.(W).R. (Grimsby, Lincs.).

Mr. Ernest Albert Duncan Williams, Commissioned Engineer, R.N. (Ret.) (Porchester, Hants.).

Chief Engineman Ronald Henry Bettison, LT/KX.108970 (Grimsby).

Chief Engineman Arthur Cavanagh, LT/KX.114191 (Preston, Lincs.).

Chief Engineman Frank Dalton, LT/KX.109749 (Montrose, Angus).

Chief Engineman John Finlayson Murray, LT/KX.109974 (Nairn, Scotland).

Chief Motor Mechanic Douglas William Vaughan Matcham, B.E.M., P/MX.66146 (Bognor Regis).

Chief Engine Room Artificer Francis Ronson, C/MX.45797 (Garstang, Lincs.).

Engine Room Artificer Second Class Arthur Lloyd, C/X.904EB (Potters Bar).

Engine Room Artificer Third Class John Patrick Jacobs, P/MX.53749 (Portsmouth).

Petty Officer Donald Campbell, LT/X.7255C (Lewis, Stornoway).

Petty Officer Wireman Denis Parnell Ash, C/MX.67286 (Galmpton, Brixham).

Petty Officer Wireman Robert William Brown, C/MX.76573 (Fulham).

Petty Officer Wireman William Kinnear, C/MX.64577 (Kirkintilloch).

Temporary Petty Officer Motor Mechanic Joseph Maurice Reed, P/MX.77127 (Bournemouth).

Engineman George Raymond Taylor, LT/KX.161997 (Market Rasen, Lincs.).

Leading Seaman Edgar Manuel Hillier, LT/JX.216670 (Lamaline, Newfoundland).

Leading Seaman Ronald Clare Lee, LT/JX.280027 (Petty Harbour, Newfoundland).

Leading Seaman Ronald Smith, LT/JX.214793 (Peterhead, Aberdeen).

Leading Seaman Wesley Sparkes, LT/JX.217873 (Saunders Cove, Newfoundland).

Acting Temporary Leading Seaman Walter Henry Claringbould, C/JX.314414 (Wandsworth).

Leading Wireman Victor Ernest Bailey, C/MX.97316 (Chelmsford).

Leading Wireman Robert Alan Batey, C/MX.77989 (Newcastle-on-Tyne).

Leading Wireman William Grahamslaw, C/MX.118943 (Manchester).

Leading Wireman Harold James Henry Keeping, C/MX.64469 (Heath Charnock, Nr. Chorley).

Leading Wireman George Ernest Arthur Mabley, C/MX.76422 (London).

Leading Wireman John James McCarthy, C/MX.97239 (Wapping).

Temporary Leading Wireman Frederick Bridges Collinson, C/MX.119478 (Hull).

Signalman Peter Andrew Barthram, LT/JX.360249 (Nottingham).

Signalman Roy William Disley, C/JX.166417 (Walthamstow).

Coder Norman Stones, C/JX.251575 (Tadcaster, Yorks.).

Stoker Philip Henry Underwood, LT/KX.132088 (Hornerton, London).

For courage and determination while serving in H.M. Minesweepers in clearing a passage into Rotterdam, Yjmuiden and Den Helder, thereby making possible the swift relief of Holland:

The Distinguished Service Cross

Acting Temporary Lieutenant-Commander Norman Wingfield Motson, R.N.V.R. (Totteridge).

The Distinguished Service Medal

Chief Petty Officer Writer Owen George Slater, C/MX.52808 (Gillingham).

Engineman William James Grant, L/KX.112626 (Buckie, Banffs.).

Wireman Hector Walker, C/MX.97417 (Longton, Lincs.). A.F.O. 2397/46

Mention in Despatches

Acting Captain Humfrey Greenwood Hopper, D.S.O., R.N.

Acting Temporary Lieutenant-Commander Ernest Robert Dalby, R.N.R. (Sheerness).

Acting Temporary Lieutenant-Commander Curtis Delmar-Morgan, D.S.C., R.N.V.R. (Hertford Heath).

Chief Motor Mechanic Fourth Class Reginald Deighton Pounder, P/MX.66903 (Leeds).

Second Hand Robert Stanley Kaiser, L/JX.225137 (Hull).

Acting Temporary Yeoman of Signals Douglas Harry Turner, C/LD/X.4739 (Bournemouth).

Engineman James McKenzie Brown, L/KX.130868 (Midlothian).

Engineman George Daniel Gant, L/KX.115090 (Grimsby).

Leading Seaman Joshua Stanley Kelly, L/JX.174479 (Douglas, Isle of Man).

Leading Wireman Sidney Leonard Atkinson, C/MX.77926.

Leading Wireman Cyril William Wallbank, C/MX.76307 (Thornton Heath).

Able Seaman Henry Charles Lancaster, C/JX.206706 (Peckham, S.E.15).

For courage, skill and enterprise in an attack by M.T.B.409 on an enemy coastal convoy off the Istrian Coast during the night of 16th/17th April, 1945:

The Distinguished Service Cross

Temporary Lieutenant Claude Raymond Holloway, R.N.V.R. (Bournemouth).

For outstanding services in coastal operations in the Red Sea which led to the capture of Massawa in April, 1941, and clearing the harbour at Massawa:

The Distinguished Service Cross

Commander Geoffrey Vance Gordon Beamish, R.I.N.

Commander Eric George Guilding Hunt, R.I.N.

Mention in Despatches

Acting Captain William Herbert Sandford, R.N.

Commander Robert Ronald Malachy-Morgan, R.N.

Lieutenant-Commander Arthur Hubert Straight, R.D., R.N.R. (Ret.).

Acting Temporary Lieutenant-Commander Meredith Jackson Paulin, R.N.R.

Sub-Lieutenant W. Little, R.I.N.V.R.

For good services in towing and rescue work after an oil tanker had been torpedoed on 17th February, 1945:

Mention in Despatches

Skipper Lieutenant John Howson, R.N.R.

For good services in the rescue of survivors from a torpedoed Merchant Ship on 14th April, 1945:

Mention in Despatches

Sick Berth Attendant Ernest Hallam, D/MX.93848.

For good services with the 21st Army Group:

Mention in Despatches

Captain (Acting Lieutenant-Colonel) Arthur Owen Powell, R.M.

Captain (Acting Lieutenant-Colonel) Norman Hastings Tailour, R.M.

Captain (Acting Major) Davis Gratiaen Tweed, R.M.

Temporary Captain (Acting Temporary Major) Alfred Laphorne Blake, M.C., R.M.

Temporary Captain (Acting Temporary Major) Robert Perry Burton, R.M.
 Temporary Captain (Acting Temporary Major) Peter Graham Hetherington, R.M.
 Captain Stephen Waddington Eldridge, M.B.E., R.M.
 Lieutenant (Acting Captain) Ernest Robert Bridges, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Herbert Aitken, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Gerald Henry Davies, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Francis Henry Gaske'l, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Arthur Hambleton, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Archibald Blair Jackson, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Philip Kemble Walter Johnson, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Peter Cresswell Jones, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Roger Exley Lloyd, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Guy James O'Connell, R.M.
 Temporary Lieutenant (Acting Temporary Captain) Eric Thomas Patterson, R.M.
 Temporary Lieutenant (Acting Temporary Captain) John Godfrey Rowe, R.M.
 Temporary Lieutenant (Acting Temporary Captain) John Edwin David Watkins, R.M.
 Temporary Lieutenant Michael Mancell Aldworth, R.M.
 Temporary Lieutenant Frederick Raymond Bell, R.M.
 Temporary Lieutenant Derrick Trevor Burrows, R.M.
 Temporary Lieutenant John Arthur George Petty, R.M.
 Temporary Lieutenant David Ruben Ring, R.M.
 Temporary Lieutenant James Taylor, R.M.
 Temporary Lieutenant George Dennis Thomas Warman, R.M.
 Sergeant Major William John Gillian, B.E.M., R.M., Po.22816 (Southsea).
 Colour Sergeant (Acting Temporary Quartermaster Sergeant) Herbert Arthur Fletcher, R.M., Po.X.729 (Portsmouth).
 Sergeant (Temporary) (Acting Temporary Quartermaster Sergeant Instructor) Bernard Francis Conway, R.M., Po.X.2195 (Walsall).
 Corporal (Acting Temporary Company Sergeant Major) Basil McGonigle Aylett, M.M., R.M., Ch.X.1409 (London).
 Sergeant (Acting Temporary Company Sergeant Major) Thomas Trevor Crocker, R.M., Po.X.1448 (Manchester).
 Colour Sergeant (Temporary) (Acting Temporary Company Sergeant Major) John Charles Davies, R.M., Ex.1129 (Warrington, Lancs.).
 Sergeant (Acting Temporary Company Sergeant Major) Percy James Thomas Reading, R.M., Po.X.1696 (Salford).
 Sergeant (Temporary) (Acting Temporary Company Sergeant Major) Ronald Joseph Totman, R.M., Po.X.987 (Burnham, Bucks.).
 Colour Sergeant (Acting Temporary Company Sergeant Major) Enoch Riley Wilson, R.M., Ch.X.23 (Rochester).
 Corporal (Temporary) (Acting Temporary Colour Sergeant) Frederick Chinn, R.M., Po.X.104868 (Bath).
 Colour Sergeant (Temporary) Leslie Frederick Gibbs, R.M., Po.X.100454 (Battley, Yorks.).
 Sergeant (Acting Temporary Colour Sergeant) Eric Louis Alfred Moore, R.M., Ch.X.1045 (Bury St. Edmunds).
 Marine (Acting Temporary Colour Sergeant) Francis Herbert Pinches, R.M., Po.X.2424 (Balcombe, Essex).
 Sergeant (Temporary) Frederick Percy Attwood, R.M., Ex.1930 (Bristol).
 Sergeant (Temporary) John Gilby, R.M., Po.X.104492 (Macclesfield).
 Sergeant (Temporary) George Jesse Maley, R.M., Ply.X.100034 (Hadleigh, Essex).
 Sergeant (Temporary) Charles McDonald, R.M., Ex.5454 (Leith).
 Sergeant (Temporary) Reginald Charles Sheppard, R.M., Ex.1463 (Winchester, Hants.).
 Sergeant (Temporary) William George Titmuss, R.M., Po.X. 106621 (Romford).
 Sergeant (Temporary) Harry Desmond Workman, R.M., Po.X.110111 (Redditch).
 Corporal (Acting Temporary Sergeant) George Leonard Bream, R.M., Ply.X.3273 (Saundersfoot, Pems.).
 Marine (Acting Temporary Sergeant) Ronald Gethin Cunner, R.M., Ply.X.2401 (Aberdare, S. Wales).
 Corporal (Temporary) (Acting Temporary Sergeant) Donald Alexander Gibson, R.M., Po.X.107010 (Glasgow).
 Marine (Acting Temporary Sergeant) Gerald Henry Frank Orchard, R.M., Po.X. 112976 (Aylesbury).

Marine (Acting Temporary Sergeant) John William Pells, R.M., Po.X 2272 (Portsmouth).
 Corporal (Temporary) (Acting Temporary Sergeant) Norman Albert Skeath, R.M., Po.X.105444 (St. Helens, Lancs.).
 Corporal William Henry Barton, R.M., Ch.X.103750 (Bognor Regis).
 Corporal (Temporary) William Wotherspoon Martin, R.M., Po.X.101466 (High Blantyre, Lanarks.).
 Corporal (Temporary) William Simpson McKinlay, R.M., Po.X.106314 (Coventry).
 Corporal (Temporary) Robert Young Parker, R.M., Ply.X.103897 (Hexham, Northumberland).
 Corporal (Temporary) Percival Leslie Wells, R.M., Ch.X.109634 (London).
 Marine (Acting Temporary Corporal) Edward David Johnson, R.M., Ch.X.106988 (Crook, Co. Durham).
 Marine (Acting Temporary Corporal) Dennis James Lofthouse, R.M., Po.X.112167 (St. Albans, Herts.).
 Marine (Acting Temporary Corporal) Richard Lloyd Mason, R.M., Ply.X.3995 (Hucclecote, Glos.).
 Marine (Lance-Corporal) Charles David Dawes, R.M., Ply.X.112571 (Malvern, Wores.).
 Marine (Lance-Corporal) Ronald Thomas Dundon, R.M., Po.X.120752 (Tottenham).
 Marine (Lance-Corporal) Jack Faulkner, R.M., Ch.X.105216 (Stewkley, Nr. Leighton Buzzard).
 Marine (Lance-Corporal) William Frederick Hendy, R.M., Ex.2634 (Highcliffe, Hants.).
 Marine William Godfrey Carter, R.M., Ply.X.101718 (Wotton-under-Edge, Glos.).
 Marine Owens Creeth Elliott, R.M., Ch.X.112031 (Stranraer).
 Marine Harty Frake, R.M., Ch.X.110209 (London).
 Marine Rex George, R.M., Po.X.113288 (Bedhampton, Hants.).
 Marine Alfred Andrew Alexander Inglis, R.M., Po.X.120943 (Alloa, Clackmannanshire).
 Marine Thomas Henry Jennings, R.M., Ply.X.103098 (Jarrow, Co. Durham).
 Marine Leonard Machin, R.M., Po.X.116256 (Sheffield).
 Marine Charles Felix Thompson, R.M., Po.X.4717 (Glasgow).
 Marine Crawford Wilson, R.M., Po.X.113779 (Carlisle).

The following *amendments*, where underlined, are made to previous orders of Honours and Awards under the headings shown:—
 A.F.O. 4707/45.

Bar to the D.S.O.

Ty. S/Lt. (A) Herbert John Pain, D.S.C., R.N.V.R.
 A.F.O. 4856/45.

D.S.M.

L/Sgt. William Watt, 2756301, 1st Regiment Maritime Royal Artillery.
 The Mention in Despatches awarded to L/Sgt. Watt, promulgated in A.F.O. 1825/45, is cancelled, as the D.S.M. has now been awarded for the same services

5188.—Medical Officers—Shortage—Reduction in Medical Standards and Economy in Nursing Personnel—REPORTS

(C.W./M.D.G. 51224/45.—13 Sep. 1945.)

Owing to the acute shortage of doctors in the civilian population it has been deemed advisable to release more doctors from the Navy, thus leaving fewer than the number necessary to maintain the present scale for provision of doctors in the Navy.

2. All Flag Officers, Commanding Officers, Principal Medical Officers and Senior Medical Officers are to examine carefully, once a quarter, the medical staffs in their commands or charge, and report to the Admiralty where and when doctors and nursing staff can be reduced, even at the expense of some deterioration of the normal medical standard.

3. Whenever it is considered that the provision of a motor car for the doctor's sole use (preferably driven by himself), and at his disposal day and night, will enable him to look after two or more small units within 25 miles of each other instead of one, such a car, to operate on detached duty from the appropriate M/T pool, is to be provided from Command resources.

4. "Days-on" and all "Standby duties" are to be reduced to a minimum, if by so doing a doctor can be spared, and the usual civilian practice of sending for a doctor when an emergency arises is to be adopted. The "safety first" principle of keeping doctors doing nothing but waiting about for the accident which may only occur once or twice a year, must be abandoned, and the single-handed doctor must be allowed (after working hours) to use his own discretion as to when he can leave his place of duty.

Note.—In this context there are only two relatively rare conditions when a doctor, literally on the spot, may save a life, i.e. acute bleeding, and stopped breathing, and even in these cases anyone who knows his first aid can generally do as much as a doctor. In other cases the delay of an hour or two will do no harm, especially if a trained nurse is present to relieve pain and keep the patient comfortable until the doctor arrives.

5. The Medical Director-General must use his discretion as to where the reduced number of doctors at his disposal are most economically employed. The practise of refusing to disgorge doctors and nursing staff without relief or writing protests to the Medical Director-General must cease, unless it appears obvious that the appointing authorities have made a mistake. This practice is causing an ever-increasing bulk of unnecessary correspondence. The Medical Director-General has to accept the general responsibility for any falling off in medical standards, and therefore must distribute medical staff in the way which he deems will reduce the decline to a minimum.

6. Flag Officers who can find a change which will provide a more economical distribution of doctors within their Command are authorized to make the alteration at once in anticipation of approval, but to report the alteration to the Admiralty (M.D.G.).

7. Requests from Commanding Officers of ships for individual doctors, or doctors with special attributes, cannot be entertained. Some doctors are not so good as others, but somebody has to accept the "not so good".

8. The Medical Director-General views with anxiety the ever-growing reluctance of many Medical Officers to do anything without a specialist's opinion; this reluctance throws more and more work on the specialists, who are also in woefully short supply and are wanted in the Far East, and many of whom have to be released for educational duties ashore. The practice is growing, as is shown by the increasing numbers of relatively trivial cases among out-patients who are sent up for specialist examinations. This means the hospitals are being overworked unnecessarily. Naval "general practitioners" must accept more responsibility. Principal Medical Officers and Senior Medical Officers must discourage the custom of requiring a specialist's report or opinion, except in those cases which are really obscure or difficult.

9. Medical Officers must also understand that home appointments will in general tend to be of shorter duration, owing to the greater proportion of officers being required in the Far East, and to the necessity of relieving officers after a reasonable period of service in hot, unhealthy climates.

10. Where apposite, the above remarks apply to trained nursing staff, in which there is also an acute shortage. Untrained labour should replace trained nurses whenever and wherever possible.

(A.F.O. 4708/45 is cancelled.)

***5189.—Berthing of Officers, Chief Petty Officers and First-Class Civilian Passengers in Troop Transports**

(C.W./M.O.V./11/45.—13 Sep. 1945.)

Owing to the considerable increase in the proportion of officers of all services and first-class civilian passengers for whom movement in troop transports must be provided, it has become necessary to institute a procedure whereby, in order to employ the maximum overall capacity of all troopships (thereby ensuring the earliest completion of all outstanding sea movement), officers and civilians of junior rank or status, also Warrant Officers in the Army and R.A.F. and Chief Petty Officers in the R.N. may be required to travel in troopdecks instead of as first-class or second-class passengers.

2. The following instructions define the conditions under which Officers and civilians of equivalent status may be embarked in troopdecks. The principle that, owing to the special circumstances now prevailing, it is no longer possible to afford at all times cabin berths and saloon messing for all personnel normally entitled to first-class travel in troop transports, will apply only to Junior Officers and equivalent civilians of the following ranks:—

Royal Navy	Lieutenant and below.
Army	Captain and below.
Royal Air Force	Flight Lieutenant and below.
Merchant Navy	Officers other than:— Masters, Chief Officers, Chief Engineers and Second Engineers of ships 10,000 tons and over, and Masters and Chief Engineers of ships under 10,000 tons.
Civilians	Equivalent grades as laid down by the sponsoring Government department, or Priority Board.

3. As an emergency measure to be adopted until further notice, personnel described in paragraph 2 will be required to travel in troopdecks of troopships when the carrying capacity of a troop transport cannot otherwise be fully utilized and when such personnel would otherwise be denied passage for an indefinite period.

4. The number of officers of each service required to travel troopdeck will be proportionate to the total number of junior officers of the respective service embarked in any one vessel, the definition of the term "junior officer" being as described in paragraph 2 and including civilians.

5. The berthing of officers and civilians as described in troopdecks of troopships will be subject to the following conditions:—

- The allocation of such personnel to troopdeck accommodation will be limited as far as possible to the most junior ranks.
 - Troopdeck sections thus employed will provide for complete segregation of sleeping and messing accommodation from ratings and other ranks, and the sole use of separate ablutions and latrines throughout the voyage. In the case of hammock troopdecks, the normal hammock capacity will not be exceeded.
 - That personnel accommodated in this segregated troopdeck accommodation shall essentially have access to the deck spaces and lounges reserved for first-class passengers.
 - The location of troopdeck sections allotted to officers will be carefully selected in relation to first-class decks, lounges, saloons, etc., so as to avoid as far as possible the necessity of officers continually passing through troopdeck sections occupied by other ranks.
 - Officers and civilians of equivalent rank accommodated in troopdecks will be messed in the first-class saloon with the other first-class passengers to the extent of the ship's capacities for first-class messng. Such personnel who are in excess of this messing capacity will be selected from the most junior ranks and messed in their own troopdeck sections. In the case of ships in which central or cafeteria messing is provided, special arrangements must be made in this respect so as to segregate to the fullest extent possible any such officer or civilian personnel from the other ranks messing in the same hall by means of separate meal services or temporary screening of bays.
 - Whereas the limitation of ships' galleys will necessitate officers and civilians of equivalent rank being messed in troopdecks at other rank scales, Sea Transport in consultation with ships' owners will do everything possible to improve the standard of messing in the provision of crockery, cutlery, napery and such additional uncooked items of food as may be practicable. In addition, mess waiters will be detailed from the other ranks embarked on the ship.
 - No officers or civilians of equivalent status will be accommodated in troopdecks of troopships in which coloured troops are embarked.
6. The foregoing instructions will also apply to Dominions and Allied personnel.

*Cancelled by
AFO 4360/46*

7. When Warrant Officers in the Army and R.A.F. and Chief Petty Officers in the R.N. have to be berthed on troopdecks, similar arrangements as regards segregation will apply.

8. The determination of the necessity to berth first or second-class passengers in troopdecks of troop transports in accordance with the foregoing principles is the responsibility of:—

- (a) In the case of U.K. ports, representatives of the three services and the Ministry of War Transport integrated within the Directorate of Movements, War Office.
- (b) The Overseas Theatre Commander through Movement Control in consultation with Sea Transport representatives at the port of embarkation.

9. All Officers, Warrant Officers in the Army and R.A.F. and Chief Petty Officers in the R.N. and civilians of equivalent status who are required to travel in troopdecks will, prior to embarkation, be handed a document embodying the following statement:—

Extract from Admiralty Fleet Order 5189/45—

"You have been given passage in a troopship under conditions which require to be explained if they are to be appreciated.

As an (Officer)
(Warrant Officer or Chief Petty Officer) normally entitled to (first-class) (second-class) accommodation, you are being accommodated through force of circumstances in the troopdeck of this troopship in accommodation normally allotted to other ranks. The authority for taking this step is contained in the appropriate A.F.O. of which this statement is an extract:—

As a result of demobilization, repatriation and replacement, the present-day demands for movement by sea of officers of all Services and civilians of equivalent status is very greatly in excess of the first-class accommodation available in our trooping fleet. If it were decided to allot sea passages only to such officers, W.Os. and C.P.Os. and their civilian equivalent as could be accommodated as first and second-class passengers, the inevitable result would be a serious delay in the completion of all outstanding sea movement and would, in particular, hold up the repatriation of personnel from overseas theatres. The authorities, in approving this method of travel for you, have therefore been unwillingly obliged to take this decision as an emergency measure, adopted only under specific conditions of segregation and messing which have been carefully defined in the A.F.O. referred to above, and which constitute the maximum possible effort on the part of all concerned to make you as comfortable as possible under all circumstances. It is felt that this word of explanation will enable you more readily to recognize the motives of the authorities and that you will accept conditions as you find them in a spirit of whole-hearted co-operation."

5190.—Promotions from Lower Deck to Permanent Commissions (Executive and Air Branches)

(C.W. 57856/45.—13 Sep. 1945.)

The undermentioned promotions to the rank of Acting Sub-Lieutenant, R.N., have been made, to date 1st September, 1945:—

McQuoid, D., Leading Seaman, C/JX.245661.
Holt, P. W., Leading Seaman, P/JX.246031.
Camplin, R. N., Acting Leading Seaman, P/JX.246040.
Mathys, G. J., Leading Seaman, D/JX.246001.
Cooper, A. G., Leading Seaman, C/JX.292220.
Soffe, J de C, Acting Petty Officer, P/JX.246141.

2. The undermentioned promotion to the rank of Acting Sub-Lieutenant, R.C.N., has been made, to date 1st September, 1945:—

MacFarlane, G. R., C.P.O., R.C.N.4457.

3. The undermentioned promotions to the rank of Acting Sub-Lieutenant (A), R.N., have been made, to date 1st September, 1945:—

Saban, D. R. S., A.A.4.(O), FX.75329.
Adams, F. D., A.A.4 (A.E.), FX.75369.
Gall, J., P.O. (A) Ty., FX.704107.
Radley, K., A/A.A.4, FX.75389.
Newby, G. B., A.F.4 (O), FX.75225.

(A.F.Os. 147/44 and 4836/45.)

5191.—Promotion to Instructor Commander, R.N.—Revised Regulations

See AFO 19/46. (C.W. 50892/45.—13 Sep. 1945.)
" 3240/46.

It has been decided to introduce a system of selective promotion to the rank of Instructor Commander R.N.

2. Accordingly the provisions of Article 293, K.R. and A.I., under which an Instructor Lieutenant-Commander R.N. may be promoted to the rank of Instructor Commander R.N. on attaining eight years seniority, will not in future apply to new entries into the Instructor Branch or to officers transferred to the permanent list of Instructor Officers R.N. after the date of this Order.

3. In respect of the officers referred to in paragraph 2 above promotion to the rank of Instructor Commander R.N. will be made by selection, half-yearly, from Instructor Lieutenant Commanders R.N. of over five years' seniority (with no upper seniority limit).

4. The number of such promotions will be at Their Lordships' discretion but in the initial stages will be equal to the number of Instructor Lieutenant-Commanders R.N. with 8-8½ years' seniority plus the number who would have had this seniority if they had not already been promoted.

5. It will be seen that a strict application of the new scheme will not be possible until the officers to whom it will apply have at least 8 years' seniority as Instructor Lieutenant-Commander R.N.

6. During the interim period however a modified form of this selective promotion system will be applied both for officers already on the permanent list and for the most senior of those referred to in paragraph 2.

7. Accordingly an occasional promotion of an Instructor Lieutenant-Commander R.N. with at least 6 years' seniority, limited to an average of one such promotion a year, will be made, at Their Lordships' discretion, until the revised regulations become fully operative.

8. These changes do not in any way affect the eligibility of existing Instructor Lieutenant-Commanders R.N. for promotion to Instructor Commander R.N. on attaining 8 years' seniority, under Article 293, K.R. and A.I.

9. K.R. and A.I. will be amended in due course.

(K.R. and A.I., Article 293.)

*5192.—Royal Australian Navy—Marriage and Child Allowances—Sterling Payments

(C.W./N. 15474/45.—13 Sep. 1945.)

The following is the text of Commonwealth Navy Order No. 76, dated 27th February, 1945, and is to be read in conjunction with Appendix II, Clause 6, and Appendix IV, Clause 8 of A.F.O. 6307/43:—

"Under a pre-war arrangement with the Treasury, approval was given for payment of personnel serving abroad to be made in sterling subject to the proviso that allotments payable in Australia would be charged at par.

Technically, marriage allowance was a credit to the account of the rating and where, in relatively few instances, there were allotments payable in England, they were paid in sterling at par.

As a war measure, the rates of marriage and child allowances have been considerably increased. The accounts of the other Services (Army and Air), wherever they may be, are kept in Australian currency, and when members are serving abroad, they receive a further credit adjusting part only of their pay to sterling equivalent.

The R.A.N., however, has carried on under the old conditions, and the whole of the credits of personnel serving abroad have been treated as sterling, insofar as payments abroad are concerned, irrespective of whether they were "over the counter" or "by allotment".

An anomalous position arises also in that, when a rating is returned to Australia and leaves his wife and family at home, the whole of his credits are in Australian currency. Should he be allotting considerably more than the minimum requisite allotment, he is faced either with meeting the difference between Australian currency and his current sterling allotment from the residue of his own drawings or with reducing the allotment payable in the United Kingdom to the sterling equivalent of Australian currency.

The question has been raised as to the authority for payment of marriage allowance in sterling as, under the terms of the approval, these were payments to be made direct to the wives or in respect of children (as distinct from credits to the member).

It is realized that hardship may arise if such credits were reduced to Australian equivalent in respect of allotments now in force in the United Kingdom, and special approval has been obtained for continuance of present procedure in respect of existing allotments, subject to the following:—

Increases in child allowances for children born subsequent to 31st March, 1945, or credit of marriage and child allowances in respect of marriages contracted subsequent to 31st March, 1945, will be made in Australian currency. It will thus be necessary to credit the new marriage and child allowances at the sterling equivalent of the Australian rates whilst allotment and allottee both remain abroad.

In dealing with ledger accounts of personnel affected by the above, the attention of accountant officers is drawn to the following:—

- (a) Should an allotment at present being credited with the full rates of marriage and child allowances in sterling remain abroad, but his wife take up residence in Australia, he will continue to be credited with such rates, on the allotment being re-declared payable in Australia.
- (b) An allotment marrying subsequent to the 31st March, 1945, remaining abroad, whose wife subsequently takes up residence in Australia, will be credited with the full rates of marriage and child allowances in sterling from the beginning of the pay period from which the Australian allotment commences.

(It will be seen that these ledger credits abroad at (a) and (b) are in effect made in sterling at par and the identical amounts are paid by way of allotment in Australia in Australian currency. Thus the member will receive no benefit by way of exchange.)

- (c) An allotment in receipt of the reduced sterling rates of marriage and child allowances, returning to Australia, whose wife remains abroad, will be credited with the full approved rates of such allowances in Australian currency from the date of receipt of pay in Australian currency. In these cases, transfer lists should clearly indicate that the rates of marriage and child allowance are to be increased to the Australian currency equivalent from date of the member's return to Australia.
- (d) An allotment, in receipt of full rates of allowances in sterling, returning to Australia and reverting to pay in Australian currency and subsequently going abroad (his wife being still abroad), will be credited with marriage and child allowances at the reduced rates in sterling from the date of receipt of pay in sterling."

NOTE.—The above provisions apply to both officers and ratings.

2. No action on the part of R.N. Supply Officers is required.

(A.F.O. 6307/43.)

5193.—Cancelled

5194.—Shorthand Typists—Examinations for Non-Substantive Rating

(N. 18326/45.—13 Sep. 1945.)

In view of the present shortage of writer ratings qualified as shorthand typists, it has been decided as a temporary measure to give authority to the Commanding Officer of any ship or establishment, not below the rank of Captain, to appoint officers to conduct the examinations for the non-substantive rating in any case where there would be delay or inconvenience in the candidates attending the examination boards appointed by Commanders-in-Chief.

2. It has also been decided that the rank of the senior examining officer shall be not below Lieutenant Commander (S). When an officer (other than a supply officer) qualified in shorthand is borne, he may be one of the examining officers, but not the senior examining officer.

(B.R. 1066, App. IV, No. 126.)

5195.—Wiremen (L.C.)—Professional Examination for Ratings Qualifying as Leading or Petty Officer Wireman (L.C.)

(N. 18669/45.—13 Sep. 1945.)

Arrangements have been made for all electrical ratings engaged in landing craft maintenance, including combined operations personnel, in future to receive their specialized technical training at H.M.S. "Hopetoun".

2. *Advancement to Leading Wireman (L.C.)*.—(a) All wiremen (L.C.) borne by H.M.S. "Copra", including those in Landing Craft Base Mobile Units, who have attained six months' seniority and completed six months' V.G. conduct, when recommended by their Commanding Officers, are to be reported by name to H.M.S. "Copra" (Drafting) and the Commanding Officer, H.M.S. "Hopetoun", for advanced training and examination, prior to being sent to R.N. Barracks, Devonport, for two weeks' disciplinary and leadership course. On successful completion of the examination, Form S.442 is to be forwarded by the Commanding Officer, H.M.S. "Hopetoun" to the Commodore, R.N. Barracks, Devonport (copy to D.C.O.M., Admiralty). Advancement will then be made by the Commodore, R.N. Barracks, Devonport, and the ratings returned to H.M.S. "Hopetoun" for disposal.

(b) Wiremen (L.C.) serving in permanent base staffs (General Service ratings) whose seniority and conduct qualify them as in 2 (a) above, should be drafted at the first opportunity by their Commanding Officers, by direct arrangement with the Commanding Officer, H.M.S. "Hopetoun".

3. *Advancement of Leading Wiremen (L.C.) to Petty Officer Wireman (L.C.)*.—Candidates for advancement to Petty Officer Wireman (L.C.) must have served for 18 months as a Wireman or Leading Wireman (any category), six months of which must have been in the leading rate. They should be sent to H.M.S. "Hopetoun" for course and examination, and thence to R.N. Barracks, Devonport, where they may be confirmed by the Commodore on successful completion of the disciplinary course for P.O. Wireman (L.C.), and then returned to H.M.S. "Hopetoun" for disposal.

4. Ratings serving abroad, when eligible, may continue to be rated Leading Wireman (L.C.) or Acting Petty Officer Wireman (L.C.) by their Commanding Officers, if certified as professionally competent by the Base Electrical Officer.

(A.F.O. 4433/45 is cancelled.)

5196.—Service in Submarines—Further Applications from Reserve Officers Not Required

(C.W. 47687/45.—13 Sep. 1945.)

The number of volunteers for the Submarine Service is now in excess of requirements, and no further applications from Reserve Officers should therefore be forwarded.

(A.F.Os. 3130/43 and 3782/43.)

***5197.—Reinstatement in Civil Employment Act, 1944—Effect of Foreign Service Leave**

(C.W. 35777/45.—13 Sep. 1945.)

As explained in A.F.O. 6148/44, paragraph 3, applications for reinstatement in civil employment must be made in writing not later than the 5th Monday after ceasing whole time employment; it is, however, provided in the Act of Parliament that the period of whole-time employment does not include any period of leave which is given on or pending release, so that the period within which application must be made begins at the beginning of such leave.

2. Foreign service leave in the navy is a part of a man's service even though it may be taken at the end of the man's service and after he has been dispersed. It, therefore, counts as service for the purpose of reinstatement and application for reinstatement should accordingly be made after the end of foreign service leave and not later than the fifth Monday after that day. A.F.O. 6148/44, paragraph 3, is to be amended accordingly by deleting the words "or Foreign Service leave" in line 10 and inserting "Foreign Service Leave" after "Sick Leave" in line 9.

3. Officers and ratings on leaving the service and wishing to claim reinstatement, receive a form in which one of the particulars required is the "date this whole time service ended." Officers or ratings who get foreign service leave after dispersal should put down the last day of their foreign service leave.

4. There is, however, no objection to an officer or rating making arrangements with his employer to resume employment during foreign service leave taken after dispersal.

(A.F.O. 6148/44.)

***5198.—Naval Salvage Money—Distribution**

(D.N.A/S. 714/42.—13 Sep. 1945.)

The following award is now ready for distribution by the Director of Navy Accounts.

Award for the salvage of s.s. "Herisle" by H.M. ships "Hotspur" and "Dauntless" on 15th May, 1942.

2. The amounts due to individuals in the various classes are as follows:—

	£	s.	d.		£	s.	d.
Special Class ...	16	2	9	8th Class ...	1	12	3
2nd Class ...	6	9	0	9th Class ...	1	5	9
3rd Class ...	4	16	10	10th Class ...	0	19	4
4th Class ...	4	0	8	11th Class ...	0	16	2
5th Class ...	3	4	5	12th Class ...	0	9	9
6th Class ...	2	8	5	13th Class ...	0	6	6
7th Class ...	1	18	8				

3. Applications on behalf of those eligible to share should be forwarded to the Director of Navy Accounts (D.N.A.3A) on Form S.540 (in manuscript if no forms are available) by the Commanding Officers of the ships and establishments in which they are now serving.

***5199.—Examination for Warrant Aircraft Officer, May, 1945—Results**

(C.W. 59139/45.—13 Sep. 1945.)

The following statement shows the results of the examination for Warrant Aircraft Officer held in May, 1945. The first eight candidates on the list were successful at the examination and are to be discharged to R.N. Barracks, Lee-on-Solent, to join by 1st October, 1945.

2. The advancement of candidates to Acting Warrant rank will be subject to their being physically fit and to their conduct and ability continuing to be satisfactory. Attention is specially drawn to K.R. & A.L., Articles 306 and 311c (5) and (6).

3. The promotion of candidates will be issued in a C.W. Daily List of Appointments, which will be the authority for promotion and will contain the date of appointment. Normally this will be issued after receipt of reports of arrival in Depot and of medical fitness and recommendation. Candidates should not incur expenses in anticipation of promotion.

4. Commanding Officers are requested to forward reports of medical fitness and recommendation in respect of the successful candidates forthwith and to take every step to ensure that they reach R.N. Barracks, Lee-on-Solent, by 1st October, 1945. The arrival of these ratings at Lee is to be reported by signal.

MARKS

Name and Rating	Official Number	Where Serving	Provisional Date for Promotion	F.A.A. Procedure (Total 100)	Airframes (Total 100)	Engines (Total 100)	Airframes Special (Total 100)	Paper 2 L/O (Total 100)	Paper 3 L/O (Total 100)	Paper 2L (Total 100)	Paper 3L (Total 100)	Total (300)
Jolliffe, Ronald Frank, C.A.A. (L).	C/MX 47687	St. Merryn	1st October 1945	50.3	—	—	—	—	—	68	80	204.3
Knell, Stanley Gordon, A.A. (L/O) 2nd. Cl.	FAA/FX 704866	Newcastle-under-Lyme.	1st October 1945	45.0	—	—	—	84.10	70.5	—	—	201.1
Rouse, Reginald Ernest, Act. C.A.A. (L/O) Typ.	P/MX 48005	Worthy-Down.	1st October 1945	50.5	—	—	—	81.0	68	—	—	200.1
Kealey, Bryan Rodney, C.P.O. A/F (A) (ex Shipwright)	FAA/FX 608682 (MX 46736)	Newcastle-under-Lyme	1st October 1945	47.0	72	—	78.0	—	—	—	—	107.9
Davey, Cecil James, A.A. 3. (A/E)	FX 75170	Arbroath	1st October 1945	67	77	50	—	—	—	—	75.3	194
Harwood, Sydney Jewell, A/C.A.A. (L).	F. 55184	Newcastle-under-Lyme.	1st October 1945	40	—	—	—	—	—	—	—	173.3
Myers, William Leonard, A.A. 3. A/E.	FX 75607	719 Squadron	1st October 1945	51	56.8	62	—	—	—	—	—	109.8
Moore, Francis John Edward, A.A. 3 A/E.	FAA/FX 75946	Arbroath	1st October 1945	63	61.5	41	—	—	—	—	—	165.5
Unsuccessful Candidates.												
Examination No. Allotted.	105			35	—	—	—	57.5	60.5	—	—	162
	109			46.6	52	40	—	—	—	—	—	138.6
	101			34	54	34	—	—	—	—	—	122

***5200.—Warrant Officers—Full Pay on Promotion from Temporary Warrant Rank to Permanent Warrant Rank**

(C.W. 10852/44.—13 Sep. 1945.)

Permanent Warrant Officers, who previously served as temporary Warrant Officers do not count their former service in the temporary rank towards increases of full pay in the permanent rank, *i.e.*, their rate of full pay on being promoted to permanent Warrant rank is the minimum rate of pay on the Warrant Officers' scale of full pay and only service in the permanent rank counts towards increases of full pay.

2. In cases, however, where a temporary Warrant Officer has received an increment of pay whilst serving in that rank, he may, on being promoted to permanent Warrant rank, retain on a mark-time basis, the rate of full pay in issue on the day preceding the date of his promotion to permanent rank until he is enabled to pass beyond that rate of full pay by length of service as a permanent Warrant Officer.

Section 3.—G., T., N., E., etc., & STORES; HULL, EQUIPMENT & FITTINGS

5201.—Aircraft—Guns—General—Kits, Bore-sighting (U.S. Pattern)

(A.S./A.D.P. 1457/43.—13 Sep. 1945.)

Kits, bore-sighting, Mark I, of American design (U.S. Stock No. 2—B—2444), have been introduced into Naval service for aligning 0.50-in. and 0.30-in. Browning guns and 20-mm. Hispano guns.

2. The 20-mm. Hispano breech adaptor (S.P. 0375) included in the bore-sighting kit has been found unsuitable, and in order that the kit may be used for aligning 20-mm. Hispano guns a new adaptor has been introduced and is to be manufactured locally in accordance with A.F.O. Diagram 340/45. This adaptor is to be used for breech-sighting in conjunction with the angle extension (S.P. 0370) and eye-piece (S.P. 0369).

3. Muzzle adaptors are not to be used for aligning any types of gun as they have been found to give inaccurate results.

4. Instructions for the use of the kit are contained in the boxes and these instructions, except for those affected by paragraphs 2 and 3 above, are to be adhered to.

5. Kits will be allowed to squadrons, H.M. ships and R.N. stations, etc., as follows:—

H.M. Aircraft Carriers—
1 per ship.

R.N. Air Stations and Repair Yards—

"v", as shown in advance extracts of C.B.(R)4252/42 ... 1

"y", as shown in advance extracts of C.B.(R)4252/42 ... 1

Squadron mobile equipment of Avenger, Corsair, Hellcat and Wildcat operational squadrons—

Up to 10 aircraft 1

Over 10 aircraft 2

6. Demands to this scale should be rendered on the appropriate R.N. armament depot.

7. Consequent on the introduction of the bore-sighting kit the allowances of instruments, gun aligning, type "C", Ref. 1E/5157, adaptors, 0.50-in., Ref. 1E/5209 and adaptors, 1E/5215, as squadron mobile equipment have been revised as under:—

	Instruments 1E/5157	Adaptors 1E/5209	Adaptors 1E/5215
<i>Avenger Squadrons—</i>			
Up to 20 aircraft	2	2	1
Over 20 aircraft	3	3	2
<i>Corsair, Hellcat and Wildcat Squadrons—</i>			
Up to 17 aircraft	2	2	—
17 to 23 aircraft	3	3	—
Over 23 aircraft	4	4	—

8. Instruments, gun aligning, type "C", Ref. 1E/5157, and adaptors, 20-mm. Ref. 1E/5206, will continue to be issued for aircraft of British origin carrying Hispano 20-mm. guns, and no issue of bore-sighting kits of U.S. pattern will be made to squadrons of such aircraft. The allowance in paragraph 5 above will, however, apply to aircraft of American origin which are fitted with 20-mm. guns (e.g., some Hellcat N.F.), and in these cases a supplementary allowance of adaptors, Ref. 1E/5206, will be made to squadrons. The new adaptor for the U.S. pattern kit mentioned in paragraph 2 above will not be supplied in kits issued by R.N. armament depots.

9. On receipt of bore-sighting kits, squadrons should return all instruments and adaptors held surplus to the allowances in paragraph 7 above.

10. R.N. armament depots should ensure that the instructions for use are contained in the box before issue.

(A.F.O. 2707/45 is cancelled.)

5202.—Aircraft—Guns—0.50-in. Browning in Wildcat Aircraft—Gun Cocking Tool—Introduction

(G. 010445/45.—13 Sep. 1945.)

To simplify the loading and unloading of Browning 0.50-in. guns mounted in Wildcat aircraft, a tool has been designed so that the guns can be cocked from the gun bay when the wings are folded. This tool is to be manufactured locally in accordance with A.F.O. Diagram 341/45.

2. The method of using the tool is as follows:—

(a) Place the tube (Item 1 in A.F.O. Diagram 341/45) over the buffer tube of the gun back plate so that the pulley (Item 4) is on the same side as the No. 3 loading mechanism.

(b) Rotate the retainer (Item 6) in relation to the eye (Item 7) so that the hooked end of the retainer is moved away from the eye.

(c) Fit the eye (Item 7) over the end of the link (which connects the gun charging cables to the bell crank lever of the No. 3 loading mechanism) so that the hook of the retainer is pointing away from the gun.

(d) Cock the gun by pulling on the wooden handle attached to the end of the cable. The initial pull will cause the retainer stop (Item 9) to move into a horizontal position which, in turn, will rotate the retainer (Item 6) so that the forked end of the latter will engage with the link (referred to in (c) above) and prevent the eye (Item 7) from slipping off the link.

Note.—The cocking tool is fully interchangeable for all guns mounted in Wildcat aircraft irrespective of whether the No. 3 loading mechanism is fitted to the left or right side of the gun. In some instances, however, it will be found necessary to cross the cable before a pull can be applied to cock the gun.

(A.F.O. 3619/45.)

5203.—Aircraft—Guns—20-mm. Hispano Guns in Firefly Aircraft—Removal of Safety Catches from Pneumatic Firing Mechanism when Mark VIII R.P. is Fitted

(A.D.P. 4129/45.—13 Sep. 1945.)

Where Firefly aircraft are fitted with Mark VIII R.P. installations the access panel to the 20-mm. Hispano pneumatic firing mechanism safety catches are completely covered, thereby preventing any manipulation of the safety catches from outside the gun bay.

2. Owing to the difficulty of manipulation from inside the gun bay it has been decided to incorporate two wander lead plugs into the electrical side of the gun firing circuit which, when disconnected, will break the electric circuit to the gun firing valves in the gun bay, so preventing the guns from being fired by accidental operation of the firing button.

The wander lead plugs will be housed on the underside of the fuselage, in both wheel wells.

Safety catches are not to be removed from guns until Mod. 419 is incorporated.

3. To prevent the possibility of the aircraft being flown with the firing mechanism safety catches set at "Safe" when fitted with Mark VIII R.P. the safety catches are to be removed at the earliest opportunity as follows:—

- (i) Remove the cam housing complete with guide rods and springs.
- (ii) Remove the index plate.
- (iii) Remove the safety catch lever axis pin.
- (iv) Remove the safety catch lever complete with plunger and spring.
- (v) Remove the safety catch lever plunger.
- (vi) Assemble the index plate and cam housing complete with guide rods and springs.

4. Components which have been removed are to be returned to the nearest R.N. armament depot, quoting this Order. Depots should retain the parts and, in the event of the incomplete mechanisms being returned, should utilize them as necessary. The components should be held on depot charge as sets.

5204.—Aircraft—Pyrotechnics—Cartridges Electric Actuating Flotation Gear, Marks II and III—Replacement

(G. 7467/45.—13 Sep. 1945.)

Cartridges, Mark II, Stores Reference 120/350, and Mark III, Stores Reference 120/444, used with Types "F" and "H" operating heads respectively, are to be changed at 60-day intervals, i.e. at every alternate dinghy inspection.

2. Removed cartridges are to be dumped.

5205.—Aircraft—Pyrotechnics—Signals, Distress, Two Star Red, Mark IV—Introduction

(G. 014844/45.—13 Sep. 1945.)

Signals, distress, two star, red, Mark IV, have been introduced and will in due course supersede Mark III signals.

2. In appearance and method of functioning Mark IV signals are identical with Mark III (A.P. 1661E, Vol. I, Sect. 5, Chap. 3), but incorporate a slip disc beneath the screw cap which enables the signals to be sealed more easily and facilitates the removal of the screw cap when required for use.

3. The signals will be packed either:—

- (i) 288 per box B.485, Mark I, or
- (ii) 7 per cylinder No. 473, Mark I, 12 cylinders per box B.560, Mark I.

Signals packed in cylinders No. 473, Mark I, and boxes B.560, Mark I, are for issue to Far Eastern theatres only as the packages have been specially designed and tropicalized.

4. Demands for Mark IV signals are not to be rendered to armament depots. Issues will be made as stocks become available.

(A.P. 1661E, Vol. I.)

5206.—Aircraft—Screwdrivers, Flexible, for Gyro Gunsights

(N.S. 20146/45.—13 Sep. 1945.)

A flexible screwdriver, to which Pattern number B11/8085 has been allocated, has been introduced for reaching positions inaccessible to a normal screwdriver, e.g., for fixed graticule harmonization in Firefly aircraft fitted with Gyro Gunsights, Marks IIC and D.

2. Purchase has been arranged from The Fairey Aviation Co., Ltd. (Contract 301/22/8584, dated 11th July, 1945) of the following quantities and deliveries are due to commence in one month's time:—

Chatham	Severn Area	Mersey Area	Carfin	West Riding Area
50	200	150	50	50

3. Shipment will be arranged from Severn Area as follows:—

Malta	Alexandria	Ceylon
20	20	100

4. The screwdriver will be allowed in accordance with the following scales:—

Pattern No.	Description	Denomination	Aircraft carriers	R.N. Air Stations		R.N. aircraft repair yards	R.N. aircraft maintenance yards	Repair ships			M.O.N.A.B.	S.S.U.
				Main				" Unicorn "	" Maintenance "	" Component "		
				Cl.A	Cl.B							
B.11/8085	Screwdriver, flexible.	No	(B.R. 378) Requirements under columns 10-20 inclusive, to be obtained from main store as necessary.	(B.R. 377) 4 2		6	4	3	3	3	1	1

5. Services concerned should forward demands to their storing yards or depots. Issues to new services will be made with the initial outfits of stores.

6. The Aircraft Stores Establishments and the Authorized List of Naval Stores will be amended.

5207.—Ammunition—Fuzes, Primers and Tubes—Primers No. 26, Mark II, R.L. Manufacture, Lot No. 90 filled B.R. 12/41—Withdrawal

(A.S./G.4055/45/B.89.—13 Sep. 1945.)

All primers No. 26, Mark II, R.L. manufacture, Lot No. 90 filled B.R. 12/41, are to be withdrawn from the service.

These primers may be found in Q.F. 12-pdr. or Q.F. 4.7-in., Mark V, gun cartridges.

2. Commanding officers of H.M. ships are to arrange for ammunition on board to be examined and for cartridges containing these primers to be landed at the nearest naval armament depot together with any loose primers and replacements demanded.

3. These primers are regarded as coming under category (b), C.A.F.O. 991/42—not dangerous—but may have a percentage of failures to function.

4. D.E.M.S. staff officers are to arrange for similar action to be taken with regard to merchant ships.

5. R.N. armament depots should arrange for stocks to be examined, and any cartridges containing these primers should be re-primed. Displaced primers, together with any loose stocks, should be set aside in store and the quantity reported to D.A.S. (B.89) Bath, on 1st November, 1945.

(C.A.F.O. 991/42.)

5208.—Miscellaneous A.A.D. Weapons—Heads, Rocket Flare, 2-in., No. 1, Mark II, Lot 116, Filled KBY 10/44—Withdrawal

(A.S. 6187/45.—13 Sep. 1945.)

Consequent upon reports of failures, it has been decided to withdraw all stocks of Heads, Rocket Flare, 2-in., No. 1, Mark II, Lot 166, filled KBY 10/44 from service and to dispose of by dumping singly in deep water. Before dumping the ballistic cap must first be removed. Ships that cannot dump in deep water are to return to the nearest R.N. armament depot for dumping with any held in store. Replenishments are to be demanded as necessary.

5209.—Anti-Ship Fire Control—Director Control Towers—Duration of Contact of Firing Switch to Ensure Firing of Tubes

King George "V" Class, 6-in. and 5.25-in. Cruisers, Destroyers

(G. 03123/45.—13 Sep. 1945.)

The cause of missfires in tubes has been under investigation.

2. It has been found that one particular cause is the fact that when rolling very heavily in certain classes of ship the tubes may not fire in the short time interval during which contact of the firing switch is made.

3. The various factors involved are :—

- (i) The time interval required to fire a tube.
- (ii) The time interval by which various guns of a salvo may be "delayed."
- (iii) The number of guns in a salvo. (This effects the voltage and current to each tube.)
- (iv) The length of arc of contact of the firing switch.
- (v) The velocity with which the ship passes through the vertical.

4. Increasing the contact arc does not imply a reduction in accuracy as the contact is not started until the right moment. The possibility does exist of a difference between the two guns of a salvo fired with virtually no motion on the ship, if the interceptor of one gun is made after the trigger has been pressed. This presupposes that the firing of the earlier guns has started the ship rolling slowly and the last gun to catch up the salvo will be fired at a different elevation. Though statistically possible, it is not considered sufficiently probable, to be of importance.

5. For ships fitted with sights earlier than the P sight, the question does not arise as the maintaining resistances in the relay circuit ensure that current continues to flow for sufficiently long to cover all eventualities.

6. *Adjustment of "P" Sights by Ship's Staff.*—The arc of contact of firing switches should be adjusted as in the table below. The method of adjustment is described in B.R. 912(14), Director Handbook, P sight, on page 34 as amended by A.F.O. P. 739/43.

Class of Ship.	Present Arc of Contact	New Arc of Contact
"King George V"	3 mins.	3 mins no change.
6-in. Cruisers	8 mins.	14 mins.
5.25-in. Cruisers	3 mins.	7 mins.
Destroyers	8 mins.	8 mins. no change.

(A.F.O. P. 739/43.)

(B.R. 912(14).)

5210.—Guns, Gun Mountings and Director Firing Gear—Surplus to Requirements—Disposal—REPORTS

All Dockyards, Gun Mounting and Armanent Depots at Home and Abroad. P.E.R.O.s and F.O.G.M.O's

(G. 026289/44.—13 Sep. 1945.)

Approval has been given to bring to produce certain types of guns, gunmountings and associated Director Firing Gear for which no future services can be foreseen. Details are given in the schedule appended.

2. It is necessary as a temporary measure to maintain a small reserve of certain types. In some instances although obsolete mountings are to be disposed of, some or all of the corresponding guns are to be retained. Particular attention is directed to the remarks in the schedule to this effect.

3. Provided the number to be retained is adhered to, gunmountings with shields if fitted, of the types indicated when subsequently removed from H.M. Ships or D.E.M.S., etc., and received into store should be brought to produce.

4. Disposal orders for guns and related stores will be issued separately to R.N. Armanent depots direct. Where such orders have already been issued they have been summarized in the schedule.

5. Separate instructions are being issued regarding Endless Chain Hoists, H.A. and L.A. Directors, and all types of Director Receivers. Receivers should be removed from mountings brought to produce and placed in store at the nearest Gun Mounting depot or store, particulars being reported to Admiralty on Form D. 742A.

6. Special reports of disposal of mountings are not required but Form D. 742 should, however, be rendered in the normal way, particular attention being paid to the correctness of the Reg. Nos. of the mountings reported.

7. Ball and Roller Bearings and any other parts which may be considered by the local officers to be of value, should be retained. Particulars of such items retained in store should be reported on Form D. 742A.

8. Guns and Gun Mountings of U.S. and Foreign manufacture, should not be disposed of without reference to the Admiralty, unless specific instructions have been given. This includes stores of ex-enemy origin.

9. Guns, and Gun Mountings not listed herein, which may be beyond economical repair, should be reported to the Admiralty for disposal instructions.

10. *Spare Parts.*—(a) *Guns.*—All tools and ancillaries for guns will be dealt with in separate detailed instructions.

(b) *Gun Mountings.*—All spare parts for mountings being scrapped can also be disposed of except as in paragraph 7. Any useful tools may be retained as desired.

11. Gun Sighting telescopes and any other optical gear should be retained in store.

12. Gun Mounting items retained in accordance with paragraphs 9 and 10, should be reported on Forms D. 742A.

13. Guns, Gun Mountings, etc., ordered for disposal are not to be returned to United Kingdom for scrapping.

14. Scrap metal and other arisings, not specifically dealt with above, from equipments scrapped in accordance with this Order, should be disposed of in the normal way.

Item	Gun	Gun Mounting	Remarks
1	B.L., 7.5-in., Mark VI	7.5-in., C.P.V. ...	<i>Mountings</i> All to be scrapped. <i>Guns</i> Separate disposal orders will be issued.
2	B.L., 6-in., Mark XII-XIIB.	6-in., P. IX	<i>Mountings</i> All to be scrapped. <i>Guns</i> All to be retained.
3	B.L., 6-in., Mark VII	6-in., P. VIII ...	<i>Mountings</i> Coventry to retain eight mountings. Remainder to be scrapped. <i>Guns</i> Separate orders will be issued.

Item	Gun	Gun Mounting	Remarks
4	B.L., 6-in., Mark XI-XI*.	6-in., P. VI	<i>Mountings</i> Coventry to retain one mounting. Remainder to be scrapped. <i>Guns</i> Separate orders will be issued.
5	B.L., 6-in., Mark XI-XI*.	6-in., P.V.	<i>Mountings</i> All gun mountings to be scrapped. <i>Guns</i> See Item 4.
6	B.L., 6-in., Mark VII	6-in., P. IV	<i>Mountings</i> Coventry to retain five mountings. Remainder to be scrapped. <i>Guns</i> See Item 3.
7	B.L., 6-in., Mark VII	6-in., P. III	<i>Mountings</i> Sydney to retain one in No. complete mounting. Bombay to retain two in No. complete mountings. Coventry to retain three in No. complete mountings. Remainder to be scrapped. <i>Guns</i> See Item 3.
8	B.L., 5.5-in., Mark I	5.5-in., P. I, I*, I**...	<i>Mountings</i> All gun mountings to be scrapped. <i>Guns</i> Orders to scrap already issued to R.N.A. depots.
9	B.L., 5.5-in., Mark I	5.5-in., C.P. II	<i>Mountings</i> All gun mountings to be scrapped. <i>Guns</i> See Item 8.
10	Q.F., 4.7-in., Mark V*	4.7-in., P. V	<i>Mountings</i> Coventry to retain one complete mounting. Remainder to be scrapped. <i>Guns</i> Orders already issued to R.N.A. depots to scrap except for 12 guns in U.K., one at Bombay, and one at Sydney.
11	Q.F., 4.7-in., Mark V*	4.7-in., P. X	<i>Mountings</i> Coventry to retain one complete mounting. Parkhead to retain one complete mounting. Remainder to be scrapped. <i>Guns</i> See Item 10.

Item	Gun	Gun Mounting	Remarks
12	Q.F., 4.7-in., Mark X*	4.7-in., C.P. (S) XV...	<i>Mountings</i> All mountings should be scrapped. <i>Guns</i> Already scrapped.
13	B.L., 4-in., Mark VII VII***.	4-in., P. II and II* ...	<i>Mountings</i> Coventry to retain three complete mountings. Remainder to be scrapped. <i>Guns</i> Orders already issued to R.N.A. depots to scrap except for 15 guns in U.K., one at Alexandria, one at Durban and one at Sydney.
14	B.L., 4-in., Mark VIII	4-in., P. III, P. III* and P. III**.	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> Orders already issued to R.N.A. depots to scrap except for three guns in U.K., one at Malta, one at Bombay, and one at Sydney.
15	B.L., 4-in., Mark VII-VII***.	4-in., P. IV*, IV** ...	<i>Mountings</i> Coventry to retain two complete mountings. Remainder to be scrapped. <i>Guns</i> See Item 13.
16	B.L., 4-in., Mark VIII	4-in., P.V.	<i>Mountings</i> Coventry to retain one complete mounting. Remainder to be scrapped. <i>Guns</i> Orders already issued to R.N.A. depots to scrap except for three guns in the United Kingdom.
17	B.L., 4-in., Mark VII-VII***.	4-in., P. VI	<i>Mountings</i> Coventry to retain one complete mounting. Alexandria to retain one complete mounting. Remainder to be scrapped. <i>Guns</i> See Item 13.
18	B.L., 4-in., Mark VIII	4-in., P. VII	<i>Mountings</i> Malta to retain one complete mounting. Remainder to be scrapped. <i>Guns</i> See Item 14.
19	B.L., 4-in., Mark VII-VII***.	4-in., P. VIII	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> See Item 13.

Item	Gun	Gun Mounting	Remarks
20	Q.F., 4.7-in., Mark VIII.	4.7-in., H.A. XII ...	<p><i>Mountings</i> All in store to be scrapped except one at each of Portsmouth, Durban and Simonstown. Mountings in ships are to be scrapped as ships in which they are mounted are scrapped or rearmed.</p> <p><i>Guns</i> Instructions have already been given to R.N.A. depots to scrap all gun bodies in store except 4 at home and 7 abroad (6 Colombo, 1 Sydney). Mechanisms to be recovered as spares.</p>
21	Q.F., 4-in., Mark V, L.A.	4-in., P. X ...	<p><i>Mountings</i> All mountings to be scrapped.</p> <p><i>Guns</i> Separate instructions have been given to R.N.A. depots as to scrapping gun bodies which have fired separate loading ammunition, the mechanisms being recovered for use as spares.</p>
22	Q.F., 4-in., Mark VII	4-in., P. XIII ...	<p><i>Mountings</i> All mountings to be scrapped.</p> <p><i>Guns</i> Already scrapped.</p>
23	B.L., 4-in., Mark IX-IX***.	4-in., Mark I, Triple ...	<p><i>Mountings</i> All mountings to be scrapped.</p> <p><i>Guns</i> All to be retained.</p>
24	Q.F., 4-in., Mark V, L.A.	4-in., C.P. II ...	<p><i>Mountings</i> Coventry to retain 3 complete mountings. Rosyth to retain 1 complete mounting. Devonport to retain 1 complete mounting. Portsmouth to retain 1 complete mounting. Chatham to retain 1 complete mounting. Remainder to be scrapped.</p> <p><i>Guns</i> See Item 20.</p>
25	Q.F., 4-in., Mark IV ...	4-in., C.P. III... ..	<p><i>Mountings</i> Coventry to retain eight complete mountings. Remainder to be scrapped.</p> <p><i>Guns</i> All to be retained.</p>
26	Q.F., 3-in., Mark I-IV	3-in. H.A. All Marks	<p><i>Mountings</i> All gun mountings to be scrapped.</p>

Item	Gun	Gun Mounting	Remarks
			<p><i>Guns</i> All 3-in., Mark I to be kept. Separate instructions have already been issued to R.N.A. depots to scrap all Mark II, III, and IV guns in store except the following :— 13. Mark II; 4. Mark III and 10. Mark IV.</p>
27	Q.F., 12-pdr., Mark V* and II*.	12-pdr., H.A. VIII ... 12-pdr., H.A. VIII*.	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> Separate disposal instructions will be issued.</p>
28	Q.F., 6-pdr., 6-cwt., II	6-pdr., Mark II (ex Tank).	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> All to be scrapped. (This cancels instructions in A.S. 7240/43/A.35 of 2 Sep. 1943 to certain N.A. depots only.)</p>
29	Q.F., 6-pdr. Hotchkiss	6-pdr., Non-recoil ...	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> All to be retained.</p>
30	Q.F., 6-pdr., Hotchkiss	6-pdr., VI	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> See Item 29.</p>
31	Q.F., 3-pdr., Hotchkiss	3-pdr., H.A. IV ...	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> All to be retained.</p>
32	Q.F., 3-pdr., Hotchkiss	3-pdr., Mark VI ...	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> See Item 31.</p>
33	Q.F., 3-pdr., Hotchkiss	3-pdr., Mark V ...	<p><i>Mountings</i> Coventry to retain 10 complete mountings, remainder to be scrapped.</p> <p><i>Guns</i> See Item 31.</p>
34	Q.F., 2-pdr., Mark II*	2-pdr., Pom Pom, H.A. II.	<p><i>Mountings</i> All gun mountings to be scrapped.</p> <p><i>Guns</i> Separate orders already issued to R.N.A. depots to scrap.</p>
35	Q.F., 2-pdr., Mark II*C	2-pdr., H.A. II*C ...	<p><i>Mountings</i> Coventry to retain 3 complete mountings.</p>

Item	Gun	Gun Mounting	Remarks
			Devonport to retain 1 complete mounting. Portsmouth to retain 1 complete mounting. Chatham to retain 1 complete mounting. Remainder to be scrapped.
			<i>Guns</i> Separate instructions already issued to R.N.A. depots to scrap with the exception of guns to match mountings retained in the United Kingdom and spare guns at Bombay, Colombo, Malta and Durban.
36	Q.F., 2-pdr., Mark XI and XII.	2-pdr., IX	<i>Mountings</i> Devonport to retain 1 complete mounting. Chatham to retain 1 complete mounting. Portsmouth to retain 1 complete mounting. Alexandria to retain 2 complete mountings. Bombay to retain 3 complete mountings. Remainder to be scrapped. <i>Guns</i> Separate instructions will be issued.
37	Q.F., 2-pdr., Mark XIV	2-pdr., Mark XIV ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> Orders to scrap already issued in A.F.O. 5655/44.
38	20-mm. Oerlikon, Mark II and later.	20-mm. (Oerlikon, Mark I).	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> All to be retained.
39	20-mm. Oerlikon, Mark II and later.	20-mm. (Oerlikon, Mark IX).	<i>Mountings</i> Coventry to retain 25 complete mountings. Parkhead to retain 10 complete mountings. Portsmouth to retain 5 complete mountings. Devonport to retain 5 complete mountings. Chatham to retain 5 complete mountings. Sheerness to retain 5 complete mountings. Remainder to be scrapped. <i>Guns</i> See Item 38.
40	20 mm. Oerlikon, Mark II and later.	R.M. mobile mountings	<i>Mountings</i> Limbers, tyres and cradles to be retained. All mountings to be scrapped.

Item	Gun	Gun Mounting	Remarks
			<i>Guns</i> See Item 38.
41	20 mm. Oerlikon, Mark II and later.	Haszard Baird ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> See Item 38.
42	20 mm. Hispano ...	20 mm. Hispano ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> Separate orders will be issued.
43	0.5-in. Vickers machine gun.	0.5-in., Mark I ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> Separate orders already issued to R.N.A. depots to scrap repairable guns in store and returned by H.M. ships. Serviceable guns in store to be retained for the present.
44	0.5-in. Vickers machine gun.	0.5-in., Mark II ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> See Item 43.
45	50.5-in. Vickers machine gun.	0.5-in., Mark III ...	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> See Item 43.
46	0.5-in. Vickers machine gun	0.5-in., Mark IV ...	<i>Mountings</i> Coventry to retain 70 complete mountings. Malta to retain 5 complete mountings. Simonstown to retain 10 complete mountings. Bombay to retain 4 complete mountings. Colombo to retain 2 complete mountings. Remainder to be scrapped. <i>Guns</i> See Item 43.
47	0.303-in. Vickers machine gun	0.303-in. Vickers II	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> All to be retained.
48	0.303-in. Vickers machine gun	0.303-in. Vickers III	<i>Mountings</i> All mountings to be scrapped. <i>Guns</i> See Item 47.
49	0.30-in. Marlin machine gun.	Single Marlin ... Twin Marlin	<i>Mountings</i> All mountings to be scrapped.

Item	Gun	Gun Mounting	Remarks
			<i>Guns</i> Orders already issued to R.N.A. depots as to disposal of guns.
50	0·303-in. Hotchkiss machine guns.	Hotchkiss Single ... Hotchkiss Twir	<i>Mountings</i> All mountings to be scrapped.
			<i>Guns</i> Separate orders will be issued.
51	2-in., Mark II rocket...	Pillar box	All mountings to be scrapped.
52	2-in., Mark III rocket	Trough	All mountings to be scrapped.
53	2-in., Mark IV rocket...	Gymbal	All mountings to be scrapped.
54	2-in., Mark V rocket...	F.A.M.	All mountings to be scrapped.
55	B.L., 4-in., Mark I mortar.	4-in. I/N mortar ...	<i>Mountings</i> All mountings to be scrapped.
			<i>Mortars</i> Separate orders will be issued.

(A.F.O. 5655/44.)

5211.—Guns—Q.F., 40-mm.—Waterjacket, Mark II—Pin, Retaining Circulating Tube—Fitting

(A.S. 9279/45.—13 Sep. 1945.)

The following modification is approved:—

<i>Guns</i>	Q.F., 40-mm., Marks IV, VIII, IX, X and XI.
<i>Parts affected</i>	Waterjacket, Mark II.
<i>Purpose</i>	To prevent circulating tube breaking loose from waterjacket pad.
<i>Nature of modification</i>	Drill waterjacket and circulating tube and fit and weld pin.
<i>Drawing</i>	A.F.O. Diagram 338/45.
<i>New parts required</i>	Pin, retaining, circulating tube—one per water-jacket. Pins will be distributed to depots.
<i>By whom to be done...</i>	R.N.A. depots.
<i>Degree of urgency</i>	As opportunities offer.

5212.—Projectors, Holman, Mark III—Disposal

(A.S. 2564/45.—13 Sep. 1945.)

All Holman Projectors, Mark III (cordite operated), are to be scrapped.

2. Any Mark III projectors still held in training and other shore establishments should be returned as convenient. In the case of ships reducing or expected to reduce to reserve or due for scrapping, projectors should be left on board. Preservation is not required in such instances.

3. R.N. armament depots at home and abroad are to dispose of all Mark III projectors in stock forthwith, together with all spare parts, tools and appurtenances special to the projectors.

4. Projectors and spares should not be shipped to U.K. from depots abroad for scrapping.

5. A separate order will be issued concerning ammunition items provided for these projectors.

5213.—Small Arms—Revolvers—Patterns in Naval Service—Safety Precautions

(A.S. 2057/45.—13 Sep. 1945.)

Pistols, revolver, No. 1 (0·455-in.), with 6-in. and 4-in. barrels, 0·455-in. Smith and Wesson, and Pistols, revolver, No. 2 (0·38-in.), Marks I, I*, I** (Enfield), 0·38-in. Smith and Wesson (U.S.A.), 0·38-in., Mark IV (Webley), are at present in use in Naval Service. Any other types of pistol held, including Pistols, self-loading, Webley and Scott, 0·455-in., should be exchanged for one of the above-mentioned patterns at the nearest R.N. Armament Depot.

2. Attention is drawn to the care necessary in handling loaded revolvers. Experience has shown that revolvers of proved mechanical efficiency can be fired when the hammer is in the forward position, if the hammer receives a sharp blow. This may occur if the revolver is accidentally dropped.

3. There is also a possibility of an accident being caused by a bullet lodging in the barrel, and a second round then being fired on to it. This will cause the barrel to bulge or burst, with danger of injury to the firer or bystanders.

4. The cause of a lodged bullet is either defective ammunition, usually due to exposure to damp, or low striker protrusion, causing a weak explosion.

5. The symptoms of a lodged bullet are absence of the usual kick of the weapon and of the normal loud report. Smoke may also appear from the body of the revolver. When these symptoms are detected, the firer should stop firing, unload the pistol and examine the bore for an obstruction. If the bore is not clear, the weapon must be handed to an O.A. for examination and rectification.

On no account should a second round be fired on to the lodged bullet.

6. A "lodged" bullet is to be reported in accordance with Article 311 of N.M.E.R.

(A.F.Os. 3813/43 and 4878/44.)

5214.—Depth Charge Pistol History Sheets—Return of

(T. 1415/45.—13 Sep. 1945.)

A.F.Os. 521/40 and 1501/41 are cancelled.

2. Attention is drawn to A.F.O. 1299/45.

(A.F.Os. 521/40 and 1501/41 are cancelled.)

(A.F.O. 1299/45.)

5215.—Depth Charges, Marks XI* and XV Hoisting Slings*Aircraft Carriers, P.S.Os. and dockyards concerned*

(T. 2305/44.—13 Sep. 1945.)

A new type of wire sling for handling Mark XI* and XV depth charges when the tail is not fitted has been designed for use in aircraft carriers. A.F.O. Diagram 15/45 (1-2).

2. Slings are to be made by ship's staff, the necessary items being drawn from Naval stores on board. Where items are not available they should be demanded from the nearest dockyard.

3. Slings of earlier type for use with depth charges, Mark XI* and XV when used with tails are to be destroyed.

4. In the case of new construction ships, slings of new type will be supplied by the shipbuilders.

5. The allowances of slings for bombs and depth charges for each class of aircraft carriers will be promulgated in a separate A.F.O.

6. The rigging warrant should be amended as necessary.

(F.O.C.T., 26 Sep. 1944, No. 4083/F.O.C.T. 776.)

(A.F.O. 3777/42 is cancelled.)

5216.—Portable Telephones for Emergency Communications and for use by Damage Control Parties

(N.S. 28385/45.—13 Sep. 1945.)

War experience has stressed the value of portable telephones for providing emergency communications after action damage has been sustained and also for use by members of a party sent to investigate or repair damage.

2. The allowances of telephones for damage control and other emergency purposes have been increased and adjusted so that ships may be equipped on the following basis:—

- (a) Provision to be made for vital emergency communication lines, for navigational or other important services.
- (b) Supplies of field telephones and sound powered head and breast sets for use during damage repair, allocated on the damage control section basis.

3. Ships in commission are to demand from their storing yards or depots the equipment necessary to bring up their numbers of portable telephones for these purposes to those allowed in the appendix to this Order, quoting this authority. Where telephones, Pattern 12500 are mentioned in the appendix, telephones, Pattern 1191 are to be considered as an alternative and are to be retained on board in lieu where already supplied. Similarly handsets, Pattern 13220, in D.III instruments are to be retained in lieu of field telephones, Pattern 13152 where already on board.

4. D.3 (twisted pair) cable is suitable for use with all the above telephones, and ships should demand 300–400-ft. of cable for every two telephones allowed. Reels, Mark II, for cable, should also be demanded on the same basis. Due allowance should be made for cable and reels already on board.

5. Supply to ships concerned under construction should be arranged by warrant yards and supplying yards or depots in accordance with the revised allowances.

6. This Order is not applicable to ships operating under the red ensign.

7. The Establishments of Naval Stores will be amended accordingly.

APPENDIX

Revised allowances of portable telephones for emergency communications and for Damage Control parties.

Group	Damage Control Sections	Ship or class	Total for D.C. purposes		Total for vital Emergency Communications	Total for ship						
			12500	13152		12500	13152					
			6	"Vanguard" ...		Two Pattern	12	12	8	12	20	
5	"King George V" ...	12500 and	10	10	8	10	18					
4	Other capital ships ...	two Pattern	8	8	8	8	16					
1	Fleet carriers— { 2 hangar } { 1 hangar }	... section and hangar.	{ 10 } { 8 }	10	8	10	18					
								3	Light fleets (1 hangar) ...	8	8	16
								3	"Unicorn," "Perseus," "Pioneer" (1 hangar) (A/C Maint. and Repair).				Two Pattern 12500 or 13152 per section and hangar.	8	8	16
3	Cruisers (over 6,000 tons) ...	Two Pattern 12500 and two Pattern 13152 per section.	6	6	8	6	14					
3	Escort carriers ...	... per section.	6	6	8	6	14				

Group	Damage Control Sections	Ship or class	Total for D.C. purposes		Total for vital Emergency Communications	Total for ship		
			12500	13152		12500	13152	
			3	A/C component and engine repair ships. ...		Two Pattern 12500 or two Pattern 13152 per section.	6	—
3	Hull repair ships ...	... section.	6	—	—	6		
3	Maintenance ships (except "Perseus," "Pioneer," "Kelantan" and "Corbrae").	... section.	6	—	—	6		
2	3†	Fleet repair ships ...	Two Pattern 12500 or two Pattern 13152 per section.	6	4	—	10	
		Landing ships ...	... section.	6	4	—	10	
		Depot ships ...	... section.	6	4	—	10	
		†H.M. ships of merchant ship construction over 10,000 tons gross. H.M. ships not of merchant ship construction over 6,000 tons displacement.	... section.	6	4	—	10	
3	2	Cruisers (under 6,000 tons) ...	Two Pattern 12500 and two Pattern 13152 per section.	4	4	8	4	12
		Monitors ...	... section.	4	4	6	4	10
		A/A ships (ex cruisers) ...	Two Pattern 12500 or two Pattern 13152 per section.	4	4	8	4	12
		L.S.T. (3) ...	... section.	4	4	4	—	8
		2†	Depot ships ...	... section.	4	—	—	4
†H.M. ships of merchant ship construction 5,000–10,000 tons gross. Ships NOT of merchant ship construction 3,000–6,000 displacement.	... section.	4	4	—	—	8		
4	1	Flotilla leaders ...	... section.	2	2	6	2	8
		Fleet destroyers ...	... section.	2	2	6	2	8
		Fast minelayers ...	... section.	2	2	6	2	8
		Netlayers ...	... section.	2	2	6	2	8
		Frigates ...	Over 1,300 tons	2	2	4	2	6
		Sloops ...	... section.	2	2	6	2	8
		Cutters (Ex U.S.) ...	... section.	2	2	6	2	8
		L.S.T. (2) ...	... section.	2	2	6	2	8
		L.S.E. ...	... section.	2	2	4	2	6
		F.D.T. ...	... section.	2	2	4	—	6
		H.M. ships of merchant ship construction (including landing ships) 3,000–5,000 tons gross.	... section.	2	2	4	—	6
5	1	Escort destroyers "Hunt" class ...	... section.	2	2	6	2	8
		Frigates ...	800–1,300 tons.	2	2	6	2	8
		Sloops ...	... section.	2	2	6	2	8
		Corvettes ...	... section.	2	2	6	2	8
		Survey vessels ...	... section.	2	2	6	2	8
		A/S vessels ...	... section.	2	2	—	—	4
		Cable vessels ...	... section.	2	2	—	—	4
		H.M. ships of merchant ship construction (including landing ships) 2,000–3,000 tons gross.	... section.	2	2	—	—	4
6	—	Fleet minesweepers ...	... section.	—	—	4	—	4
		Minelayers ...	500–1,000 tons.	—	—	—	—	2
		A/S vessels ...	... section.	—	—	—	—	2
		H.M. ships of merchant ship construction 1,000–2,000 tons gross.	... section.	—	—	—	—	2

(A.F.O. 2396/40 is cancelled.)

5217.—Pumps, Hull and Fire—Alternative Electric Supplies—As. and As.

Destroyers ("R" Classes and Earlier, including "Hunt" Class, Types II, III and IV) ...

(T. 1264/45.—13 Sep. 1945.)

In destroyers fitted with electrically driven hull and fire pumps, alternative electric feeds where not already provided are to be arranged through a change-over switch.

2. The administrative authorities of vessels concerned should insert an item in the class list of As. and As., Classification "B", quoting this Order as authority.

3. The alternative supply cables shall be connected as follows:—

(i) In "R" Class vessels, irrespective of the number of pumps fitted, the supplies for each pump shall be obtained—one from a junction box connected to the diesel section of the forward switchboard and one from a junction box connected to the diesel section of the after switchboard. The supply from the nearer switchboard shall constitute the normal supply.

(ii) In vessels earlier than "R" Class, with only one pump fitted, the supplies shall be obtained—one from a junction box connected to the port section of the after switchboard and one from a junction box connected to the starboard section of the forward switchboard, or *vice versa*. The supply from the after switchboard shall constitute the normal supply.

(iii) In vessels earlier than "R" Class, including "Hunts", Types II, III and IV, with two pumps fitted, supplies for the after pump shall be obtained—one from a junction box connected to the port section of the after switchboard and the other from a junction box connected to the starboard section of the after switchboard. The supplies for the forward pump shall be obtained—one from a junction box connected to the port section of the forward switchboard and the other from a junction box connected to the starboard section of the forward switchboard.

4. This Order is only to be carried out in ships forming part of the post-war Fleet.

(This Order is to be retained until complied with.)

(A.F.O. 2264/42 is cancelled.)

5218.—Electrically Operated Breakers—Igranic—Failure to Open

Ships concerned

(T. 532/45.—13 Sep. 1945.)

Reports have been received of some Igranic electrically operated breakers failing to open when required to do so. Breakers of this make are fitted as branch breakers in a number of ships, and as main supply breakers in some recent small ships.

2. This defective operation has been traced to excessive friction in the operating link mechanism, and the trouble has been accentuated in breakers of comparatively recent manufacture by the use of zinc for plating parts of the link mechanism, due to a shortage of cadmium. Tests have shown that zinc is unsuitable for this application.

3. In the event of a breaker failing to open, due to the above defect, the remedy is to replace the pins and link couplings in the operating mechanism by new parts which have been cadmium-plated and specially treated with colloidal graphite at the maker's works. Instructions for doing this are set out in A.F.O. Diagram 336/45.

4. The graphiting process ensures that the working parts will always be lubricated, and no oil should be applied once graphited parts have been fitted since oil and graphite together may produce gumming.

5. The parts necessary for effecting the modifications are as follows:—

For 500A Branch Breaker or 300/500A Supply Breaker—

Right hand link coupling	Part No. 85275/1	... 1 in No.
Left hand link coupling	Part No. 85275/2	... 1 in No.

Armature link pins	Part No. 85279/1	... 2 in No.
Armature main pins	Part No. 85279/2	... 2 in No.
Main pin	Part No. 85279/5	... 1 in No.
Coupling pin... ..	Part No. 85279/6	... 1 in No.
Eccentric pins for brush pressure gear.	Part No. 89997/2	... 2 in No.

For 125/250A Branch Breaker

Right hand link coupling	Part No. 85275/1	... 1 in No.
Left hand link coupling	Part No. 85275/2	... 1 in No.
Armature link pins	Part No. 85279/1	... 2 in No.
Armature main pins	Part No. 85279/2	... 2 in No.
Main pin	Part No. 85279/3	... 1 in No.
Coupling pin... ..	Part No. 85279/4	... 1 in No.
Eccentric pins for brush pressure gear.	Part No. 89997/1	... 2 in No.

6. A number of sets of these parts will be supplied without demand by S.N.S.O., Park Royal, to the following ships which are known to have breakers liable to give trouble:—

"Devonshire", "Liverpool", "Norfolk", "Achilles", "Hobart", "Leander", "Newfoundland", "Anson", "Ajax", "Euryalus", "Arethusa", "Argus", "Glory".

7. Stocks of parts will also be made available at Sydney, Colombo and Severn Area and C.Os. of any other ships in which trouble is experienced should demand replace parts from the nearest depot.

8. The work of replacement of the parts should be well within the capacity of most ships' staffs, but in case of difficulty, e.g. supply breakers in small ships, assistance of base staff should be sought, quoting this A.F.O. as authority.

9. In case of emergency, if replacement parts are not available, a temporary cure may be effected by removing the pins and links in the operating mechanism (generally as described in A.F.O. Diagram 336/45), and carefully removing all plating from the pins and bearing surfaces in the links with fine emery cloth. The breaker should then be reassembled (taking care that no grains of emery or metal find their way into the mechanism), and the parts should be oiled sparingly with light torpoyl. It should be emphasized that this is to be regarded only as a temporary cure, since removal of the plating will render the parts liable to corrode.

10. In the event of a breaker failing to open, the following procedure should be adopted immediately in order to minimise the risk of damage to the economy resistance and the operating coils.

(a) If the breaker fails to open in the normal manner when the "OFF" switch is operated, release the "OFF" switch immediately and operate the "ON" and "OFF" switches alternately five or six times.

(b) If the breaker still fails to open, finish by operating the "ON" switch.

11. The reasons for the procedure recommended in paragraph 10 are as follows:—

(a) If a breaker fails to open, holding the "OFF" switch closed will result in overheating and possibly burning out the section of the economy resistance connected between the control wire and the retaining contact.

(b) Partial opening sometimes occurs, in which case operation of the "ON" switch should bring the breaker back to the fully closed position. Alternate operation of the "ON" and "OFF" switches may result in the mechanism freeing itself and the breaker opening.

(c) When partial opening occurs the economy resistance switch may re-set to the "breaker open" position, thereby short-circuiting the portion of economy resistance connected between the operating coils and the control wire. If the breaker is left in this condition the operating coils and the section of economy resistance connected between the control wire and the retaining contact will be subjected to an excessive current with consequent overheating and the possibility of a burn-out. Operation of the "ON" switch should obviate this.

5219.—Torpedo Stores—M.A.T. IV—Exchange of Tubing fitted to “Pumps, Tyre, Inflating, R.A.F. Ref. 4K/1782”

(A.S. 9951/45.—13 Sep. 1945.)

The “Tubes, rubber, R.A.F., Ref. 4K/1782” supplied for use with “Pumps, tyre, inflating, R.A.F., Ref. 4K/1609” (*vide* A.F.O. 694/45) have been found too stiff and resistant to be easy to handle.

2. “Tube connection, R.A.F., Ref. 32c/11” is much more convenient to use and it has therefore been decided to standardize this type of connection with the foot pump.

3. When the present rubber tubing becomes defective arrangements are to be made for “Tubing, R.A.F., Ref. 32c/11” to be fitted in lieu.

4. Consequent on above “Tubes, rubber, R.A.F., Ref. 4K/1782” are to be withdrawn from the contents of “Chests, tools and spare gear, M.A.T. IV for aircraft carriers and N.A. stations” are returned to the nearest torpedo depot.

(A.F.O. 694/45.)

5220.—Torpedoes—18-in., Mark XII—XV—Test of Ignition Gear—Allowance of Adapters

(T. 08928/45.—13 Sep. 1945.)

The test figures quoted for the permissible pressure required to operate the ignition gear of 18-in., Mark XII—XV torpedoes are calculated to be below the minimum firing pressure likely to be available in practice, and be high enough to reject unduly easy release gears.

2. The results obtained by the test methods laid down vary considerably and it has been found that by specifying a more accurate test, the permissible tolerance can be increased.

3. This will save work in trying to adjust ignition gears to fine limits without impairing reliability.

4. The revised test procedure is given in paragraph 6 below, and to enable it to be carried out, the following adapters are being introduced:—

Section 11

Adapters, testing hammers, ignition gear (torpedo coupled up), St. No. T.572.

Adapters, testing hammers, ignition gear (torpedo parted), St. No. T.573.

5. Allowance will be one to each ship, station, and mobile torpedo unit outfitted with 18-in., Mark XII—XV torpedoes. Supply will be made without demand directly supplies are available.

6. The method of use with torpedo coupled up is as follows, and supersedes that laid down in B.R. 635, paragraph 36 (i) to (iii):—

- (i) Examine the firing springs. There should be no signs of rusting, and the unextended length should not exceed 4.51-in. for both springs St. No. 5386A and St. No. 5386B, measured between securing points. Springs St. No. 5386A are made of 14 S.W.G. (0.081-in. diameter) wire and springs St. No. 5386B are 15 S.W.G. (0.072-in. diameter).
- (ii) See that the hammers and cocking springs are intact. Cock the hammers.
- (iii) Examine the breech blocks for protrusion, see that the strikers work easily, and are not cracked. Ship a striker guard, St. No. 973, on each breech block.
- (iv) See 1,000 lb./sq. in. in air vessel. Insert adapter with low reading 0–500 or 0–1,000 gauge in fuel bottle. Put propellers in test position (45°), ship propeller clamps, see air lever aft and air delay valve open. Crack stop valve to allow air pressure in fuel bottle to build up slowly (approximately 1 minute). Hammers should fire at 150 ± 25 lb./sq. in. for both “A” and “B” springs.

7. Procedure with torpedo parted is similar except that the adapter St. No. T.573, with gauge fitted, is used to connect a charging hose to the air inlet to the valve group, and multiple coupling is blanked (using Blank St. No. 201, which leaves leads interconnected).

8. If the gear will not pass one or other of the tests in paragraphs 6 and 7 above, or 11 below, the torpedo must be returned, or the fault rectified as described in paragraphs 10–12 below.

9. Springs St. No. 5386B are designed to permit a 90° engagement between catch and actuating toe, to prevent jarring off, and it is important to see this is obtained.

10. When adjusting the faces of the catch and actuating lever toes, care must be taken to see that the faces are left radial to the centre of the actuating lever (A.F.O. Diagram 337/45); to assist in this adjustment it is recommended that a gauge be made consisting of a spindle to fit neatly into the pivotal hole of the brass actuating lever; on to the end of this spindle is soldered a 2-in. straight edge, to indicate the angle to which the face of the toe is to be adjusted, *i.e.*, the dotted line on the diagram.

11. Experience has shown that in torpedoes run for practice wear will soon put igniter gears out of adjustment as above. A rough test to ascertain whether engagement is satisfactory is to cock the gear and give the back of the hammers a smart blow with the palm of the hand or a wooden mallet, and if appreciable wear has taken place the hammers will fall and re-adjustment of the catch faces is required. (This test can only be done with torpedoes parted.)

12. This may necessitate building up the toe of the hammer by cutting away as requisite and then silver soldering or brazing in a phosphor bronzed filling piece and re-shaping to the radial line mentioned in paragraph 10 above which should be marked before the re-building is taken in hand. If this build up is not made, the operation of the gear will be adversely affected by the reduced depth of engagement of the faces, but should the engagement face be appreciably advanced the hammers may be moved over the dead centre.

13. In torpedoes fitted with the obsolescent spring St. No. 5386A, it is seldom possible to obtain a true 90° engagement, and a firing pressure below the prescribed maximum.

14. Adjusting procedure is similar to that laid down in paragraphs 10–12 above, except that the catch adjustment must therefore be eased as requisite.

15. B.R. 635 successor and store warrants will be amended.

(A.F.Os. 950/43, 1458/43 and 978/44 are cancelled.)

5221.—Torpedoes—21-in., Mark XI—Electrical Spares—Replenishment

(A.S. 12968/44.—13 Sep. 1945.)

Electrical spare gear required in connection with the operation and maintenance of 21-in., Mark XI torpedoes divides into the following broad groups, *viz.*:—

- (i) Spare gear for the permanent installations in submarines, depot ships, depots, etc., such as charging and heating control units, resistances charging, plugs charging, transformer rectifiers charging, etc., all of which are purchased under Vote 8.
- (ii) Spare gear for torpedoes, such as torpedo motors, control apparatus, batteries and associated ancillary gear such as ventilating blowers, motor slow run test apparatus, etc., all of which are regarded as armament stores and are purchased under Vote 9.

2. Particulars of the Vote 8 items of spare gear are given in Appendix A to this Order, and purchase of the necessary quantities for first issue to the submarines, depot ships and establishments concerned has been arranged by the Director of Electrical Engineering, Admiralty, Bath, and supply will be made by that department without demand.

3. Purchase of the Vote 9 items under category as at paragraph 1 (ii) above is arranged by D.E.E., Bath, on requisition from D.A.S. (Bath). Distribution to service is made from torpedo depots in a similar manner to spare gear, etc., for existing types of torpedoes. Allowances of these items will be included in Naval Proportion Book, Part IV.

4. When spare gear needs to be replenished the following procedure is to be worked to:—

- (a) *Vote 8 items in submarines and depot ships.*—Spare gear is to be maintained at the approved level by refitting authorities under the ordinary defect

list procedure. In this connection, should it be necessary to purchase any item from the manufacturers and should any difficulty arise, the matter should be reported to the Director of Dockyards, Admiralty, Bath.

- (b) *Vote 8 items in shore establishments.*—Particulars of any Vote 8 spare gear required in connection with the installations in the shore establishments named in Appendix B to this order should be reported to the Director of Dockyards, Admiralty, Bath, and purchase will be arranged by the Director of Electrical Engineering.
- (c) *Vote 9 items in submarines, depot ships and shore establishments.*—To be demanded from a torpedo depot in the usual manner applicable to spare gear, etc., required for existing types of torpedoes.

Appendix "A"

21-in., Mark XI Torpedo—Spares for Electrical Equipment (Vote 8)

Firm	Title	Drawing No.
Metropolitan Vickers Electrical Co., Ltd., Manchester.	Control units, heating	X.1537181
	Components for :—	
	Switches, rotary ON-OFF, 30-amp.	X.1537181, Part 95
	Handles, rotary switch... ..	X.1537181, Part 76
	Ammeters, 2½-in. dial, M.C., 0-15-amp.	X.1537181, Part 20
	Ammeters, resistances 3,600 ohms	X.1537181, Part 31
	Ammeters, resistances 200 ohms	X.1537181, Part 30
	Relays, thermal, 10-amp. ...	X.1537181, Part 104
	Pads, Resilitex	X.1537181, Part 19
	British Thomson Houston Co., Ltd., Rugby.	Sockets, heating (round, 4-pin) ...	M.1547235, Part 2
Components for :—		
Sockets, with base		M.1547235, Part 1
Caps		M.1547235, Part 9
Nuts		M.1547235, Part 11
Shields		M.1547235, Part 19
Tubes, with cable grip		M.1547235, Part 20
Metropolitan Vickers Electrical Co., Ltd., Manchester.		Control-units, charging ... ..	X.1537179
	Components for :—	
	Switches, rotary ON-OFF, 30-amp.	X.1537179, Part 103
	Handles, rotary switch... ..	X.1537179, Part 239
	Switches, push button	X.1537179, Part 102
	Springs, main push button switch	X.1537179, Part 232
	Ammeters, 2½-in. dial, M.C., 0-25-amp.	X.1537179, Part 105
	Coils, operating, contactor ...	X.1537179, Part 231
	Contacts, moving, contactor ...	X.1537179, Part 227
	Contacts, fixed, contactor ...	X.1537179, Part 226
	Springs, pull-off, contactor ...	X.1537179, Part 229
	Springs, wiping, contactor ...	X.1537179, Part 228
	Arc-shields, contactor	X.1537179, Part 230
	Relays, thermal, 10-amp. ...	X.1537179, Part 225
	Contacts, moving, timing switch	X.1537179, Part 74
	Contacts, fixed, timing switch...	X.1537179, Part 96
	Springs, pull-off, moving contact, timing switch.	X.1537179, Part 82
	Springs, latch, moving contact, timing switch.	X.1537179, Part 81
	Springs, reset, timing switch ...	X.1537179, Part 26
	Resistances, voltage measuring, 900 ohms.	X.1537179, Part 73

Firm	Title	Drawing No.	
	Rheostats, voltage measuring, 1,500 ohms.	X.1537179, Part 78	
	Resistances, contactor coil, economy, 1,800 ohms.	X.1537179, Part 114	
	Resistances, motor, D.C., 1,000 ohms.	X.1537179, Part 76	
	Brushes, motor, timing ...	X.1537179, Part 242	
	Caps, brush holder, motor, timing	X.1537179, Part 243	
	Pads, Resilitex	X.1537179, Part 65	
	Panels, motor, timing. Complete assembly.	X.1537179, Part 244	
Metropolitan Vickers Electrical Co., Ltd., Manchester.	Resistances, charging, depot model	X.2031173	
	Resistances, charging, submarine model (2 sections).	X.2031251	
	Components for :—		
	Resistance tube, 1.16 ohms ...	X.2031251, Part 29	
	Clips	X.2031251, Part 30	
British Thomson Houston Co., Ltd., Rugby.	Plugs, charging (batteries in torpedo)	X.1552005, Part 1	
	Components for :—		
	Housings... ..	X.1552005, Part 20	
	Pins	X.1552005, Part 21	
	Terminals, earthing	X.1552005, Part 18	
	Bases, insulated... ..	X.1552005, Part 7	
	Guards	X.1552005, Part 3	
	Reyrolle & Co., Hebburn-on-Tyne	Plugs, with 30-ft. or 50-ft. cable harness, charging (batteries open).	D.E.E.11566
Components for :—			
	Plugs, charging (batteries open)	D.E.E.11566	
Westinghouse Brake & Signal Co., Chippenham, Wilts	Transformer rectifiers, charging ...	D.E.E.12043	
	Components for :—		
	Transformers	D.E.E.12043, Part 1	
	Rectifier units	D.E.E.12043, Part 2	
	Chokes, primary	D.E.E.12043, Part 3	
	Chokes, secondary	D.E.E.12043, Part 4	
	Switches, rotary, ON-OFF, 30-amp.	D.E.E.12043, Part 5	
		Appendix "B"	
		21-in., Mark XI Torpedo—Establishments fitted with Vote 8 Plant	
		<i>Depots</i>	<i>Ranges</i>
Thatcham		Arrochar	
Malta		Sydney (Australia)	
Haifa			
Gibraltar		<i>Shore bases</i>	
Larkfield		Trincomalee	
Castlelaurie			
Devonport		<i>Torpedo Schools</i>	
Colombo	H.M.S. "Marlborough"		
Static Base Torpedo Depot	H.M.S. "Defiance"		
Darwin	H.M.S. "Elfin"		
Freemantle	H.M.S. "Vernon"		
Sydney	Melbourne (Australia)		
	<i>Miscellaneous</i>		
	R.N.T.F., Greenock		
	"Vernon" (Bincleaves)		
	Fort Blockhouse		

5222.—Chart and Chronometer Depot, Belfast—Closing Down

(H.C. 5228/45.—13 Sep. 1945.)

The Admiralty Chart and Chronometer Depot, Carmel Street, University Street, Belfast, N. Ireland, has been closed down.

2. Section 4 of the Hydrographic Supplies Handbook (H.51) and Appendix I of the abridged edition (H.51a) should be amended accordingly.

(A.F.O. 3628a/43 is cancelled.)

5223.—Superheaters—Replacement in Trawlers and Drifters—REPORTS

H.M. Ships concerned, Dockyards, Repair Bases, Maintenance Bases, Depot Ships and Machinery Storage Depots

(D. 17573/45.—13 Sep. 1945.)

The superheaters which were removed from the boilers of all trawlers and drifters except where their retention was considered necessary to meet service requirements, are required to be replaced in the boilers as and when these vessels are re-converted for fishing.

2. The Commanding Officers of ships concerned are to report through their administrative authorities, as soon as possible, where and when their superheaters were landed and to what authority the gear was handed over.

3. Reports are to be forwarded at the earliest practicable dates from all dockyards, repair bases, maintenance bases, depot ships and machinery storage depots, at home and abroad, with regard to the availability of any superheaters which have been landed from trawlers and/or drifters.

4. The reports should include (a) the names of the ships from which the superheaters were landed, (b) whether (i) complete superheaters, (ii) headers, (iii) elements or (iv) tubes are available, and (c) whether the various items of superheater gear are serviceable or repairable.

(A.F.O. 3630/41 is cancelled.)

5224.—L.C.T.(8)—Limiting Engine Ratings

(D.C.O.M. 2348/45.—13 Sep. 1945.)

The following information is promulgated for the guidance of authorities and personnel concerned with the operation of L.C.T.(8). The engine ratings given therein are not to be exceeded.

2. The engine ratings are defined as follows:—

Maximum continuous ratings.—The maximum power and R.P.M. at which the main engines of the craft can be run continuously without risk of breakdown. To be employed only for the purpose of actual operations.

Cruising rating.—The power and R.P.M. at which the main engines of the craft may be run indefinitely without occasioning unduly rapid wear. To be used for all normal running purposes including protracted sea passages.

3. The R.P.M. and limiting exhaust temperatures corresponding to the above ratings in L.C.T.(8) are given below. The actual exhaust temperatures for the R.P.M. stated will normally be lower than shown in the table.

Number of engines in use	Maximum continuous rating		Cruising rating	
	R.P.M.	Limiting exhaust temp. °F.	R.P.M.	Limiting exhaust temp. °F.
4 (2 per shaft)... ..	1200	720	1100	620
2 (1 per shaft)... ..	850	600	800	550
1 (on one shaft only)... ..	800	580	—	—

4. The main engines of this craft consist of four Paxman 12 T.P.M. Diesel units coupled in pairs on two shafts and so arranged that either one or two engines may be used to drive each shaft. In order to reduce engine running hours to a minimum, use should always be made of the cruising rating using one engine on each shaft at 800 R.P.M. whenever circumstances permit. When using one engine on each shaft, arrangements should be made to run the engines alternately for 24-hour periods, in order to equalize engine running hours. Four engines should only be used when speeds higher than approximately nine knots are essential, where large variations of speed are to be expected or when manoeuvring in narrow waters.

5. The craft can be propelled at speeds up to about seven knots using one engine on one shaft only. This procedure is to be restricted to cases of emergency only, and in such circumstances 800 R.P.M. are not to be exceeded.

5225.—Main Generator Engines—Cylinder Liners—Corrosion

"U" Class Submarines

(D. 18851/45.—13 Sep. 1945.)

Severe corrosion of the water side of the above-mentioned liners has been reported, and investigations show that this defect may be attributed to the failure of the corrosion inhibitor (potassium dichromate), added to the engine cooling water.

2. Arrangements should be made, at the first opportunity, for:—

(a) The concentration of the corrosion inhibitor in the cooling water increased from 1 part in 5,000 to 1 part in 500 (1 lb. to 50 gallons).

(b) Potassium chromate instead of potassium dichromate to be used as the corrosion inhibitor.

3. It is important that the corrosion inhibitor should be kept up to adequate concentration and samples of the cooling water should be referred to the nearest laboratory for analysis as opportunity arises. For this purpose the following dockyard laboratories are available:—

Chemical Department, H.M. Dockyard, Portsmouth.
Metallurgical Laboratory, M.E.D., Devonport.
Metallurgical Laboratory, M.E.D., Chatham.
Metallurgical Laboratory, M.E.D., Rosyth.
Metallurgical Laboratory, M.E.D., Malta.

5226.—Radar—Types 267W(2) and 267MW—Fitting of Ranging Outfit RTA to Control Room P.P.I.—As. and As.

Submarines

(R.E.—13 Sep. 1945.)

Item No., "A" Class, 24; Item No., "T" Class, 641; Classification "A".

2. Approval has been given to fit Ranging Outfit RTA to the control room P.P.I. with 267MW and with 267W(2) (i.e., in "T" Class Submarines with the rearranged control room).

3. This R.T.A. will be allocated by the Admiralty.

4. Fitting-out instructions when used with 267MW are contained in Addendum "A" to Installation Specification B.599. When fitted with 267W(2), information can be obtained direct from the Admiralty Signal Establishment, Haslemere.

5227.—Radar—Types 276, 277, 293M—Replacement of Air Conditioning Unit, Pattern W.8828—REPORTS

(R.E. 118/45.—13 Sep. 1945.)

Reports from ships having shown that the air conditioning units supplied with the first 276/277/293 sets fitted are unsatisfactory in use and are difficult to maintain, the unit has been redesigned and the new design units are now available.

2. Ships fitted with one of the above sets with an air conditioning unit manufactured by Messrs. Silica Gel bearing a serial number 1 to 114 inclusive, are to replace it by one of the later design. These unsatisfactory units are marked with numbers 1093/1 to 1093/114 inclusive.

3. Ships concerned are to demand the following stores from S.N.S.O. (H), quoting this A.F.O. as authority.

Pattern No.	Description	No. required
W.8828 (Serial No. 115 onwards)	... Air conditioning unit ...	1
or W.8828A	... Air conditioning unit ...	

4. Fitting is to be carried out by ships' staff assisted by base staff if necessary.

5. Displaced air conditioning units are to be invoiced on Form S.331 and returned to the nearest (S) N.S.O. to be brought to arisings locally.

6. Ships which experience failures of the heaters in air conditioning units are to report the serial numbers of such air conditioning units to Admiralty (for D.R.E.) with a copy to the Captain Superintendent, Admiralty Signal Establishment, Haslemere, Surrey, except when the units concerned are those in paragraph 2 above.

(A.F.O. 4515/44 is cancelled.)

5223.—R.N. Shore Wireless Stations—Ground Radio Equipment for Bombing Ranges at R.N. Air Stations—Policy

(R.E.02510/45.—13 Sep. 1945.)

Admiralty policy regarding ground radio equipment for bombing ranges at R.N. Air Stations is promulgated for information.

2. At each bombing range attached to an R.N. Air Station there will be installed in one quadrant hut one H/F Transmitter-receiver, Type 613FS and one V.H/F Transmitter-receiver, Type 86MS. This equipment including poles and aerials should be installed by Dockyard representatives in accordance with Admiralty Signal Establishment Specification as cited by Station Officers to meet the requirements of the Commanding Officer.

3. As a guide to Station Officers the aerials for Type 613FS should be separated from the aerial for Type 86MS by as great a distance as possible. The site for the Air Ministry Type 1A 55-ft. pole to accommodate aerial outfit AFG (late AOQ) for Type 613FS should be not less than 90-ft. and not more than 190-ft. from the quadrant hut containing the equipment and should be at least 100-ft. from all other buildings.

4. In addition to the fixed equipment installed in the quadrant hut, each R.N. Air Station will be provided with a number of Naval Radio Vans, Type 45, for use at the bombing ranges. Each Van 45 contains one Transmitter-receiver, Type 613FS and one Transmitter-receiver, Type 86MS. The basis of supply will be one Van 45 for each three or part of three bombing ranges administered by the Air Station.

5229.—Wireless—Types 86M, TBS and TCS—Pulse Limiters—Introduction

(See AFO 4985/46 (R.E. 11536/45.—13 Sep. 1945.) See AFO 5902/46.)

With a view to eliminating interference caused by pulse and similar transmissions it has been decided to fit pulse limiters into the receivers of the outfits named above.

2. Ships are to demand one limiter for each of the following outfits and to arrange installation by ship's staff. Fitting instructions are included with the unit:—

Type 86M—

Pattern 58360—Noise limiter, design 6 (box of parts).

Type TBS—

Pattern 59444—Noise limiter, design 7 (box of parts).

Type TCS—

Pattern 58359—Noise limiter, design 5 (box of parts).

3. (i) Stocks of limiters are being distributed to the following bases by S.N.S.O., Haslemere:—

Pattern	Durban	Colombo	Malta	Gibraltar	Simonstown	Greenock.	Mersey Area.	Severn Area.	Devonport.	Portsmouth.	Chatham.	Sheerness.	Rosyth.
58360	90	300	140	70	70	70	70	70	70	70	70	70	70
59444	100	350	130	75	75	75	75	75	75	75	75	75	75
58359	300	700	600	250	250	250	250	250	250	250	250	250	250

(ii) Demands for ships abroad should be forwarded to the (S) N.S.O. at the nearest base not earlier than two months from the date of this order.

(iii) Ships in home waters should demand from their normal storing yards.

4. R.I.S. will not be fitted to receivers with pulse limiters, but may be retained where already fitted if thought desirable.

5. Type 86M as being delivered from current contracts are manufactured with an efficient limiter and it is not, therefore, necessary to fit noise limiter, design 6. Models so fitted can be identified as follows:—

A stencil letter "M" located either—

(a) on the Signal Corps nameplate, which will read B.C.—624—A. "M", or

(b) on the chassis just to the left of the "A" channel core adjustment.

The limiter valve (12 M6) may be located by inspection on the underside of the chassis, close to the third I.F. transformer.

5230.—W/T Outfits—Aerial Outfit (Whip) AWE—Fitting-out Information

(R.E. 11637/45.—13 Sep. 1945.)

A.S.E. Installation Specification No. B.579 has been prepared to show the method of fitting and wiring Aerial Outfit AWE.

2. Copies of the Specification have been forwarded to the Commanders-in-Chief, British Pacific Fleet and East Indies; V.A.(Q), Melbourne; R.A.D. British Pacific Fleet; Rear Admiral Fleet Train; Admirals Superintendent, Chatham, Devonport, Portsmouth, Rosyth, Alexandria; Flag Officers-in-Charge, West Africa and Ceylon; Commodore, East Africa; Flag Officer Commanding Royal Indian Navy, Delhi; Flag Officer-in-Charge, Aden (for Port W/T Officer); Flag Officer, Bombay; Naval Secretary, Melbourne, for the officers concerned at Melbourne, Sydney and Fremantle; Naval Headquarters, India; Naval Secretary, Wellington; Secretary, Naval Board (N.D.A.), Ottawa; Commodore Superintendent, Gibraltar, Malta, Bermuda, Sheerness, Simonstown; Commodore-in-Charge, Halifax; N.O. i/c, Londonderry; Commanding Officers, H.M. Ships

"Artifex", "Resource", "Assistance" and "Diligence"; Commanding Officer, H.M.I.S. "Talwar"; Captains Superintendent, Kilindini, Durban; Deputy Superintendent, Pembroke.

3. Copies of the Specification have also been forwarded to the Warship Production Superintendents, East Coast of Scotland, North Western, Humber, Southern, London and East Coast, South Wales, Belfast, Scottish, and North Eastern Areas; Warship Electrical Superintendents, Scottish, North Western, North Eastern, London and South Eastern, Midland and South Wales, South Western and Northern Ireland Areas.

The Principal Ship Overseers and Engineer Repair Overseers of all ships approved to be fitted with Aerial Outfit (Whip) AWE are therefore to apply to the Warship Production Superintendents of their areas for a copy of A.S.E. Specification B.579.

(A.F.O. 790/40.)

5231.—W/T Set, Type 60 EQR with Battery Outfit BBz—Fitting-out Information

(R.E. 11549/45.—13 Sep. 1945.)

A.S.E. Installation, Specification No. B.495/R1 has been prepared to show the method of fitting and wiring Wireless Installation, Type 60EQR, with Battery Outfit BBz.

2. Copies of the specification have been forwarded to the Commanders-in-Chief, British Pacific Fleet, East Indies; V.A. (Q), Melbourne; R.A.D., British Pacific Fleet; Rear-Admiral, Fleet Train; Admirals Superintendent, Chatham, Devonport, Portsmouth, Rosyth and Alexandria; Flag Officers-in-Charge, West Africa and Ceylon; Flag Officer-in-Charge, Aden (for Port W/T Officer); Flag Officer, Bombay; Commodore, East Africa; Naval Secretary, Melbourne, for the officers concerned at Melbourne, Sydney and Fremantle; Naval Headquarters, India; Naval Secretary, Wellington; Secretary, Naval Board (N.D.A.), Ottawa; Commodores Superintendent, Gibraltar, Malta, Bermuda, Sheerness and Simonstown; Commodore-in-Charge, Halifax; Naval Officer-in-Charge, Londonderry; Commanding Officers, H.M. ships "Artifex", "Resource", "Assistance" and "Diligence"; Captains Superintendent, Kilindini and Durban; Deputy Superintendent, Pembroke.

3. Copies of the specification have also been forwarded to the Warship Production Superintendents, East Coast of Scotland, North Western, Humber, Southern, London and East Coast, South Wales, Belfast, Scottish and North Eastern Areas, and to the Warship Electrical Superintendents, Scottish North Western, North Eastern, London and South Eastern, Midland and South Wales, South Western and Northern Ireland Areas. The Principal (Ship) Overseers and Emergency Repair Overseers of all ships approved to be fitted with Wireless Installation, Type 60EQR, with Battery Outfit BBz, are therefore to apply to the Warship Production Superintendent of their areas for a copy of A.S.E. Specification No. B.495/R1.

4. It is to be noted that Specification B.495/44 and any advance fitting-out drawings, etc. which may already have been distributed are superseded by this specification and should be disposed of as confidential waste.

(A.F.O. 790/40.)

5232.—Echo Sounding—Type 765—Inspection Lamp to be Fed from Lighting Circuits

(A/S.M. 2667/45.—13 Sep. 1945.)

The existing arrangement whereby the Pattern 17014 (adjustable) lamp fitting is fed from the fuse and junction box of the set is unsatisfactory because illumination is only available when the set is switched on, and hence the lamp fitting is of no value in providing illumination for working on the recorder when stopped.

2. It is accordingly approved for the lamp fitting to be fed instead from the nearest convenient distribution box for ships lighting. This modification is not applicable to submarine installations (in which the lamp fitting concerned is omitted).

3. In existing sets the work is to be undertaken by ship (or depot ship) staffs.

4. The relevant "Instructions for Installing" (A/S 7314) and Handbook (B.R. 1040) will be amended in due course.

5233.—Centaurus Engines—Establishment of Tools

(A.M.R. 344/45.—13 Sep. 1945.)

The tools detailed in the Appendix to this Order have been introduced for maintenance and overhaul of Centaurus engines.

2. The tools allowed will mainly limit the work which can be undertaken by ships and establishments to the following:—

- | | |
|--|--|
| (a) Squadrons | Daily inspections
Daily maintenance
Minor inspections |
| (b) Aircraft carriers (Fleet and Light Fleet). | Minor repairs and replacements which involve minor stripping only. Shock loading within the limits laid down in A.P. 2039B.
Changing of engines. |
| (c) Aircraft carriers (escort) ... | As for (b) but on a reduced scale. |
| (d) Naval air stations (Classes "A", "B" and "C"). | Major inspections,
Minor repairs and replacements which involve minor stripping only.
Shock loading within the limits laid down in A.P. 2039B.
Changing of engines. |
| (e) Naval air stations (Classes "D" and "E"). | Daily maintenance.
Daily inspections.
Minor inspections.
Minor repairs by replacements with complete assemblies which do not involve removal of engine from airframe. |
| (f) Repair yards | Complete overhauls, major repairs and limited salvage. |
| (g) Maintenance yards | Complete overhauls and major repairs. |
| (h) Engine repair ship... .. | As for maintenance yards (g). |
| (i) Maintenance ship | As for Naval air stations (Classes "A", "B" and "C"). |
| (j) H.M.S. "Unicorn" | As for Naval air stations (Classes "A", "B" and "C"). |
| (k) Squadron servicing unit ... | As for squadrons. |
| (l) Mobile Naval air bases:— | |
| M.R. component | As for Naval air stations (Classes "A", "B" and "C"). |
| M.M. component | As for Naval air stations (Classes "D" and "E"). |
| M.S. component... .. | As for squadrons. |
| M.S.R. component | As for squadrons. |

3. Repair yards, maintenance yards and T.A.M.Ys. are authorized to hold stocks of tools for the types of engines fitted to aircraft normally maintained or repaired in the ship or establishment, in cases where complete overhaul is not undertaken, as for Naval air stations, Class "A".

4. T.A.M.Ys. undertaking overhauls of Centaurus engines should hold tools as for maintenance yards.

5. In general the work undertaken by the above-mentioned services is to come within limitations laid down in Air Publication 2039B.

6. To ensure economy, demands for tools are to be limited to immediate requirements.

7. If stocks of any tool held by ships and establishments for the repair of Pegasus, Mercury and/or Taurus engines exceed the allowance for that tool, as laid down in this A.F.O., additional stocks are not to be demanded.

APPENDIX
CENTAURUS AERO ENGINE TOOLS

Sect.	Ref. No.	Part No.	Description	Engines				ALLOWANCES																Remarks			
				Centaurus				Aircraft Carriers		Naval Air Stations				Yards		Repair Ships		M.O.N.A.B.									
				IX				Squadrons & I.E. Aircraft or less	Fleet and Light Fleet	Escort	Class "A"	Class "B"	Class "C"	Class "D", "E", and "F"	Repair	Maintenance	Engine	Maintenance	H.M.S. "Unborn"	Squadron Servicing Unit	M.R.	M.M.	M.S.		M.S.R.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
86R	8017	FB.19160	TOOLS FOR GENERAL USE Gun, oil, "Ecoots" ...	*						1	4	2	6	4	3	2	9	6	6	4	4	2	6	6	3	2	Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury. Common also to Taurus, Pegasus and Mercury.
	54050	FB.63076	Spanner, universal box, 2 B.A. ...	*						6	12	8	15	7	6	4	30	20	20	7	7	9	15	15	13	9	
	10530	FB.26407	Spanner, box, 1/2 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	20	7	7	9	15	15	13	9	
	54036	FB.63020	Spanner, universal box, 1/4 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	20	7	7	9	15	15	13	9	
	10518	FB.26464	Spanner, 2 B.A. x 4 B.A. ...	*						6	12	8	15	7	6	4	30	20	16	7	7	9	15	15	13	9	
	10520	FB.26463	Spanner, 1/2 in. x 1/4 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	16	7	7	9	15	15	13	9	
	10522	FB.26462	Spanner, 3/8 in. x 1/4 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	16	7	7	9	15	15	13	9	
	10524	FB.26461	Spanner, 1/2 in. x 1/4 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	16	7	7	9	15	15	13	9	
	10526	FB.26460	Spanner, 3/8 in. x 1/4 in. B.S.F. ...	*						6	12	8	15	7	6	4	30	20	16	7	7	9	15	15	13	9	
	120651	FB.113476	Spanner, 1/2 in. x 1 in. B.S.F. ...	*						3	8	6	12	6	4	3	20	16	10	6	6	4	12	12	6	4	
	10528	FB.26459	Spanner, 1 1/8 in. x 1/2 in. B.S.F. ...	*						3	8	6	12	6	4	3	20	16	10	6	6	4	12	12	6	4	
	13010	FB.35274	Spanner, 1 1/2 in. x 1 1/2 in. B.S.F. ...	*						3	8	6	12	6	4	3	20	16	10	6	6	4	12	12	6	4	
	120287	FB.97332	Screwdriver, for Jubilee clips ...	*						6	12	8	15	8	6	4	30	20	10	6	8	9	15	15	13	9	
	53450	FB.66060	Spanner, box, 1 in. B.S.F. ...	*							2	2	2	2	2		16	12	12	2	2		2	2			
	10506	FB.26456	Bar, tommy, 1/2 in. dia. ...	*							2	2	2	2	2		16	12	12	2	2		2	2			
			TOOLS FOR USE WITH ACCESSORY DRIVE																								
86W	130149	FB.123855	Pliers for "Seeger" circlip ...	*							3	2	4	3	2	1	10	8	6	3	3	1	4	4	1	1	
			TOOLS FOR USE WITH CENTRIFUGER																								
36R	92808	FB.84359	Holder for centrifuger unit ...	*						1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	
	120472	FB.95122	Spanner for nut ...	*						1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	
	92850	FB.90131*	} Tool for splitting centrifuger casing	*						1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	
	120678	FB.123921		*							1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1

36W	130147	FB.113444	Tool for extracting centrifuge spindle group, comprising:—	*																								
	130148	FB.123895	Extractor ... Ring, adaptor ...	*						1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1		
			TOOLS FOR USE WITH CONNECTING RODS																									
36R	88026	FB.72527	Drift for inserting artic rod pin ...	*												4	3	3										
	92762	FB.74619	Drift for extracting artic rod pin ...	*												4	3	3										
36W	130040	FB.113371	Jig for connecting rod ... Pliers for removing artic rod pin retaining ring.	*												2	1	2										
36W	130041	FB.113335	Tool for compressing oil retainer springs Tool for assembling artic rod pin circlip group, comprising:—	*												2	2	2										
36R	92763	{ FB.74622 FB.74620	Drift ... Plug ...	*												3	2	2										
			TOOLS FOR USE WITH CRANKCASE																									
36W	130017	FB.105199	Protector for crankcase and connecting rods (18 per set).	*						18	72	54	72	72	72	54	108	108	90	72	72	18	54	54	36	18		
	130180	FB.136927	Tool to assemble or extract centre bearing.	*													2	1	2									
	130170	FB.136929	Sleeve, distance ... Spanner, box, for idler shaft retaining nut.	*													2	1	2									
36R	98216	FB.87033	Drift for assembling sleeve-crank ball bearing.	*													3	2	2									
36W	130191	FB.123923	Drift for assembling sleeve-crank ball bearing.	*													3	2	2									
36W	130010	FB.97351	Drift for extracting sleeve-crank ball bearing.	*													3	2	2									
	130190	FB.123927	Drift for extracting sleeve-crank ball bearing.	*													3	2	2									
36R	87936	FB.66086	Spanner, tube, for layshaft retaining ring.	*													4	3	3									
	72858	FB.60002	Pliers for sleeve crank bearing retaining ring. Spanner for crankcase bolt, and gland sleeve. Spanner for gland nut ...	*													3	2	2									
36W	130168	FB.123082	Extractor, crankcase bolt, rear ...	*													2	1	2									
			TOOLS FOR USE WITH CRANKSHAFT																									
36W	130024	FB.105221	Drift to assemble crankshaft gear (front)	*													2	1	1									
	130025	FB.105218	Drift to assemble crankshaft gear (rear)	*													1	1	1									
36R	92702	FB.84342	Drift for retaining washer ...	*													2	2	2									
36W	130026	FB.105222	Extractor for crankshaft gear (front)...	*													1	1	1									
	130005	FB.113448	Extractor for crankshaft gear (rear) ...	*													1	1	1									

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APPENDIX—contd.
CENTAURUS AERO ENGINE TOOLS

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Sect.	Ref. No.	Part No.	Description	Engines				ALLOWANCES													Remarks						
				Centaurus				Squadrons 6 I.E. Aircraft or less	Aircraft Carriers		Naval Air Stations				Yards		Repair Ships		M.O.N.A.B.								
				IX					Fleet and Light Fleet	Escort	Class "A"	Class "B"	Class "C"	Class "D" and "E"	Repair	Maintenance	Engine	Maintenance	H.M.S. " Unicorn "	Squadron Servicing Unit		M.R.	M.M.	M.S.	M.S.R.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
			TOOLS FOR USE WITH CRANKSHAFT—contd.																								
	130027	FB.105204	Extractor for reduction gear driving wheel.	*													1	1	1								
	130028	FB.105202	Holder for reduction gear driving wheel	*													1	1	1								
	130169	FB.136909	Protector for crankpin sleeve (2 per set)	*													12	8	8								
	130030	FB.105203	Spanner for bearing retaining nut on reduction gear driving wheel.	*													3	3	3								
			Spanner for crankpin oil plug...	*																							
	130031	FB.105220	Spanner for retaining nuts (front and rear).	*													3	2	2								
36R	10532	FB.26583	Spanner for crankshaft oil jet...	*													6	5	4								Use FB.66060 In General Section.
36W	130032	FB.105219	Tool for dismantling bearing on reduction gear driving wheel.	*													2	2	2								Common also to Pegasus and Mercury.
	130033	FB.105261	Tool for assembling bearing on reduction gear driving wheel.	*													2	2	2								
	130034	FB.105209	Tool for assembling and extracting crankshaft front bearing.	*													2	2	2								
	130035	FB.105210	Tool for assembling and extracting crankshaft rear bearing.	*													2	2	2								
36W	130038	FB.113326	Disc, engine turning ...	*						2	1	1	1	1	1		4	3	3								
	130039	FB.113328	Attachment, turning, for engine ...	*						1	1	1	1	1	1		2	2	2								
			Stand for assembling crankshaft group, comprising:—	*																							
	130102	FB.113455	Bolts, lifting (4 per set) ...	*													8	8	12								
	130103	FB.113456	Fixture ...	*													1	1	1								
	130104	FB.113457	Ring, adaptor ...	*													1	1	1								
	130105	FB.113458	Bracket, clamping, for conn. rods (2 per set).	*													2	2	4								
36R	72924	FB.66098	Stand ...	*																							
36W	130106	FB.113460	Steady for crankshaft, front and rear	*													1	1	2								Common also to Taurus.
	130107	FB.113461	Steady for crankshaft, centre	*													1	1	1								
36R	72926	FB.66097	Tackle, lifting ...	*													1	1	2								Common also to Taurus.

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			TOOLS USED IN CONJUNCTION WITH STAND FOR ASSEMBLING CRANKSHAFT																										
36W	130067	FB.113462	Bar, alignment ...	*													1	1	2										
	130068	FB.113463	Bar, alignment ...	*													1	1	1										
36R	72938	FB.71919	Extractor for front and rear crankshaft	*													1	1	1									Common also to Taurus.	
36W	130069	FB.113464	Expander, manston (front) ...	*													3	3	3										
36R	74012	FB.97232	Expander, manston (rear) ...	*													3	3	3										
	72950	FB.77566	Spanner for retaining bolt nut (2 per set)	*													2	2	2										
36W	130036	FB.113325	Tool for assembling bearing sleeve ...	*													2	2	2										
	130037	FB.113324	Tool for dismantling bearing sleeve ...	*													2	2	2										
	130096	FB.113324-10	Ejector, spare ...	*													10	8	8										
			TOOLS FOR CRANKSHAFT BOLT, FRONT GROUP, comprising:—																										
	130071	FB.113466	Holder ...	*													2	1	2										
	130072	FB.113467	Holder ...	*													2	1	2										
	130073	FB.113468	Spanner, complete ...	*													2	2	2										
	130138	FB.113498-1	Spanner, spare ...	*													2	2	2										
			TOOLS FOR CRANKSHAFT BOLT, REAR GROUP, comprising:—																										
36W	130151	FB.123863	Plate, locking, for crankshaft bolts ...	*													2	2	2										
	130152	FB.123864	Spanner ...	*													1	1	1										
	130154	FB.123864-1	Spanner end, spare ...	*													2	2	2										
			TOOLS FOR CRANKSHAFT BUSH																										
36W	130125	FB.105205*	Extractor ...	*													2	1	2										
	130184	FB.136953	Gauge plug ...	*													2	2	2										
	130126	FB.105208	Jig, reaming ...	*													1	1	1										
	130127	FB.113331	Reamer, group, comprising:—	*																									
	130128	FB.113330	Holder ...	*													1	1	1										
	130129	FB.113332	Reamer ...	*													4	3	3										
			TOOLS FOR INSERTING CRANKSHAFT BUSH																										
36W	130130	FB.105207	Gauge ...	*													1	1	1										
	130131	FB.105206	Insert ...	*													1	1	1										
			TOOLS FOR CRANKPIN SLEEVE																										
	130132	FB.113334	Extractor ...	*													1	1	1										
	130133	FB.113480	Fixture, assembling, for crankpin sleeves.	*													1	1	1										
	130134	FB.113483	Lap, hand, for crankpin diameter ...	*													2	1	2										
	130174	FB.113483-2	Insert for lap, spare ...	*													4	3	3										

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APPENDIX—contd.
CENTAURUS AERO ENGINE TOOLS

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Sect.	Ref. No.	Part No.	Description	Engines				ALLOWANCES																Remarks																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				Centaurus				Squadrons 9 I.E. Aircraft or less	Aircraft Carriers		Naval Air Stations				Yards		Repair Ships		M.O.N.A.B.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
				1X					Fleet and Light Fleet	Escort	Class "A"	Class "B"	Class "C"	Class "D" and "E"	Repair	Maintenance	Engine	Maintenance	H.M.S. "Unicorn"	Squadron Servicing Unit	M.R.	M.M.	M.S.		M.S.R.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
<p>TOOLS USED WITH CYLINDERS AND SLEEVES</p> <tr> <td>36R</td> <td>120699</td> <td>FB.136944</td> <td>Spanner for sparking plug ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td>12</td> <td>8</td> <td>12</td> <td>12</td> <td>12</td> <td>8</td> <td>15</td> <td>15</td> <td>12</td> <td>12</td> <td>12</td> <td>9</td> <td>12</td> <td>12</td> <td>12</td> <td>9</td> <td></td> <td rowspan="10">Common also to Taurus. Common also to Taurus.</td> </tr> <tr> <td>36R</td> <td>120457</td> <td>FB.105191</td> <td>Spanner for relief valve body ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>6</td> <td>3</td> <td>4</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>4</td> <td></td> </tr> <tr> <td></td> <td>72512</td> <td>FB.69551</td> <td>Spanner for exhaust snout nut ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>6</td> <td>5</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td>12</td> <td>10</td> <td>8</td> <td>8</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td>36W</td> <td>92536</td> <td>FB.90137</td> <td>Spanner for induction belt bolt ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>8</td> <td>5</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>36W</td> <td>130007</td> <td>FB.113475*</td> <td>Spanner for induction pipe nut ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>8</td> <td>5</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130185</td> <td>FB.130953</td> <td>Spanner for induction pipe nut (super-charger end).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>8</td> <td>5</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130098</td> <td>FB.113479</td> <td>Spanner for induction pipe nut (super-charger end).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>8</td> <td>5</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>36R</td> <td>53220</td> <td>FB.65993</td> <td>Hook for locking plate ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>6</td> <td>4</td> <td>6</td> <td>6</td> <td>6</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>3</td> <td></td> </tr> <tr> <td>36W</td> <td>180046</td> <td>FB.113315</td> <td>Holder for cylinder sleeve (for use when tightening sleeve ball housing nuts).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>6</td> <td>6</td> <td>4</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130139</td> <td>FB.113482</td> <td>Pilot for cylinder sleeve (2 per set) ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4</td> <td>6</td> <td>4</td> <td>10</td> <td>8</td> <td>8</td> <td>6</td> <td>10</td> <td>8</td> <td>6</td> <td>8</td> <td>8</td> <td>4</td> <td>10</td> <td>10</td> <td>6</td> <td>4</td> <td></td> </tr> <tr> <td colspan="27"> <p>SPANNERS FOR CYLINDERS AND CYLINDER HEAD NUTS, comprising:—</p> <tr> <td>36R</td> <td>98086</td> <td>FB.90121</td> <td>Adaptor, ratchet ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> <td rowspan="5">Common also to Taurus. Common also to Taurus.</td> </tr> <tr> <td>36W</td> <td>98090</td> <td>FB.90130</td> <td>Handle for spanner (for slackening nuts)</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>180064</td> <td>FB.113387</td> <td>Spanner, extended, for cylinder nuts...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>130099</td> <td>FB.113459</td> <td>Spanner for cylinder nuts (for running down nuts only).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Spanner for cylinder headnuts</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td>36R</td> <td>98100</td> <td>FB.90119/2</td> <td>Wrench, "Sunner" tension ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> <td rowspan="5">Use FB.113484. Common also to Taurus</td> </tr> <tr> <td>36W</td> <td>130045</td> <td>FB.113317*</td> <td>Spanner for locking plate nut...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36R</td> <td>129290</td> <td>FB.97333</td> <td>Spanner end, spare ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>120688</td> <td>FB.97333-1</td> <td>Spanner for sleeve ball housing nut, comprising:—</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>4</td> <td>16</td> <td>12</td> <td>16</td> <td>4</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td></td> </tr> <tr> <td>36W</td> <td>130141</td> <td>FB.113481</td> <td>Shank for spanner (for use with FB.90130 and FB.113317).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36W</td> <td>130140</td> <td>FB.113484</td> <td>Spanner ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>6</td> <td>6</td> <td>5</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130050</td> <td>FB.113313</td> <td>Tool, assembly, for cylinders ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>2</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> <td>5</td> <td>4</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>130051</td> <td>FB.113318</td> <td>Tool for removing sleeve contracting ring.</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td></td> </tr> </td></tr>																											36R	120699	FB.136944	Spanner for sparking plug ...	*						6	12	8	12	12	12	8	15	15	12	12	12	9	12	12	12	9		Common also to Taurus. Common also to Taurus.	36R	120457	FB.105191	Spanner for relief valve body ...	*						1	6	3	4	3	3	5	5	5	4	3	3	4	4	4	3	4			72512	FB.69551	Spanner for exhaust snout nut ...	*						3	6	5	8	8	6	4	12	10	8	8	5	5	5	5	5	5		36W	92536	FB.90137	Spanner for induction belt bolt ...	*						3	4	3	6	5	5	3	10	8	8	5	5	3	3	3	3	3		36W	130007	FB.113475*	Spanner for induction pipe nut ...	*						3	4	3	6	5	5	3	10	8	8	5	5	3	3	3	3	3			130185	FB.130953	Spanner for induction pipe nut (super-charger end).	*						3	4	3	6	5	5	3	10	8	8	5	5	3	3	3	3	3			130098	FB.113479	Spanner for induction pipe nut (super-charger end).	*						2	4	3	6	5	5	3	10	8	8	5	5	3	3	3	3	3		36R	53220	FB.65993	Hook for locking plate ...	*						1	6	4	6	6	6	3	10	8	6	6	6	6	6	6	6	3		36W	180046	FB.113315	Holder for cylinder sleeve (for use when tightening sleeve ball housing nuts).	*						1	2	2	3	2	2	2	6	6	4	2	2	2	3	3	3	3			130139	FB.113482	Pilot for cylinder sleeve (2 per set) ...	*						4	6	4	10	8	8	6	10	8	6	8	8	4	10	10	6	4		<p>SPANNERS FOR CYLINDERS AND CYLINDER HEAD NUTS, comprising:—</p> <tr> <td>36R</td> <td>98086</td> <td>FB.90121</td> <td>Adaptor, ratchet ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> <td rowspan="5">Common also to Taurus. Common also to Taurus.</td> </tr> <tr> <td>36W</td> <td>98090</td> <td>FB.90130</td> <td>Handle for spanner (for slackening nuts)</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>180064</td> <td>FB.113387</td> <td>Spanner, extended, for cylinder nuts...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>130099</td> <td>FB.113459</td> <td>Spanner for cylinder nuts (for running down nuts only).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Spanner for cylinder headnuts</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td>36R</td> <td>98100</td> <td>FB.90119/2</td> <td>Wrench, "Sunner" tension ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> <td rowspan="5">Use FB.113484. Common also to Taurus</td> </tr> <tr> <td>36W</td> <td>130045</td> <td>FB.113317*</td> <td>Spanner for locking plate nut...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36R</td> <td>129290</td> <td>FB.97333</td> <td>Spanner end, spare ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>120688</td> <td>FB.97333-1</td> <td>Spanner for sleeve ball housing nut, comprising:—</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>4</td> <td>16</td> <td>12</td> <td>16</td> <td>4</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td></td> </tr> <tr> <td>36W</td> <td>130141</td> <td>FB.113481</td> <td>Shank for spanner (for use with FB.90130 and FB.113317).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36W</td> <td>130140</td> <td>FB.113484</td> <td>Spanner ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>6</td> <td>6</td> <td>5</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130050</td> <td>FB.113313</td> <td>Tool, assembly, for cylinders ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>2</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> <td>5</td> <td>4</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>130051</td> <td>FB.113318</td> <td>Tool for removing sleeve contracting ring.</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td></td> </tr>																											36R	98086	FB.90121	Adaptor, ratchet ...	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5		Common also to Taurus. Common also to Taurus.	36W	98090	FB.90130	Handle for spanner (for slackening nuts)	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5			180064	FB.113387	Spanner, extended, for cylinder nuts...	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5			130099	FB.113459	Spanner for cylinder nuts (for running down nuts only).	*						1	4	3	6	5	5	3	10	8	6	5	5	5	5	5	5	5					Spanner for cylinder headnuts	*						1	4	3	6	5	5	3	10	8	6	5	5	5	5	5	5	5		36R	98100	FB.90119/2	Wrench, "Sunner" tension ...	*						1	4	3	5	4	4	2	8	6	8	4	4	2	5	5	3	2		Use FB.113484. Common also to Taurus	36W	130045	FB.113317*	Spanner for locking plate nut...	*						1	4	3	4	2	2	1	8	6	8	2	2	2	4	4	3	2		36R	129290	FB.97333	Spanner end, spare ...	*						1	4	3	4	2	2	1	8	6	8	2	2	2	4	4	3	2			120688	FB.97333-1	Spanner for sleeve ball housing nut, comprising:—	*						2	8	6	8	4	4	4	16	12	16	4	4	4	8	8	6	4		36W	130141	FB.113481	Shank for spanner (for use with FB.90130 and FB.113317).	*						1	4	3	5	4	4	2	8	8	6	4	4	2	5	5	3	2		36W	130140	FB.113484	Spanner ...	*						2	4	3	6	5	5	3	10	8	6	5	5	3	6	6	5	3			130050	FB.113313	Tool, assembly, for cylinders ...	*						1	3	2	4	3	2	1	5	4	5	4	4	2	4	4	3	2			130051	FB.113318	Tool for removing sleeve contracting ring.	*						1	1	1	1	1	1	1	5	4	4	4	4	2	1	1	1	1	
36R	120699	FB.136944	Spanner for sparking plug ...	*						6	12	8	12	12	12	8	15	15	12	12	12	9	12	12	12	9		Common also to Taurus. Common also to Taurus.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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36R	53220	FB.65993	Hook for locking plate ...	*						1	6	4	6	6	6	3	10	8	6	6	6	6	6	6	6	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36W	180046	FB.113315	Holder for cylinder sleeve (for use when tightening sleeve ball housing nuts).	*						1	2	2	3	2	2	2	6	6	4	2	2	2	3	3	3	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	130139	FB.113482	Pilot for cylinder sleeve (2 per set) ...	*						4	6	4	10	8	8	6	10	8	6	8	8	4	10	10	6	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<p>SPANNERS FOR CYLINDERS AND CYLINDER HEAD NUTS, comprising:—</p> <tr> <td>36R</td> <td>98086</td> <td>FB.90121</td> <td>Adaptor, ratchet ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> <td rowspan="5">Common also to Taurus. Common also to Taurus.</td> </tr> <tr> <td>36W</td> <td>98090</td> <td>FB.90130</td> <td>Handle for spanner (for slackening nuts)</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>180064</td> <td>FB.113387</td> <td>Spanner, extended, for cylinder nuts...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td>130099</td> <td>FB.113459</td> <td>Spanner for cylinder nuts (for running down nuts only).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Spanner for cylinder headnuts</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td></td> </tr> <tr> <td>36R</td> <td>98100</td> <td>FB.90119/2</td> <td>Wrench, "Sunner" tension ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> <td rowspan="5">Use FB.113484. Common also to Taurus</td> </tr> <tr> <td>36W</td> <td>130045</td> <td>FB.113317*</td> <td>Spanner for locking plate nut...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36R</td> <td>129290</td> <td>FB.97333</td> <td>Spanner end, spare ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>4</td> <td>2</td> <td>2</td> <td>1</td> <td>8</td> <td>6</td> <td>8</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>120688</td> <td>FB.97333-1</td> <td>Spanner for sleeve ball housing nut, comprising:—</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>8</td> <td>6</td> <td>8</td> <td>4</td> <td>4</td> <td>4</td> <td>16</td> <td>12</td> <td>16</td> <td>4</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td></td> </tr> <tr> <td>36W</td> <td>130141</td> <td>FB.113481</td> <td>Shank for spanner (for use with FB.90130 and FB.113317).</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>8</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>2</td> <td>5</td> <td>5</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td>36W</td> <td>130140</td> <td>FB.113484</td> <td>Spanner ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> <td>6</td> <td>6</td> <td>5</td> <td>3</td> <td></td> </tr> <tr> <td></td> <td>130050</td> <td>FB.113313</td> <td>Tool, assembly, for cylinders ...</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>3</td> <td>2</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> <td>5</td> <td>4</td> <td>5</td> <td>4</td> <td>4</td> <td>2</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>130051</td> <td>FB.113318</td> <td>Tool for removing sleeve contracting ring.</td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td></td> </tr>																											36R	98086	FB.90121	Adaptor, ratchet ...	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5		Common also to Taurus. Common also to Taurus.	36W	98090	FB.90130	Handle for spanner (for slackening nuts)	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5			180064	FB.113387	Spanner, extended, for cylinder nuts...	*						1	4	3	6	5	5	3	8	6	5	5	5	5	5	5	5	5			130099	FB.113459	Spanner for cylinder nuts (for running down nuts only).	*						1	4	3	6	5	5	3	10	8	6	5	5	5	5	5	5	5					Spanner for cylinder headnuts	*						1	4	3	6	5	5	3	10	8	6	5	5	5	5	5	5	5		36R	98100	FB.90119/2	Wrench, "Sunner" tension ...	*						1	4	3	5	4	4	2	8	6	8	4	4	2	5	5	3	2		Use FB.113484. Common also to Taurus	36W	130045	FB.113317*	Spanner for locking plate nut...	*						1	4	3	4	2	2	1	8	6	8	2	2	2	4	4	3	2		36R	129290	FB.97333	Spanner end, spare ...	*						1	4	3	4	2	2	1	8	6	8	2	2	2	4	4	3	2			120688	FB.97333-1	Spanner for sleeve ball housing nut, comprising:—	*						2	8	6	8	4	4	4	16	12	16	4	4	4	8	8	6	4		36W	130141	FB.113481	Shank for spanner (for use with FB.90130 and FB.113317).	*						1	4	3	5	4	4	2	8	8	6	4	4	2	5	5	3	2		36W	130140	FB.113484	Spanner ...	*						2	4	3	6	5	5	3	10	8	6	5	5	3	6	6	5	3			130050	FB.113313	Tool, assembly, for cylinders ...	*						1	3	2	4	3	2	1	5	4	5	4	4	2	4	4	3	2			130051	FB.113318	Tool for removing sleeve contracting ring.	*						1	1	1	1	1	1	1	5	4	4	4	4	2	1	1	1	1																																																																																																																																																																																																																																																																																																																					
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	130099	FB.113459	Spanner for cylinder nuts (for running down nuts only).	*						1	4	3	6	5	5	3	10	8	6	5	5	5	5	5	5	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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36R	98100	FB.90119/2	Wrench, "Sunner" tension ...	*						1	4	3	5	4	4	2	8	6	8	4	4	2	5	5	3	2		Use FB.113484. Common also to Taurus																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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36R	129290	FB.97333	Spanner end, spare ...	*						1	4	3	4	2	2	1	8	6	8	2	2	2	4	4	3	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	120688	FB.97333-1	Spanner for sleeve ball housing nut, comprising:—	*						2	8	6	8	4	4	4	16	12	16	4	4	4	8	8	6	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36W	130141	FB.113481	Shank for spanner (for use with FB.90130 and FB.113317).	*						1	4	3	5	4	4	2	8	8	6	4	4	2	5	5	3	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36W	130140	FB.113484	Spanner ...	*						2	4	3	6	5	5	3	10	8	6	5	5	3	6	6	5	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	130050	FB.113313	Tool, assembly, for cylinders ...	*						1	3	2	4	3	2	1	5	4	5	4	4	2	4	4	3	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	130051	FB.113318	Tool for removing sleeve contracting ring.	*						1	1	1	1	1	1	1	5	4	4	4	4	2	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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APPENDIX—cont 1.
CENTAURUS AERO ENGINE TOOLS

Sect.	Ref. No.	Part No.	Description	Engines				ALLOWANCES												Remarks				
				Centaurus				Squadrons of I.E. Aircraft or less	Aircraft Carriers		Naval Air Stations				Yards		Repair Ships		M.O.N.A.B.					
				IX					Escort	Class "A"	Class "B"	Class "C"	Class "D" and "E"	Repair	Maintenance	Engine	Maintenance	H.M.S. "Unborn"	Squadron Servicing Unit		M.R.	M.M.	M.S.	M.S.R.
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)		
36R	53212	FB.66014	TOOLS FOR USE WITH PISTONS Clip to compress piston and cylinder head rings.	*																				
	54260	FB.57411	Pliers for removing gudgeon pin circlip	*																				
	120593	FB.113312	Tool for assembling gudgeon pin circlip	*																				
36W	130065	FB.113382	TOOLS FOR USE WITH REAR COVER Extractor for driving gear and starter jaw.	*																				
	130054	FB.113359	Spanner for control sleeve plug	*																				
	130066	FB.113445	Adaptor, vice, for control sleeve	*																				
	130109	FB.123809	TOOLS FOR CROSS DRIVE SHAFT BUSH Fixture, inserting	*																				
	130110	FB.113357	Jig, reaming	*																				
	130111	FB.97358	Reamer group, comprising :-	*																				
	130112	FB.97359	Reamer, shell	*																				
	130113	FB.95020	Shank	*																				
	130114	FB.97357	Gauge, plug	*																				
			Drift	*																				
	130115	FB.123802	TOOLS FOR DRIVING SHAFT BUSHES Fixture, inserting	*																				
	130116	FB.97355	Jig, reaming	*																				
	130117	FB.97354	Reamer, group, comprising :-	*																				
	130118	FB.97353	Reamer, shell	*																				
	130119	FB.97356	Holder...	*																				
	130120	FB.123866	Gauge, plug	*																				
	130121	FB.113352	Extractor	*																				
			Tool, inserting	*																				

Common also to Taurus.

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36W	130122	FB.113356	TOOLS FOR LAYSHAFT BUSH (MAGNETO DRIVE) Fixture, inserting	*																					
	130123	FB.113358	Jig, reaming	*																					
36R	120295	FB.97375	Reamer	*																					
	120293	FB.97374	Gauge, plug	*																					
36W	130124	FB.113360	Drift	*																					
			TOOLS FOR USE WITH REDUCING VALVE Pliers for retaining ring	*																					
			TOOLS FOR USE WITH REDUCTION GEAR Lifting sling for reduction gear assembly	*																					
36R	120690	FB.136941	Wrench for turning engine	*																					
36R	87794	FB.66062	Base for oil retainer cover, for removing oil retainer.	*																					
36W	130001	FB.105293	Drift for removing oil retainer from oil retainer cover.	*																					
36R	87947	FB.84398	Drift for assembling bevel gear thrust bearing.	*																					
36W	130005	FB.105291	Ring, distance, for assembling stationary gear.	*																					
36W	130166	FB.123983	Drift for bevel pinion thrust bearing	*																					
36R	72808	FB.72570	Extractor for bevel gear, rear	*																					
36W	130092	FB.123800	Extractor for bevel pinion	*																					
36W	130003	FB.105226	Extractor for bearing housing	*																					
36R	92614	FB.84399/2	Extractor for oil feed bush	*																					
36W	130004	FB.105287	Fixture for checking backlash on reduction gear assembly group comprising :- Bush adaptor	*																					
36W	130093	FB.72567	Fixture	*																					
36R	72818	FB.72561/2	Gauge, pressure, and adaptor	*																					
36R	72820	FB.79942	Ring, adaptor	*																					
36W	130008	FB.105298	Ring, packing (substitute for reduction gear case).	*																					
36W	130009	FB.105297	Gauge depth (face of reduction gear case to rear bevel gear).	*																					
	130010	FB.105296	Holder for propeller shaft	*																					
	130011	FB.105290	Key for centre piece	*																					
36R	92632	FB.84366	Pilot for assembling oil retainer cover	*																					
	13124	FB.35228	Pliers for oil seal retaining ring	*																					
	87918	FB.72585	Spanner for propeller shaft thrust nut	*																					
	87916	FB.72581	Spanner for bevel pinion nut	*																					
			Spanner for oil tube nut, front	*																					
36W	130167	FB.123938	Spanner for centre piece locknut (rear)	*																					
	130014	FB.105223	Spanner for retaining nut, rear	*																					
36R	87926	FB.72589	Tool for assembling front bearing to propeller shaft.	*																					

Common also to Taurus

Common also to Taurus.

Common also to Taurus, Pegasus, Mercury.

Use FB.66060 in general section

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APPENDIX—contd.
CENTAURUS AERO ENGINE TOOLS

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Sect.	Ref. No.	Part No.	Description	Engines				ALLOWANCES														Remarks					
				Centaurus				Aircraft Carriers		Naval Air Stations				Yards		Repair Ships		M.O.N.A.B.									
				LX				Squadrons 6 I.E. Aircraft or less	Fleet and Light Fleet Escort	Class "A"	Class "B"	Class "C"	Class "D" and "E"	Repair	Maintenance	Engine	Maintenance	H.M.S. "Unicorn"	Squadron Servicing Unit	M.R.	M.M.		M.S.	M.S.R.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
36W	130015	FB.105288	Tool for inserting and extracting front bearing in bearing housing group comprising:—																								
36R	92628	FB.84374	Holder for bearing housing ...	*																							
36W	130016	FB.105289	Insertor and extractor ...	*																							
36R	92652	FB.84376	Piece, distance, for use when extracting bearing.	*																							
36R	87939	FB.77664	Spanner for locking ring ...	*																							
36W	130002	FB.105292	Tool for inserting oil retainer in oil retainer cover, group comprising:—																								
36R	87941	FB.77665	Base ...	*																							
36W	130002	FB.105292	Drift ...	*																							
36W	130135	FB.105227	Ring, locating ...	*																							
36R	130136	FB.105299	Drift and base for extracting bevel pinion bush.	*																							
36R	88206	FB.80074	Adaptor ...	*																							
36W	130137	FB.113301	Base ...	*																							
36R	72844	FB.72530	Drift ...	*																							
36W	130094	FB.113494	Drift to remove sleeve crank ...	*																							
36R	53452	FB.71917	Extractor for sleeve driven wheel ...	*																							
36W	130022	FB.97360	Holders for sleeve crank (9 per set) ...	*																							
36R	130023	FB.105107/2	Tool to assemble sleeve crank ...	*																							
36W	130150	FB.123857	Tool for tightening sleeve crank locknut, group, comprising:—																								
36R	72867	FB.79992	Bracket steady, for spanner ...	*																							
36W	130150	FB.123857	Holder, for sleeve crank ...	*																							
36R	72867	FB.79992	Spanner for locknut ...	*																							
36W	130150	FB.123857	Bracket for positioning master rod	*																							
36W	130075	FB.113384	TOOLS FOR USE WITH SUPERCHARGER																								
36R	78042	FB.79039	Clip for assembling clutch blocks ...	*																							
36W	130600	FB.113338	Drift for inserting oil tube in main driving shaft.	*																							
36W	130076	FB.113336	Extractor for centrifugal clutch unit	*																							
36R	92800	FB.84355	Fixture for checking wobble on impeller blades group, comprising:—																								
36R	92778	FB.84353	Fixture ...	*																							
36W	130078	FB.113393	Block (4 per set) ...	*																							
36W	130079	FB.113340/2	Pincers for assembling spring drive springs.	*																							
36R	130080	FB.113341/2	Retainer for impeller shaft bearing (front).	*																							
36W	130182	FB.136912	Spanner for impeller shaft retaining nuts group, comprising:—																								
36W	130081	FB.113385	Holder spanner for impeller shaft ...	*																							
36W	130082	FB.113394	Spanner for retaining nut ...	*																							
36R	130083	FB.113395	Spanner for retaining plug in end of main driving shaft.	*																							
36W	130175	FB.136937	Gauge for checking clearance between volute casing and impeller group comprising:—																								
36R	130176	FB.136938	Gauge ... 1 each	*																							
36W	130182	FB.136950	Steady for spanner for retaining plug ...	*																							
36R	130187	FB.136926	Spanner for cap nut on oil sleeve in blower casing.	*																							
36W	130084	FB.113379	Spanner for oil sleeve in blower casing	*																							
36R	130085	FB.113378	Tool for assembling impeller shaft bearings group, comprising:—																								
36W	130086	FB.113377/2	Tool, assembling sleeve adaptor (for use when assembling rear bearing).	*																							
36R	130087	FB.113375	Lifting plate, supercharger casing ...	*																							
36W	130088	FB.113376	Lifting plate, complete supercharger and rear cover assembled.	*																							
36R	130089	FB.113372	Extractor for front bearing and distance pieces on impeller shaft.	*																							
36W	130090	FB.113374	Tool for extracting impeller shaft from blower casing.	*																							
36R	130091	FB.113373	Tool for splitting supercharger (extract volute casing from blower casing)	*																							
36W	130084	FB.113379	TOOLS FOR SUPERCHARGER CLUTCH UNIT																								
36R	130085	FB.113378	Block for assembling low speed clutch	*																							
36W	130086	FB.113377/2	Clip ring for assembly of oil seal rings	*																							
36R	130087	FB.113375	Collar distance for assembling low speed clutch.	*																							
36W	130088	FB.113376	Holder for high speed clutch gear ...	*																							
36R	130089	FB.113372	Holder for low speed clutch gear ...	*																							
36W	130090	FB.113374	Ring guide for clutch piston and ring	*																							
36R	130091	FB.113373	Spanner for high speed gear retaining nut.	*																							
36W	130091	FB.113373	Spanner for low speed gear retaining nut	*																							
36R	130091	FB.113373	Spanner for centre tube ...	*																							
36W	130091	FB.113373	Spanner for clutch casing nuts ...	*																							

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5234.—Naval Aircraft—Regulations regarding the Use, Testing, and Maintenance of Oxygen and Oxygen Equipment

(A.A.E. 5027/43.—13 Sep. 1945.)

The following *amendments* are to be made to A.F.O. 2612/45 :—

Paragraph 2 (c).

Delete “ (Provided oxygen equipment is fitted in the aircraft) ”

Substitute “ (Provided an oxygen installation is part of the approved equipment of the aircraft) ”.

Paragraph 9. Amplify subheading to read :—

“ Mark VC oxygen cylinders (Stores reference 6D/483, 106D/61, 106D/62 and 106D/63) ”

(A.F.O. 2612/45)

5235.—Aircraft Radio—Detonators—Cancellation

(N.A.R. 534/45.—13 Sep. 1945.)

Detonators are no longer required to be carried in aircraft I.F.F. equipments in any circumstances and they should be removed forthwith.

2. Surplus detonators should be returned to the nearest Armament depot.

5236.—Aircraft—Laryngaphones (Army Ref. No. ZA.19734)—Introduction and Modification for use with Wired Helmets

(A.E. 915/45.—13 Sep. 1945.)

Laryngaphone (Army Ref. No. ZA.19734), Stores Ref. No. 10A/NIV, is hereby introduced.

2. It is an electromagnetic throat microphone and should be worn above the Adam's Apple, a light contact only between the diaphragms of the laryngaphone and the throat being necessary. It has been found that the wearing of a scarf assists in keeping the laryngaphone in its proper position. No ON/OFF switch is fitted.

3. The laryngaphone is required and should be worn by—

(i) Observers in aircraft fitted with Search Radar, so that their hands may remain free to operate the controls of that equipment.

(ii) Observers in Firefly aircraft, so as to avoid compass deviations introduced when readings are taken wearing the mask type of microphone.

4. To enable laryngaphones to be used with wired helmets, it is necessary to carry out the following modification. Units concerned are to demand the necessary items from Naval Stores and are to modify equipment as detailed below. The laryngaphone is to be issued to personnel authorized in paragraph 3, as an item of flying clothing equipment. Spares allowances will be laid down in B.R. 378.

5. The following items of equipment are required :—

Item	Stores Ref. No.	Nomenclature	Quantity
1	10A/NIV	Laryngaphone (Army Ref. No. ZA.19734)	1
2	5F/2122	Tubing, insulating, H.T., grade E, 2mm.	1 inch
3	10H/14207	Socket, type 453	1
4	10GP/126	Tag, crimping, straight	2

6. The procedure is as follows :—

(i) Cut away the laryngaphone lead, leaving 10 inches from the junction moulding.

(ii) Pass the free end of the 10-inch lead through the rubber grommet supplied with the socket, type 453.

(iii) Cut away the P.V.C. covering to each lead, exposing the core which consists of two multi-stranded leads wound round several strands of cotton.

(iv) Cover the leads with a ½-in. length of insulating tubing.

(v) Crimp on a tag to each lead and solder these to the pins of the socket, type 453.

(vi) Ease the insulating tubing down over the connections so that the ends of the tags are covered.

(vii) Ease the rubber grommet down the wire, so that the flange of the grommet rests inside the socket, and replace the lid of the socket.

7. Plug, Army Ref. No. ZA5028, which is rendered surplus, is to be returned to stores.

5237.—Aircraft Radio—SCR.695 in Firefly—Reversal of “Manual G” Switch

(N.A.R. 677/45.—13 Sep. 1945.)

It has been found that in certain Firefly aircraft F.R., Mark I, the “Manual G” switch on the port switch panel in the pilot's cockpit has been installed upside down in error, i.e., it does not align properly with the “ON” and “OFF” marks engraved on the panel. The serial numbers of the aircraft with the switch incorrectly installed are :—

MB. 500 to MB. 536 inclusive.

MB. 549 to MB. 593 inclusive.

MB. 613 to MB. 626 inclusive.

MB. 628 to MB. 637 inclusive.

MB. 639 to MB. 643 inclusive.

2. The procedure to be adopted to correct this fault is as follows :—

(i) Slacken the nickel-plated, securing nut and rotate the switch bodily through 180°.

(ii) To verify the circuit after carrying out the above, check that when the “Manual G” switch is ON, continuity is obtained at terminals A and B on terminal block No. 22 situated on the SCR.695 mounting on the rear decking in the observer's cockpit. Continuity should also be obtained at these terminals when the “Auto” switch is depressed.

5238.—Electric Motor and Starter for Hydraulic Test Rig

(A.M.R. 6/45.—13 Sep. 1945.)

Supply to the following scale will be made, without demand, to Naval Air Establishments, Aircraft Carriers and Repair Ships of two-speed reversible 7 H.P. electric motors for use with hydraulic test rigs of local manufacture.

Aircraft carriers	...	...	...	1
Maintenance ships	...	...	...	1
“Unicorn”	...	...	...	1
Repair yards	...	...	...	2
Maintenance yards	...	...	...	2
Air stations	...	...	...	1
R.D.Us.	...	...	...	2

2. The motors are mounted on small trolleys and are supplied with interchangeable splined drives and mounting plates to suit all types of British and American hydraulic pumps.

3. Care must be taken to ensure that aircraft pumps are driven in the correct direction of rotation and within the normal operating limits of R.P.M.

4. The words “Hydraulic Test” will be painted on these motors.

5239.—Setting of Aircraft Altimeters

(A. 0508/45.—13 Sep. 1945.)

In future, the setting of aircraft altimeters will be standardised throughout the R.N. according to the following rules :—

I. Sensitive altimeters are always to be set at current pressure at mean sea level prior to take-off, and, on long flights, are to be checked, and reset, if necessary, at every opportunity, except in the following case :—

For landing.—The barometric pressure at airfield height is to be set after the aircraft has reached the circuit and has been given permission to land.

II. Cloud flying regulations and height instructions passed to aircraft for safety purposes are to be in relation to current pressure at mean sea level, except when aircraft are engaged in controlled approach and landing. In that case, height instructions are to be in relation to the barometric pressure at the airfield concerned.

III. In particular cases where, for instance, the height of the airfield or the proximity of mountains, precludes the use of the above rules, local rules may be made by C.Os. Admiralty is to be informed in any instance when this is necessary, so that an appropriate navigational warning can be issued.

5240.—Electric Cables—Patterns 12897, 12898, 12899 and 12900—Introduction
(N.S. 25217/45.—13 Sep. 1945.)

Electric cables, pattern 12897 (single core, 14/0076, high tension, polythene insulated), pattern 12898 (single core, 14/0076, P.V.C. insulated and screened), pattern 12899 (single core, 14/0076 P.V.C. insulated) and pattern 12900 (single core, 28/012, P.V.C. insulated), for use in connection with the production of Type 267 P.W., have been added to the Rate Book of Naval Stores under Subhead FIC, part 1, page 1378 (New Edition).

2. Arrangements have been made for the purchase of the following quantities of these cables from Messrs. Pirelli General Cable Works Ltd., under contract C.P. 75530/45, for delivery to Glossop.

Pattern	Yards	Pattern	Yards
12897	8,000	12899	23,000
12898	72,000	12900	8,000

3. It is anticipated that the above cables will be available for issue during the current month.

4. Requirements should be demanded from the Superintending Naval Store Officer, Haslemere.

5241.—Return of Empty Cable Drums from Ports Abroad

(N.S. 24535/45.—13 Sep. 1945.)

In view of the difficulty experienced in re-building dismantled electric cable drums returned from yards abroad in accordance with instructions in A.F.O. 6322/42, this method of shipment should cease forthwith.

2. Every endeavour should continue to be made to return complete empty drums, when shipping opportunities permit.

(A.F.O. 6322/42 is cancelled.)

5242.—Hulls—Scraping of Coastal Force Craft

(D/C.F.M. 1914/45.—13 Sep. 1945.)

Instances have occurred where excessive weight has been added to the outer bottoms of Coastal Force Craft by repeated applications of paint without the old material being previously scraped off.

2. The hulls of operational Coastal Force Craft are to be scraped at 12-monthly intervals by refitting authorities, the work being treated as a defect.

5243.—Acoustic Booths, Additional Telephones—Additional Lighting

L.C.T.(E) and N.S.C.(L)

(D.C.O.M. 661/45.—13 Sep. 1945.)

It has been approved to carry out the following additional work on each L.C.T.(E) :—

- (i) Fit an acoustic booth in the generator room and in the engine room.
- (ii) Fit telephone communication between Bridge and engine room (in lieu of present voice-pipe).

(iii) Fit telephone communication between Bridge and W/T office.

(iv) Fit electric lighting in the remaining wing compartments in the hold space, with the exception of the fresh water tanks.

2. *Acoustic Booths.*—The manufacturers of the acoustic booths supply instructions for fitting with each booth and attention should be paid to the following points in selecting the position for the booth on board craft.

(i) The booth should be located with the back facing the greatest source of noise, or as close to this position as practicable.

(ii) The height from floor level to the inside of the top of the booth should be 75-in.

3. *Telephone Communication between Bridge and Engine Room.*—A telephone, A.P. 13734, Mark XV*, is to be fitted on the bridge and a telephone, A.P. 13231, Mark XV, in the engine room.

4. *Telephone Communication between Bridge and W/T Room.*—A telephone, A.P. 13734, Mark XV*, is to be fitted on the bridge and a telephone, A.P. 13231, Mark XV, in the W/T office.

5. *Lighting in Wing Compartments.*—Fittings A.P. 4215 and switches, A.P. 4081A, or their equivalent substitute, are to be fitted

6. For vessels which have not had the above work carried out during conversion, items Classification A, should be included in the list of As. and As. to cover the work involved; if, however, the vessels have left home waters the following arrangements should also be made.

(i) Demands for booths should be forwarded to L.C.M.S.O.(I), Bombay, and the work of fitting carried out by ships' staff.

(ii) Demands for A.P. fittings and telephones should be made through the local Naval stores depot and the work of installing carried out by either the ships' or base staff.

5244.—Handles for Switches, Pattern 4214—Supply

L.S.T.(3)

(N.S. 29523/45.—13 Sep. 1945.)

A requirement for handles, Pattern 4214 (Subhead F.2B), for use in operating 7½-in. and 5-in. fan control switches, Pattern 4094A, has arisen in L.S.T.(3).

2. A first supply of six handles, which are consumable Naval stores, will be made to each vessel under construction by Superintending Naval Store Officer, Leeds (C.A.F.O. 1193/44 refers). Vessels in commission are to demand six from their storing yards or depots.

3. The Establishment of Naval Stores will be amended.

(C.A.F.O. 1193/44.)

5245.—Electrodes—Approved Types—for Welding Steel

See AFO 6873/44. (N.S./D. 13909/45.—13 Sep. 1945.) *See AFO 6134/44. 6579/44.*

The following are the types of electrodes approved for Admiralty work :—

(1) *Ferritic Electrodes*

A.—*For strength connections*

Note.—Approval is only given for welding "D" quality steel in thicknesses up to and including ½-in.

Makers	Name of Electrodes	Approved for Welding
Arc. Manufacturing Co., Ltd. (Incorporating Sure-Arc Electrode Co., Ltd.)	Blue white ... Type 142* ...	} Mild steel, D., D.W. and S. quality steels on all positions.
	Deependarc ... Speedarc ...	
		} Mild steel, D., D.W. and S. quality steels in downhand position only.

* Except for work in confined spaces.

(72542)

Makers	Name of electrode	Approved for welding
Arc. Manufacturing Co., Ltd. (Incorporating Sure-Arc Electrode Co., Ltd.) —contd.	Blue-Red ...	Mild steel in all positions.
	Neptune ...	
	Meteor ...	
	X.L. Marine ...	Mild steel in downhand and overhead positions.
	Red White ...	Mild steel in downhand position only.
	A.C. Marine ...	Mild steel in vertical position only.
Fusarc Welding Co., Ltd.	Marine 45 ...	Mild steel in all positions and D., D.W. and S. quality steels in downhand and vertical positions.
Invicta Electrodes, Ltd....	Shieldway ...	Mild steel in all positions.
	Speedway ...	Mild steel in all positions and D., D.W. and S. quality steels in downhand position only.
Lincoln Electric Co., Ltd.	Transweld ...	Mild steel, D., D.W. and S. quality steels in all positions.
	Fleetweld No. 5 ...	
	Fleetweld No. 7 ...	Mild steel in all positions.
	Fleetweld No. 9... ..	Mild steel in downhand position only.
	Fleetweld No. 11	
Metropolitan-Vickers Electrical Co., Ltd.	R.L.	Mild steel, D., D.W. and S. quality steels in all positions.
	R.H.V.	
	R.G.	
	E.H.V.	Mild steel in all positions.
	E.G.	Mild steel in downhand and overhead positions.
	R.H.	Mild steel, D., D.W. and S. quality steels in downhand position only.
Murex Welding Processes, Ltd.	Vodex	Mild steel, D., D.W. and S. quality steels in all positions.
	Ironex I	
	Overhead	
	Type 2325	Mild steel, D., D.W. and S. quality steels in vertical and overhead positions.
	Type 2325	Mild steel in all positions and D., D.W. and S. quality steels in downhand and overhead positions.
	Cresta	Mild steel in all positions and D., D.W. and S. quality steels in downhand position only.
	Ironex II	Mild steel in all positions.
	Fastex 2	Mild steel, D., D.W. and S. quality steels in downhand position only.
Fastex 5	Mild steel in downhand and overhead positions only.	
Pethow Ltd. (formerly Weldrics (1922), Ltd.).	Protectweld, Type 52.	Mild steel in all positions.
Pethow, Ltd. (formerly Frederick A. Power & Sons, Ltd.).	Type W.5	Mild steel in all positions.
	Type L.L.C.	Mild steel in downhand position only.

Makers	Name of electrode	Approved for welding
G. D. Peters & Co., Ltd....	Grade 15 Lion ...	Mild steel, D., D.W. and S. quality steel in all positions.
	Grade 160 "Hood" (Red Tipt).	Mild steel in all positions.
	Grade 162 "Nelson" (Gold Tipt).	
	Grade 162 "Rodney"	
Philips Industrial (Philips Lamps), Ltd.	Shipweld 2 ...	Mild steel, D., D.W. and S. quality steels in all positions.
	Type 48	
	Type 48E	Mild steel in all positions.
	Type 50	Mild steel in downhand position only.
Quasi-Arc Co., Ltd. ...	Vortic	Mild steel, D., D. W. and S. quality steels in all positions.
	Radian	
	Viking	
	Celto	Mild steel in all positions and D., D.W. and S. quality steels in downhand and vertical positions.
	Ferrospeed	Mild steel in all positions and D., D.W. and S. quality steels in downhand position only.
	Uranium T	D., D.W. and S. quality steels in all positions.
Rockweld, Ltd.	Mild Steel T	Mild steel in all positions.
	Mild Steel T.V.	Mild steel in vertical position only.
	Carend	Mild steel in all positions and D., D.W. and S. quality steels in downhand and vertical positions.
J. Stead & Co., Ltd. ...	Facilend B.	Mild steel, D., D.W. and S. quality steels in downhand and vertical positions only.
	Stabilend	Mild steel, D., D.W. and S. quality steels in downhand position only.
	Stead No. 3	Mild steel in all positions. D., D.W. and S. quality steels in all positions.
Stead No. 3D		
Vulcan Welding Products, Ltd.	Vulcan	Mild steel in all positions.
Welding Rods, Ltd. ...	W.R. 70 Universal	Mild steel in all positions and D., D.W. and S. quality steels in downhand and vertical positions.
Welding Supplies, Ltd. ...	O.K. 50	Mild steel in all positions.
	O.K. 50P	
	O.K. 41P	

B.—For work which is not of structural importance

Makers	Name of electrode	Approved for welding
Arc Manufacturing Co., Ltd. (Incorporating Sure-Arc Electrode Co., Ltd.).	A.C. Type ...	Mild steel in downhand position only.
Invicta Electrodes, Ltd....	Mildway ...	Mild steel in all positions.
Murex Welding Processes, Ltd.	Belfinish ...	Mild steel in all positions.
Petbow, Ltd. (Formerly Weldrics (1922), Ltd.).	Standard Weldrics	Mild steel in downhand position only.
G. D. Peters & Co., Ltd....	Grade 98, Shielded arc type.	Mild steel in all positions.
Philips Industrial (Philips Lamps), Ltd.	Type 46 ...	Mild steel in all positions.
Rockwell, Ltd. ...	Utend ... Veloxend ...	Mild steel in all positions. Mild steel in downhand position only.

(2) Austenitic Electrodes

Makers	Name of electrode	Colour identification	For use where welding is approved on D.K.M., N.C. Armour, and non-magnetic machinable quality protective plating
Lincoln Electric Co., Ltd.	Armorweld ...	None ...	All positions.
Metropolitan Vickers Electrical Co., Ltd.	B.P.5 ...	Light grey coating. Green tip ...	} All positions.
Murex Welding Processes, Ltd.	Armex 2 ... Armex 3 ...	Slate coating Yellow tip ... Red coating, yellow tip.		} Downhand position only. Vertical and overhead positions.
Quasi Arc. Co., Ltd.	Armoid No. 1 Type H. Armoid No. 2	Red band, red tip. Red band, black tip.	Downhand position only. All positions.
Rockwell, Ltd. ...	Armend A ... Armend D ...	Blue tip ... White tip ...	All positions. Downhand position only.

2. The above are the only types of electrodes approved for the purposes stated and the inclusion of other types in Standing Contracts in no way authorizes their use without prior Admiralty approval.

(A.F.Os. 4228/41, 5017/41, 205/42, 317/42, 1622/42, 2952/42, 4350/42, 5234/42, 552/43, 667/43, 668/43, 1770/43, 5815/43, 2548/44, 3103/44, 5610/44, 495/45, 1128/45 and 3988/45 are cancelled.)

5246.—Projectors, 16 mm., and Still Projectors—Use in Classrooms—Institution
See AFOS 209/44. of Smaller Type Screen

" " 6112/46 (D.N.T.—13 Sep. 1945.)
" " 529/47

It is desired to improve training efficiency by encouraging the use of 16 mm. projectors, as well as still projectors, under ordinary classroom conditions. In order to minimize any air of novelty, the screen should be as unobtrusive as possible and about the size of the average big blackboard.

2. Employing the visual standards laid down in A.F.O. 4876/44, it can be shown that a screen width of 3 ft. 6-in. is entirely adequate for an audience of 30 seated under classroom conditions with facilities for note-taking.

3. A self-erecting opaque screen of size 4 ft. 4-in. by 3 ft. 4-in., to which Pattern No. 7836 has been allocated, has therefore been introduced under subhead F3A of the Rate Book for Naval Stores, for use in classrooms in cases where front projection technique appears preferable to back projection technique.

4. Ships and establishments may send in demands for this screen to S.N.S.O., Neasden, on the basis of one screen per still projector or 16 mm. projector held and used for classes not exceeding 30 in number in classrooms or small spaces, one screen only being demanded if both a still projector and a 16 mm. projector are used in the same room or space.

5. In cases where the 16-mm. projector, for which the screen, Pattern 7836, is demanded, is used solely for classes not exceeding 30 in number, the larger screen (Pattern 7602 or 7683) already supplied should be returned to S.N.S.O., Neasden, on receipt of the Pattern 7836 screen. The demand made in accordance with paragraph 4 should indicate that a larger screen is being returned.

(A.F.Os. 4876/44, 5377/44 and 4735/45.)

5247.—Diesel Engines—Paxman 4RQ and RW Types—Valve Tappet Defects
Ships and Establishments concerned, Repair Authorities and S.P.D.Os.

(D. 12379/45.—13 Sep. 1945.)

Several cases have been reported of excessive wear on the cam bearing face of the valve tappets of Paxman "4RQ" and "RW" type engines, due to inefficient hardening. Wear rates reported vary between ten-thousandths and fifty-thousandths of an inch in 100 hours.

2. If excessive tappet wear is suspected the engine should be run only when absolutely necessary. Provided that the valve clearances are frequently re-adjusted, no damage to the engine should result, but excessive clearances will cause loss of power, black exhaust and rapid carbonisation, besides probable damage to the valve gear.

3. In all new or reconditioned engines the valve clearances are to be checked every 50 hours for the first 250 hours' running and if clearances are found to be increasing at an unduly rapid rate the tappets are to be examined and replaced, if necessary, at the earliest possible opportunity.

4. All tappets held as spares by ships, establishments and the authorities addressed are to be tested with a file and if suspected of being soft are to be returned to L.C.M.S.O., Building III, Staines, Middlesex, for "4RQ" type and I.C.E. Spare Gear Store, c/o Southern Railway Station, Botley, Hampshire, for "RW" type engines. L.C.M.S.O. and I.C.E. Spare Gear Store should be informed of the reason for their return. All tappets which develop this defect in service are to be returned to the same addresses. Replacements are to be demanded in accordance with A.F.O. 3711/44 or C.A.F.O. 151/44 as applicable.

(A.F.O. 3711/44 and C.A.F.O. 151/44.)

(A.F.O. 2461/45 is cancelled.)

5248.—Deck Coverings in H.M. Ships

Destroyers.

(P. 9783/45.—13 Sep. 1945.)

The fitting of cement and tiles on the floors of galleys, heads, wash places, bathrooms, etc., referred to in A.F.O. 3670/45, is not applicable to destroyers in commission or under construction.

2. The present practice of painted steel floors in galleys and Semtex composition in wash places, etc., is to be continued.

3. The deck covering to be fitted in preparing rooms where such rooms are provided in destroyers is under consideration and instructions will be issued in due course.

(A.F.O. 3670/45.)

5249.—Naval Store Accounts—Transfer on Charge of Operational Base, etc.

Small Craft, including Combined Operations Craft

(N.S. 21943/45.—13 Sep. 1945.)

Instances occur where new naval store accounts are prepared for small craft which have been transferred from one operational base to another, or taken in hand for refits, despite the fact that accounts have already been prepared during the vessels' service and are normally held and maintained by the Operational Base Authorities. In some cases the fact that new accounts have been prepared has not been reported to the Admiralty, with the result that two sets of accounts, which may not agree, are in existence. It is therefore essential that new accounts should not be created without prior concurrence of the Director of Stores (4A), Admiralty, London.

2.—(a) When craft are transferred from one operational base to another, or removed to another port for refit, the naval store accounts should be transferred at the same time to the appropriate Naval Authority at the new base or port (see also A.F.O. 5172/43, Appendix B, paragraph 4(b), as amended by A.F.O. 1011/44 as regards Major and Minor Landing Craft and Landing Barges).

(b) Form S.549 is to be used for the transfer of the accounts and a copy of the form should be sent to the Director of Stores (4A), Admiralty, for information. The Supply Officer or other Officer responsible at the new base or port should acknowledge receipt on one copy of the form and return it without delay to the transferring Authority.

(c) In the event of the naval store account of a transferred vessel not being received by the new Authority within a reasonable time, hastening action should be taken.

3. Base Authorities still holding naval store accounts for vessels which have been transferred to other operational ports should forward these accounts to the vessels' new bases or, if these cannot be readily ascertained, the documents should be forwarded to the Director of Stores (4A), Admiralty, with a request that they may be transmitted to the appropriate Authorities.

4. Where approval is given for a new account to be prepared to replace an old account, the latter should be closed and the differences listed on Forms S.148—Report of Stocktaking. The entries in the old account should be annotated, "Transferred to new account", "S.148 (date) etc." as appropriate, and the original copy of the stocktaking should be enclosed in a cover S.148 (outside), certificated and forwarded to the Director of Stores (4A), Admiralty, with the closed account.

(A.F.Os. 4435/41, 201/43, 5172/43, 1011/44 and 642/45.)

(A.F.Os. 2979/43 and 3087/43 are cancelled.)

5250.—Aircraft—Putty Dum-Dum

(N.S. Air 10523/44.—13 Sep. 1945.)

For the purpose of sealing aircraft instrument glasses, putty dum-dum (Stores Reference 33C/631), will be allowed to ships and services in accordance with the following scales :—

Ref. No.	Description	B.R. 378				B.R. 377		R.N. Aircraft	S.S.U.	Repair Ships			
		Maintenance Stock				R.N. Aircraft Stations				Repair Yards	Maintenance Yards	" Unicorn "	A.R.V. (C)	A.R.V. (M)
		Carriers				Class "A"	Class "B"	Main Store					
		1 Squad.	2 Squad.	3 Squad.	4 Squad.								
631	Section 33C Putty Dum-Dum (Nobel 153-522) In 4-oz. tins ...	2	2	2	2	3	3	6	6	3	12	12	12

2. Services concerned should forward demands to their normal sources of supply of air stores, quoting this order as authority for supply. Issues to new services will be made with their original supply of stores.

3. Stocks are available in U.K., and arrangements have been made for quantities to be despatched to yards abroad to cover the requirements of ships and services attached to overseas stations.

5251.—Ammeters, Patterns 12920 and 12921—Introduction

(N.S. 39650/44.—13 Sep. 1945.)

The following instruments have been added to the Rate Book for Naval Stores under Subhead F, Item 1C, Part III, Schedule C.827.

*Ammeters—moving coil—Rectangular projecting type
5-in. scale with illuminated dial.*

Pattern					Range
12920	...	...	...	...	0-800 amps-long shunt.
12921	...	...	...	...	0-1600 amps-long shunt.

2. The ammeters are for replacement, when necessary, of the 150 kW, 300 kW, and 350 kW, oil and turbine driven generators fitted in 1944 programme destroyers of the Fleet "D" and "G" Classes, and for any other services which may arise for the same type and range of instruments.

3. Purchase has been arranged for distribution as follows :—

	12920	12921
Stroud	...	10
Mossley	...	10

(A.F.O. 4769/45 is cancelled.)

5252.—Glass Wool Insulation—American Type—Use Of

Dockyards, Bases, Overseers; L.S.T.s and Craft; C.V.E.s. "Captain" Class Frigates, etc., American Built

(N.S. 24176/45.—13 Sep. 1945.)

Stocks of glass wool insulating panelling are held under Subhead E.2, at Rosyth and West Riding. The sizes are as follows:—

- 20-in. × 47½-in. × 1-in.
- 20-in. × 47½-in. × ¾-in.
- 23½-in. × 41¼-in. × ¾-in.
- 21¾-in. × 47½-in. × 1-in.
- 23½-in. × 46¾-in. × ¾-in.
- 22-in. × 47-in. × ¾-in.
- 16-in. × 47¼-in. × ¾-in.
- 23¼-in. × 47½-in. × 1-in.

2. This material is suitable for general insulation repair work in ships which were built or have been refitted in the U.S.A., and in which glass insulation has been fitted. It should not be used where such material has not been fitted previously.

3. Services requiring this material should demand direct on Superintending Naval Store Officers, Rosyth or West Riding.

5253.—Main Motor Supports—Defects in

1940 "S" Class Submarines

(D. 14703/45.—13 Sep. 1945.)

As the result of an examination of the main motor supports in a 1940 "S" class submarine, following damage sustained to the pressure hull by depth charge attacks, it has been decided to increase the strength of the main motor supports.

2. This work is to be carried out as a defect in all 1940 "S" class submarines when in hand for large refit, and when the main motors are lifted.

3. The side plates and bracket plates connected to the top 30 lbs. seating between the main motors are to be increased from 15 lbs. to 20 lbs. as indicated on A.F.O. Diagram 343/45.

4. The wing supports to the main motor feet at the ship's side are to be examined at the same time, and if necessary, re-inforcing brackets are to be fitted.

(Admiral (S/M), 1 July, 1945, No. SM. 535/652.)

(This Order is to be retained until complied with.)

5254.—"Q" Tank Inboard Vent—Modification to—As. and As.

Submarines

(D/P. 9533/45.—13 Sep. 1945.)

Item No. "A" class 20.

Classification "A".

2. To prevent spray from "Q" tank inboard vent discharge in the auxiliary machinery compartment reaching the electrical machines in the immediate vicinity, and to improve the observation of the vent discharge, the following modifications are to be carried out at the first available opportunity in "A" class submarines:—

- (a) Fit a "Perspex" hood over "Q" inboard vent drain funnel.
- (b) Fit a light to illuminate the funnel.

3. Separate instructions have been issued by the Admiralty for vessels under construction.

(This Order is to be retained until complied with.)

5255.—Tanks, Oil Fuel, External—Stiffening of Bulkheads

"T" Class Submarines

(D. 012939/45.—13 Sep. 1945.)

Tests carried out on external oil fuel tanks in "T" class submarines indicate that additional stiffening is required to bulkheads 59 and 86, as shown on A.F.O. Diagram 342/45.

2. This item is to be dealt with as a defect when vessels are next in hand for refit.

(A.S. Chatham, 2 Aug., 1945, No. 2795.)

(This Order is to be retained until complied with.)

5256.—Coolers, Drinking Water—Supply—REPORTS

Capital Ships, Aircraft Carriers, Depot, Maintenance, Accommodation and Repair Ships, Cruisers, Destroyers, Fast Minelayers, Sloops, Frigates, Corvettes, Minesweepers, Surveying Vessels, Danlayers, Trawlers, Tugs and Major Landing Craft

(D/D.C.O.M. 2127/45.—13 Sep. 1945.)

It has been approved in principle to supply self-contained drinking water coolers to all the ships mentioned above, if and when fitted for service in the tropics.

2. Particulars of the description, size, weights, water and electrical connections, etc., of the machines being supplied are shown in A.F.O. Diagram 339/45.

3. The following table shows the approved scale of supply:—

Class of Ship	No. of		Maker
	Coolers	Sets of Spare Gear	
Capital ships	4	2	Hall or Sterne, 6½-gallon type (30 gall/hr. peak capacity) or Frigidaire 8-gallon type.
"Vanguard"	8	4	
Fleet carriers	8	4	
"Ark Royal" class	12	6	
Escort carriers... ..	4	2	
Light Fleet carriers	6	3	
"London", "Kent", "Belfast", "Leander", "Norfolk", "Southamp- ton", "Swiftsure", "Fiji", "Uganda" and "Tiger" class cruisers	3	1	Pressed steel or Frigidaire, 4-gallon type.
"Dido" and "Arethusa" class cruisers ...	2	1	
Depot and maintenance ships	4	2	
S.R.R.D., accommodation and repair ships...	3	1	
Fast minelayers	2	1	
Destroyers, including "Hunt" class	2	1	
All other classes of ship, including major landing craft where crews exceed 20	1	1	

4. Coolers up to the approved allowance will be provided by the Admiralty to all ships when taken in hand for tropicalization conversion, etc., without demand, subject to supplies being available. Priority will be given to ships destined for service in the East Indies Fleet and the British Pacific Fleet. Stocks of water coolers will be forwarded to Colombo, Sydney and Malta to provide for ships already on the stations. Demands for these coolers up to the approved allowance should be made to the administrative authority concerned. Reports by the administrative authorities should be forwarded to the Admiralty, quoting the allocations made. Arrangements should be made in advance for the provision of water and electrical connections.

5. Where two or more water coolers are allowed, one should be fitted in a position to supply cooled water to the soda fountain.

6. Proposals for the surrender of compensating topweight should be forwarded for the following ships:—

- "Renown", "Valiant" and "Queen Elizabeth".
- All cruisers ex "Tiger" class.
- "Halcyon"—"Hebe" class minesweepers, all sloops and surveying vessels.
- "Hunt" class, "Tribal" class, "J", "P" class, "D", "I" class destroyers and leaders.

(A.F.O. 2945/45 is cancelled.)

5257.—Brasses and Bronzes—Welding of

(D. 14443/45.—13 Sep. 1945.)

Brasses and bronzes may be welded by flame, metallic arc or carbon arc processes. The following information regarding these three processes has been prepared as a result of investigations carried out at Portsmouth and is promulgated for general information :—

I.—Flame Welding

1. Suitable filler rods may be classed as follows : (a) Brass rods (essentially a copper-zinc alloy). These are subdivided as follows, with some of the proprietary names in brackets :—

- (i) Brass—60 : 40, Cu : Zn with certain small alloying additions for deoxidizing purposes. (B.O.C. "Brazotectic"; "Sifbronze"; Gussolite "Brabro"; "Deltaweld W.A.8").
- (ii) Brass 60 : 40, Cu : Zn with small additions of Sn, Fe and Mn (B.O.C. "Bronzotectic").
- (b) Special brass rods (copper alloys with other metals as major constituents).
 - (i) With zinc and nickel (Gussolite "Silbro"; B.O.C. "Delta No. 2 Brazotectic Nickel-bronze").
 - (ii) With 3 per cent. Si (I.C.I. "Everdur").
- (c) Bronze rods (high copper alloys with Sn as chief alloying element). 10 per cent. Sn P bronze (B.O.C. "Alda phosphor-bronze").
- (d) Aluminium bronze rods (high copper alloys with Al as chief alloying element).
 - (i) 3 per cent. Al, 6 per cent. Ni (B.O.C. "Crotorite").
 - (ii) 10 per cent. Al (Manganese Bronze and Brass Co.).

2. The most common rods are those listed in Section (a) (i). These can be used for welding brass, bronze (including gunmetal), cast iron and most copper alloys where the strength of the weld is not to be more than that of 60 : 40 brass (yield point 8 tons/sq. in.). The other rods are of a more specialized kind and usually are similar in composition to the parent metal to be welded, but they are in many cases used for dissimilar metals where the properties of the weld are particularly required. In addition, some materials (such as "Everdur") are particularly suitable for easy welding because of the deoxidizing additions, etc., that they may contain.

3. Fluxes.—These are all of a proprietary nature and makers provide suitable fluxes for the rods they market. Gussolite "Uniflex" flux has been found to be very good and suitable for all bronze welding. None of the rods are flux coated, as are metallic arc welding electrodes, and the flux is applied as a powder or paste.

4. Technique.—There is very little to choose between any of the rods listed in each category of paragraph 1, and the success of the weld is far more dependent on the technique of the operator than on the slight differences in rod composition. Superior welds are obtained when preheating of the parent metal is possible, and in any case local heating with the torch should be carried out.

5. Uses.—Many of the rods are suitable for welding a variety of materials, but the data in Table I has been compiled from trials undertaken at Portsmouth. The numbers in the columns indicate the order of merit of the rods.

6. Corrosion considerations.—In some cases these are not of paramount importance in the components to be welded, e.g., where welds are not subjected to a corrosive environment such as sea water. In cases where the weld and adjacent parent metal is exposed to sea water either intermittently or continuously, it is essential that the weld metal is neutral or slightly cathodic to the parent metal. Thus in the case of copper piping where the weld is exposed, a weld of brass alloy will rapidly corrode; the filler rods noted for copper in Table II should be used. Table II similarly gives recommendations for other materials.

II.—Non-ferrous Metallic Arc Welding Rods

1. All non-ferrous (copper alloy) rods which are worth considering are flux coated in the same way as mild steel electrodes. They all contain tin as the chief alloying element, and usually phosphorus for deoxidation purposes. Details of the best known electrodes and their compositions are given below. Included also is an aluminium bronze electrode which is suitable for welding all types of copper alloys.

Approximate Composition

Proprietary Names

- | | |
|---|--|
| (a) Bronze, 9 per cent. tin, 0.1 per cent. phosphorus, 0.1 per cent. silicon. | Murex, "Bronze C, 3"; Murex "Bronze C, 6"; Murex "P.E., Bronze"; Quasi Arc, "Bronzoid No. 1" (deposits, 1 per cent. zinc). |
| (b) Bronze, 10 per cent. tin, 0.21 per cent. phosphorus. | Lincoln, "Aerisweld". |
| (c) Bronze, 7 per cent. tin, 3 per cent. zinc | Welding Supplies Ltd., "O.K. B.4". |
| (d) Bronze, probably 9 per cent. tin bronze | The Arc Manufacturing Co. Ltd., "B.4." |
| (e) Aluminium bronze, probably 9 per cent. Al-bronze. | Murex, "Bronalex". |

2. All the electrodes given above except (e) are virtually of the same type; any differences in running or soundness are due to differences in the flux coating which is a particular feature of each proprietary brand. In comparison with steel, arc welding with copper alloys is more difficult since the arc which is struck is not so stable and is more susceptible to "blow" than with steel electrodes; one of the characteristics of the coating is to prevent this. On the whole the progress that has been made with the development of bronze electrodes is far behind that now obtaining with steel electrodes and consequently more skill is required in welding them.

3. Technique.—None of the electrodes is suitable for straightforward welding by a good ordinary welder in the same way as most mild steel rods. Practice is necessary to produce a sound weld with any particular electrode. The chief troubles which have been encountered in the tests carried out are caused by gas holes and slag entrapment. To overcome these troubles, a more backward sloping and weaving of the electrode is recommended, so that a larger pool of weld metal is formed which gives time for the slag to rise to the surface and gas bubbles to escape. Some of the rods (e.g., Murex C 3 and C 6 and O.K.B. 4) make a slag which is difficult to distinguish from the surrounding deposit and consequently care must be taken thoroughly to remove this before proceeding with the next run. The aluminium bronze electrodes ("Bronalex") are fairly new on the market and have not been tried at Portsmouth, but some tests carried out at Rosyth indicate that they are promising. The strength of the weld deposit is approximately 30 tons/sq. in. and the electrodes are not more difficult to use than other bronze rods. Preheating of the parent metal, if practicable, aids the quality of all metallic arc welding considerably.

4. Uses.—All the rods listed are suitable for welding copper alloys and, if sound, a butt welded joint should have a tensile strength of approximately 20 tons/sq. in. This is higher than gunmetal and considerably lower than H.T. brass; if the latter is being welded the weld metal cannot be expected to have a high tensile strength. Aluminium bronze electrodes should, however, give a deposit more comparable in strength to the H.T. brass.

The same conditions apply to welded components, as far as corrosion resistance is concerned, as are mentioned in Table II for flame welding rods.

III. Carbon Arc Welding Rods.

1. Filler rods are used for carbon arc welding in the same way as for flame welding. The essential difference is, however, that the arc is much hotter than the flame so that rods containing zinc are unsatisfactory because of the ease with which this constituent is volatilised. Of the flame welding rods given in Part I, paragraph 1, the most suitable are, *b* (ii), *c*, *d* (i) and (ii). The most usual is (c), the tin phosphorus bronze, but owing to its superior strength *d* (i), the aluminium bronze is becoming more widely used for butt welding high tensile brass. Tin bronze is very suitable for reinforcing repairs in propellers.

2. Fluxes.—The same types of fluxes can be used for carbon arc welding as for flame welding.

3. Technique.—The technique for carbon arc welding is specialized and should only be attempted at the present stage by a competent welder, but if the trials at present in progress of this type of welding for repairing propeller tips are satisfactory the technique necessary will be made known.

4. Corrosion considerations.—These are the same as for flame welding; see Table II.

TABLE I

	Gun Metal	H.T. Brass	Brass	Phosphor Bronze	Cast Iron	Special Brasses and Bronzes
Reinforcing	1. B.O.C. Brazotectic 2. Gussolite "Brabro" 3. { Sifbronze Deltaweld W.A.8	1 B.O.C. Bronzotectic 2. Gussolite "Brabro" 3. { Sifbronze Deltaweld W.A.8	1. { B.O.C. Brazotectic Sifbronze Deltaweld W.A.8 Gussolite "Brabro"	1. Alda phosphor bronze	1. { Sifbronze Deltaweld W.A.8 3. Gussolite "Brabro" 4. B.O.C. "Brazotectic" 5. B.O.C. "Monel"	Alloys should be used for the welding rod which corresponds in composition as nearly as possible to the composition of the parent metal.
Butt Welding	1. Sifbronze 2. Deltaweld W.A.8 3. B.O.C. Brazotectic 4. Alda phosphor bronze 5. Gussolite "Brabro"	1. { Deltaweld W.A.8 Sifbronze 3. B.O.C. Bronzotectic	1. { B.O.C. Brazotectic Sifbronze Deltaweld W.A.8 Gussolite "Brabro"	1. Alda phosphor bronze	1. { Sifbronze Deltaweld W.A.8 3. B.O.C. "Monel" 4. B.O.C. "Brazotectic"	

Note.—B.O.C. = British Oxygen Co., Ltd.

"Sifbronze" rods are supplied by the Suffolk Iron Foundry (1920), Ltd., Stowmarket.

"Deltaweld" rods are supplied by the Delta Metal Co., Ltd., Delta Works, East Greenwich, London, S.E.10.

"Brabro" rods are supplied by the François Cementation Co., Ltd, Bentley Works, Doncaster.

"Alda" rods are supplied by the British Oxygen Co., Ltd., Thames House, Millbank, London, S.W.1.

TABLE II

(Weld Metal to be Used in a Corrosive Environment)

Type of Weld Metal (Order of Merit)

Parent Metal	Type of Weld Metal (Order of Merit)
Copper (deoxidised) or B.N.F. alloy	1. Deoxidised copper 2. Phosphor copper 3. Phosphor bronze (5 per cent. Sn) 4. Silver solder
Gun metal	1. Phosphor bronze (10 per cent. Sn) 2. Aluminium bronze 3. Nickel brass
H.T. brass	1. Brass (60 : 40 ; Cu : Zn) with Sn and Fe additions 2. Brass (60 : 40 ; Cu : Zn) 3. Phosphor bronze (e.g., small areas on propellers)
Brass	Brass (60 : 40 ; Cu : Zn)
Phosphor bronze	Phosphor bronze (10 per cent. Sn)
Cast iron	Bronze welding must not be used. Cast iron rods only are suitable
Special brasses and bronzes	Provided similar weld metal to that of the parent metal is used, no trouble should be experienced

Section 4

OTHER STORES—NAVAL STORES, VICTUALLING STORES,
MEDICAL STORES, CONTRACTS

5258.—Aircraft—Withdrawal of Flying Clothing

(V. 4458/45.—13 Sep. 1945.)

It has recently been brought to notice that flying personnel arriving in New Zealand for discharge are still in possession of flying clothing.

2. Attention is drawn to the regulations which require the withdrawal of all flying clothing from officers and ratings on termination of flying duties.

(A.F.O. 5695/44.)

5259.—Anti-Gas Impregnated Clothing

(V. 1/5346/45.—13 Sep. 1945.)

Anti-gas impregnated battledress suits of the "A.V." type described in C.A.F.O. 2275/44, held by shore establishments at home, should now be returned to the nearest victualling yard or depot.

2. Impregnated overall suits should be retained for the present.

(F.O.N.A.S. 1478/945/4 of 1 Mar. 1945.)

(C.A.F.Os. 2275/44 and 2597/44.)

5260.—Kits of General Service Ratings—Substitution of Singlets for Summer Vests in Class I and Class III Kits

(V/1/5143/45.—13 Sep. 1945.)

Singlets, cotton, sleeveless, will be substituted for summer vests in the Class I and Class III regulation kits as soon as the stocks of summer vests are exhausted.

2. For the present, summer vests should continue to be demanded from the Victualling Yards for kitting up new entries in Class III uniform and either summer vests or singlets, cotton, sleeveless, will be supplied, whichever is available.

(Uniform Regulations—App. to the Navy List—Section VIII.)

(A.F.Os. 5781/43, 5782/43 and 5783/43.)

5261.—Uniform—Action Working Dress

(V. 13/6554/45.—13 Sep. 1945.)

Supplies of the new Action-Working dress are now becoming available in sufficient quantities to enable ships proceeding to the East Indies and Pacific Stations to be equipped before leaving U.K.

2. Demands should therefore be forwarded by such ships to the Director of Victualling indicating the date by which the dress is required.

3. Small supplies have been sent to the East Indies and Pacific Stations, and further supplies will be sent to the latter as soon as they become available. Local production is being arranged on the East Indies Station.

(A.F.Os. 2125/45 and 2126/45.)

5262.—W.R.N.S. Officers—Shoulder Straps

(V/1/290/44.—13 Sep. 1945.)

Supplies of shoulder straps for wear by Chief, First, Second and Third Officers, W.R.N.S., on white dresses, white tropical shirt blouses and blue working dress are now available for issue on repayment from Service sources.

2. Demands should be forwarded by Supply Officers at home to Director, W.R.N.S., and abroad to (Superintending) Victualling Store Officers, who will demand quantities required from Director, W.R.N.S.

3. A.F.O. 1049/44 is to be amended as follows:—

Section 3—

Add "Shoulder straps, W.R.N.S. 6s. 5d. a pair"

Section 4—

Add "Shoulder straps, W.R.N.S. 5s. 6d. a pair"

(A.F.Os. 5830/42, 1049/44 and 4584/44.)

Section 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE

5263.—Amendments to Books

(E.F.O.—13 Sep. 1945.)

The undermentioned amendments (A.F.Os. P.754-781/45) to B.R. and O.U. books are available for issue from the R.N. Store Depot, Elveden Road, Park Royal, N.W.10, in accordance with A.F.O. Volume, 1941, Instructions, paragraph 9. Distribution is limited to holders of the relative publication(s) affected.

2. Demands from Shore Establishments in the Nore, Plymouth and Portsmouth Commands should be addressed as under:—

Nore. Book Office, Quarry House, Aylestone Hill, Hereford.

Plymouth. Book Office, R.N. Port Library, Devonport.

Portsmouth. Book Office, 54 Bedford Street, Leamington Spa, Warwickshire.

A.F.O. *P.754/45.—B.R. 377(B)—A.S.E.—Amendment No. 22.

*P.755/45.—B.R. 377(C)—Firefly—A.S.E.—Amendment No. 24.

*P.756/45.—B.R. 378(B)—Barracuda—A.S.E.—Amendment No. 49.

*P.757/45.—B.R. 378(C)—Firefly—A.S.E.—Amendment No. 31.

*P.758/45.—B.R. 378(J)—Seafire—A.S.E.—Amendment No. 30.

*P.759/45.—B.R. 383—A.S.E.—Amendment No. 20.

*P.760/45.—B.R. 378(C)—Firefly—A.S.E.—Amendment No. 32.

*P.761/45.—B.R. 380/Y—Sea Otter—S.A.E.L. and S.A.T.L.—Amendment No. 4.

*P.762/45.—B.R. 380/Y—Sea Otter—S.A.T.L. and "M" Items List—Amendment No. 5.

*P.763/45.—B.R. 377 (Photographic) A.S.E.—Amendment No. 9.

*P.764/45.—B.R. 378 (General)—A.S.E.—Amendment No. 81.

*P.765/45.—B.R. 377 (General)—A.S.E.—Amendment No. 43.

*P.766/45.—B.R. 378 (General)—A.S.E.—Amendment No. 82.

*P.767/45.—B.R. 378 (General)—A.S.E.—Amendment No. 83.

*P.768/45.—B.R. 380/D—Firebrand—S.A.T.L. and "M" Lists—Amendment No. 2.

*P.769/45.—B.R. 378(B)—Barracuda—A.S.E.—Amendment No. 50.

P.770/45.—B.R. 796/44—Handbook of Periodical Maintenance Routines for 21-in., Mark VIII** Torpedoes—Amendment No. 4.

P.771/45.—B.R. 869(4)—Instructions for the Use of A.A. Verifying Camera—Amendment No. 1.

P.772/45.—B.R. 915—Handbook for 5.25-in. Q.F., Mark I, Gun on HA/LA Twin, Marks I and II, Mountings—Amendment No. 17.

P.773/45.—B.R. 976/44—The Officer of Quarters' Pocket Book, 1944—Amendment No. 2.

P.774/45.—O.U. 5225—Home Dockyard Regulations—Amendment.

P.775/45.—O.U. 6350—Manual of Minesweeping—Amendment No. 22.

P.776/45.—B.R. 1216—The Transport of L.C.T.(5) or L.C.T.(6) by L.S.T.(2) or L.S.T.(3)—Amendment No. 1.

P.777/45.—B.R. 875—R.F.A. Handbook—Amendment No. 6.

P.778/45.—B.R. 1281(2)—Instructions for Release from the Naval Service, Part II—Amendment No. 2.

*P.779/45.—B.R. 377(C)—Firefly—A.S.E.—Amendment No. 25.

P.780/45.—B.R. 984—Radar Operating Procedure, Part II—Drill for Gunnery Radar Sets, 1943—Amendment No. 1.

P.781/45.—B.R. 1022—Schedule of Tests to be carried out ashore for Cordite and High Explosives—1940—Amendment No. 3.

* Exceptionally A.F.Os. P.754-769 and 779 will be distributed without demand by the Superintending Naval Store Officer, R.N. Store Depot, 191a Askew Road, Shepherds Bush, W., who hold the stocks of the parent books.

(A.F.O. 5115/45.)

5264.—B.R. 317 (16/45)—Mining Drill Book—Flooder Units in Buoyant Mines—Issue

(T. 776/45.—13 Sep. 1945.)

Copies of the above book will shortly be distributed by the Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, N.W.10, to all concerned without demand.

2. B.R. 317 (16/45) cancels B.R. 317 (16).

5265.—B.R. 317 (29) Mining Drill Book—Preparation of the M., Mark I, Mine, Assembly Nos. 1, 2, 3, 4, 9, 10, 23, 24, 31 and 32—Issue

(T. 776/45.—13 Sep. 1945.)

Copies of the above book will shortly be distributed by the Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, N.W.10, to all concerned without demand.

5266.—B.R. 321—Establishment of Naval Stores for Engineering Purposes, and Form D.127B—List of Particulars—Lists of Errata Nos. 2 and 14 respectively

(N.S. 41974/44.—13 Sep. 1945.)

Lists of Errata No. 2 to B.R. 321—Establishment of Naval Stores for Engineering Purposes—and No. 14 to Form D.127B—Lists of Particulars—have been prepared and copies will be issued from R.N. Store Depot, Park Royal, on the usual basis.

2. Three copies of the list of errata to Form D.127B will be required to complete each copy of the "List of Particulars" already supplied to ships under construction, and these should be supplied without demand by the appropriate Warrant Yard. Ships' Officers, etc., concerned with preparing the lists should not demand the lists of errata from R.N. Store Depot, Park Royal.

3. One copy of lists of Errata Nos. 1 and 2 will be supplied with each copy of the establishment issued from Park Royal.

4. Each copy of Form D.127B when supplied from Park Royal (normally to warrant yards only) will be accompanied by three copies of lists of Errata Nos. 13 and 14.

5267.—B.R. 377(L) (1945 Edition)—Hellcat

(N.S. Air 8075/43.—13 Sep. 1945.)

An Aircraft Stores Establishment B.R. 377 (L) for Hellcat aircraft has become available too late to merit general distribution. This publication will not be amended.

2. Any services to whom the A.S.E. would be useful should demand on the Superintending Naval Store Officer, Shepherds Bush, or S.N.S.O. (Air), Sydney or Ceylon, as appropriate.

5268.—Ceylon W/T Station, North

(M. 3335/45.—13 Sep. 1945.)

Approval has been given for the use of the address "Ceylon W/T Station, North, Trincomalee," in postal correspondence.

***5269.—Income Tax—Address of Departmental Claims Branch**

(D.N.A. 29607/45.—13 Sep. 1945.) *AFO 7370/46*

Cancelled by Routine work in connection with the income tax of Naval and Royal Marine officers and civilian non-industrial staff previously carried out by the Chief Inspector of Taxes, Departmental Claims Branch, at the Hydro, Llandudno, Caernarvonshire, has recently been transferred to a new office at Cardiff. The address is:—

H.M. Inspector of Taxes (D.C.B.),
Kennard Hall,
Richmond Road,
Cardiff.

Work in connection with naval ratings and Royal Marines (other ranks) will continue to be dealt with at Llandudno for the present.

(A.F.O. 1160/44.)

5270.—Form D.129—List of Particulars for Sloops, certain Corvettes, Frigates Minesweepers and Surveying Vessels

(N.S. 35666/44.—13 Sep. 1945.)

Form D.129, "List of Particulars in regard to naval stores allowed by scale" has been reprinted and stocks are available at R.N. Store Depot, Park Royal. Stocks at yards of earlier reprints (blank forms) should be disposed of on receipt of the new forms.

2. Warrant yards for the classes of ships to which the form is applicable should forward demands to Superintending Naval Store Officer, Park Royal, to cover six months' anticipated requirements. The position should be reviewed every three months and replenishment quantities then obtained from Park Royal as requisite.

3. The reprint incorporates all amendments promulgated in Lists of Errata, Nos. 1 to 13. When future lists of errata are issued, copies of the Form D.129 should be corrected by the errata at the warrant yards before despatch to new construction services. Similarly where copies of the form have already been provided for a new construction service, the warrant yard should forward three copies of subsequent lists of errata to the officer preparing the list of particulars so that it may be brought up-to-date.

5271.—Ammunition Label, N.507A—Introduction of

(A.S. 8125/45.—13 Sep. 1945.)

Serial No.	Description	Where used	Page in Form O.6	A.S. No.
N.507A	Group 7A ...	On packages ...	29	8125/45

2. Until these new labels are in supply the existing Group 7 label, N.507, is to be amended by adding the letter "A" in blue, and also by the addition of an "A" in red after the label number and after "Group 7" as necessary to meet local requirements.

3. Labels should be demanded as necessary from Senior Armament Supply Officer, Finchfield House, Compton, Wolverhampton.

5272.—Labels, Ammunition—N.959—N.966—Introduction

(A.S. 8992/45.—13 Sep. 1945.)

Serial No.	Description	Where used	Page in Form O.6	Authority
N.959	1 Projectile, 1½-in., Hedgerow, Mark..... Plgd..... :-	End of Box P.68 Body of Box P.74	26	A.S. 8992/ 45
N.960	ABCDR (600 grn. cartridge)			
N.961	EFG (523 grn. cartridge) ...			
N.962	HIJ (454 grn. cartridge) ...			
N.962	KLMN (380 grn. cartridge)			
N.963	1 Projectile, practice, 1½-in., Hedgerow, Mark..... Plgd..... :-			
N.964	ABCDR (600 grn. cartridge)			
N.964	EFG (523 grn. cartridge) ...			
N.965	HIJ (454 grn. cartridge) ...			
N.966	KLMN (380 grn. cartridge)...			

2. Labels should be demanded as necessary from Senior Armament Supply Officer, Finchfield House, Compton, Wolverhampton.

5273.—Form S. 1148 (n)—Report on Failure of Automatic or Machine Gun Armament of 20-mm. and below, Small Arms and their Ammunition in Naval Service—Introduction

(G. 5155/45.—13 Sep. 1945.)

In AFO 4957/46
The above-mentioned form has been introduced and should be rendered when failures occur of automatic or machine gun armament of 20 mm. and below, small arms and their ammunition in Naval service.

2. This form is to be rendered in accordance with Articles 310 and 311 of B.R. 862, Naval Magazine and Explosive Regulations and Article 171 of B.R. 863, Royal Naval Air Station Magazine and Explosive Regulations and/or Article 1235 of King's Regulations and Admiralty Instructions.

Craft Number	Engine (N) Number	Major Main and Auxiliary Engine (P) Defects Developed	Running (Q) Hours	(R) Action Taken
DEFECTS WHICH NECESSITATE DOCKYARD ASSISTANCE.				

Craft Number	(S) Nature of Defect

Signature of Flotilla Officer.

8. 1675A. (Established July, 1945)

MAJOR LANDING CRAFT REPORT (L.C.T. (8) ONLY).

- FOR CRAFT ALLOCATED TO FLOTILLAS: TO BE FORWARDED TO FLOTILLA OFFICER AS ORDERED.
- FOR CRAFT NOT ALLOCATED TO FLOTILLAS TO BE COMPLETED UP TO MIDNIGHT OF THE LAST DAY OF EACH MONTH AND FORWARDED TO ADMIRALTY (D.C.O.M.) THROUGH THE ADMINISTRATIVE AUTHORITY.

CRAFT { TYPE:
NO.:

WEEK OR { MONTH
ENDING:

	MAIN ENGINES		GENERATOR ENGINES	
	PORT	STARBOARD	PORT	STARBOARD
	Inboard	Outboard	F'ord	Aft
A	ENGINE SERIAL NUMBERS			
B	RUNNING HOURS SINCE ENGINE FITTED			
C	RUNNING HOURS SINCE LUB. OIL CHANGED			
D	DATE AND RUNNING HOURS OF FIRST TOP MAINTENANCE ROUTINE		DATE AND RUNNING HOURS OF SECOND TOP MAINTENANCE ROUTINE	
E	DATE AND RUNNING HOURS OF FIRST TOP MAINTENANCE ROUTINE		DATE AND RUNNING HOURS OF SECOND TOP MAINTENANCE ROUTINE	
F	DATE AND RUNNING HOURS OF 1,000 HOUR OVERHAUL (FAXMAN)		DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)	
G	DATE AND RUNNING HOURS OF 1,000 HOUR OVERHAUL (FAXMAN)		DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)	
H	DATE AND RUNNING HOURS OF SECOND TOP MAINTENANCE ROUTINE		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
I	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
J	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
K	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
L	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
M	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
N	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	
O	DATE AND RUNNING HOURS OF LAST TOP MAINTENANCE ROUTINE (AUXILIARIES)		DATE AND RUNNING HOURS OF LAST COMPLETE OVERHAUL (AUXILIARIES)	

FUEL

SUPPLIED DURING WEEK:
EXPENDED DURING WEEK:
REMAINING:

GALLONS.....
GALLONS.....
GALLONS.....

LUBRICATING OIL (in Reserve Tanks)

MAIN ENGINE OIL:
AUX. ENGINE OIL:
GEARBOX OIL:

GALLONS.....
GALLONS.....
GALLONS.....

ROUTINE MAINTENANCE CARRIED OUT

A radius not less than 35 feet from the centre of the shoe when installed is required to manoeuvre the aircraft.

5. If the selected site is of concrete construction it is essential that no metal reinforcement should have been used in its construction.

6. The shoe should be fitted flush with the existing surface and bedded, complete with its concrete base, on a bed of concrete of requisite thickness, and to a true level.

Details of the concrete foundation, etc., are shown on C.E.-in-C. Drawing No. 2524/45, and requisitions on the Superintending Civil Engineer for the Vote 10 work involved should be made in the usual way.

7. Black lines are to be painted on the compass base for its full width, great care being taken to assure that each passes through the centre of the shoe. Directions should be N-S, E-W, NE-SW, NW-SE Magnetic, and the date of laying out recorded.

8. The width of the lines should not exceed 1-in.

9. The recommended methods of aligning the aircraft to the base lines are :—

(i) By hanging plumb bobs from exactly opposite points on the wings and aligning the aircraft so that the plumb bobs are parallel to the desired base line. The use of a measuring-stick will facilitate this.

(ii) By suspending a plumb bob from the top of the free wheel so that it hangs exactly across the centre of the axle of that wheel, then aligning the aircraft so that the plumb bob is over the desired base line.

This is the quicker method, but great care must be exercised to ensure, by placing the fore and aft chocks correctly, that the fixed wheel is exactly over the centre of the rotatable shoe.

10. A steering arm for moving the tail wheel of the aircraft should always be used.

11. After trial of the shoe for compass swinging, stations should, if they consider the shoe would facilitate manoeuvring aircraft, demand additional shoes for installation in marshalling aprons, visitors aprons, hangars aprons, and other areas where required.

(A.F.O. 1925/45 is cancelled.)

5277.—Economy in Civil Staff

(C.E. 58108/45.—13 Sep. 1945.)

Following the end of the Japanese war and in view of the need for the re-employment of man power to meet the needs of national reconstruction it becomes more than ever important to exercise the utmost economy in matters of staff. Clearly, staff must be retained while there is adequate essential work to call for their presence, but a constant watch should be maintained on the position with a view to effecting reductions as soon as conditions permit.

2. All vacancies for staff at present outstanding are cancelled. In any case where it is considered essential to fill such a post, the matter will have to be specially submitted.

3. From now on, it will be necessary to apply much more rigorous standards than have obtained during the war in scrutinizing any request for additional staff. It will be necessary in all cases to certify in making any such request not only that the work is essential judged by peace-time standards, but that the requirement cannot be met without increase in numbers as by reductions elsewhere or readjustments within the Department.

4. It is important to bear in mind that the shrinkage of the Admiralty Establishment as the requirements of the work fall away from the wartime peak will inevitably mean reversions on a big scale. It is therefore particularly undesirable to add to this problem by further upgradings of staff which in most cases at this stage must necessarily be very shortly followed by downgrading.

5278.—Admiralty Regional Officers

(P. 15371/45.—13 Sep. 1945.)

The following revised list of Admiralty Regional Officers and their postal and telegraphic addresses and telephone numbers is issued for information. The boundaries of the various regions are detailed in A.F.O. 3889/41 :—

Region	Admiralty Regional Officer	Postal Address	Tel. No.	Telegraphic Address
Northern ...	Engr. Rear-Admiral R. W. B. Andrews, C.B.	Clarendon House, Clayton St. West, Newcastle/Tyne, 1.	Newcastle/Tyne 27550.	"Navypro", Newcastle.
E. and W. Ridings.	R. K. Saunders, Deputy A.R.O.	Fargate House, Sheffield, 1.	Sheffield 26461.	"Navypro", Sheffield.
North Midland	Engr. Rear-Admiral J. B. Pulliblack, D.S.O., O.B.E.	Government Bldg., Clifton Boulevard, Lenton, Notts.	Nottingham 77722.	"Navypro", Nottingham.
Eastern ...	Engr. Rear-Admiral J. P. Foster.	New Court, Trinity College, Cambridge.	Cambridge 35664 (Ext. 7)	"Navypro", Cambridge.
London and South Eastern	Engr. Rear-Admiral T. Gurnell, C.B.	Brettenham House, Lancaster Place, London, W.C.2.	Temple Bar 9591 (Ext. 20)	"Navypro Ränd", London.
Southern ...	Engr. Rear-Admiral W. J. Deans, C.B.	King Edward Bldg., 1, Station Road, Reading.	Reading 4835.	"Navypro", Reading.
South-Western	H. C. Joy, Deputy A.R.O.	Elmdale Hotel, Elmdale Road, Bristol, 8.	Bristol 26061.	"Navypro", Bristol.
Wales ...	Engr. Rear-Admiral H. L. Harvey, C.B.	G.E.C. Building, Kingsway, Cardiff.	Cardiff 9320 (Exts. 52-55).	"Navypro", Cardiff.
Midland ...	A. L. Asquith, Deputy, A.R.O.	C.M.L. Building, Gt. Charles Street, Birmingham, 3.	Birmingham Central 1650 and Central 8231 (Ext. 1).	"Navypro", Birmingham.
North-Western.	Engr. Rear-Admiral L. Robins, O.B.E.	Britannia House, Fountain Street, Manchester, 2.	Deansgate 4343	"Navypro", Manchester.
Scotland ...	Engr. Rear-Admiral H. A. Sheridan, C.B.	21, Glassford Street, Glasgow, C.1.	Glasgow Bell 3588	"Navypro", Scotland.
Northern Ireland	The Admiralty Regional Controller.	Law Courts Bldgs., Chichester Street, Belfast.	Belfast 27531 (Exts. 14 and 15)	"Navypro", Belfast.

(A.F.O. 3889/41.)

(A.F.O. 2078/45 is cancelled.)

5279.—Income Tax—Address of Departmental Claims Branch

(D.N.A. 29607/45.—13 Sep. 1945.)

Attention is drawn to A.F.O. 5269/45 in section 5 of this issue.

5280.—Economy in the Use of Motor Transport

(N.S.M.T. 2617/45.—13 Sep. 1945.)

The necessity for stringent economy in the use of motor transport and the consumption of petrol is undiminished by the conclusion of hostilities, and Their Lordships desire that the following extracts from previous Admiralty Fleet Orders may be brought to the notice of all concerned:—

“Particular importance is attached to the continued economy in the use of petrol for motor transport, and it is essential that the use of service motor vehicles be restricted to occasions when public transport facilities are either not available or are so uneconomical as regards time as to justify the employment of a service car or lorry. Long journeys (e.g. those in excess of 40 miles) should only be made by motor car on the authority of a senior officer, who should satisfy himself that the expenditure of petrol is justified by the time saved in travelling. Similarly the long distance transport of material should be restricted to instances in which transport by rail would entail operational delays or non-shipment of stores in freight ships, etc.

Drivers of all service vehicles are to record their journeys on work sheets (Form D.394) and these sheets are to be inspected regularly with a view to ensuring that vehicles are being used economically and that no unnecessary journeys are undertaken.”

2. The instructions as to the recording of journeys on work sheets (Form D.394) are also to be complied with in all cases where official vehicles are driven by officers, whether or not on detached duty, and the worksheets are to be punctually rendered to the officer controlling the pool to which the vehicle is attached.

3. Care is also to be exercised by all petrol coupon issuing authorities to ensure that issues both to owners of private cars used for duty journeys and for leave purposes conform strictly to instructions and that duty journeys in private cars are not undertaken when public transport facilities are adequate.

4. Every opportunity is to be taken of employing R.N. lorries, which otherwise would be returning empty to the point of departure, for the conveyance of a return load, even if this should involve a not unreasonable diversion from the direct route, and drivers are to be given a standing instruction that orders of this nature, given by authorized officers in charge of transport, are to be complied with, except in special circumstances where the driver has been given *written* orders to the contrary. (See also A.F.O. 5165/43, paragraph 16.)

5. Administrative authorities and heads of establishments are to take special steps to ensure that the above instructions are faithfully observed.

(A.F.Os. 1842/41, 724/42, 5050/43 and 4098/45.)

5281.—Petrol Rationing—Closing of Naval Establishments

(N.S.M.T. 2574/45.—13 Sep. 1945.)

As establishments at home are closed down, the Naval Issuing Authority for petrol coupons appointed under A.F.O. 5050/43 is to forward to the Director of Stores (Section 15D), Admiralty, Whitehall, London, S.W.1., all petrol coupons, motor fuel indent forms, S.1.1. (Pass) and S.1.2. (Goods) and the “Admiralty Service” moveable date stamp held by him.

2. The record of receipts and issues of coupons should also be forwarded.

(A.F.O. 5050/43.)

5282.—Brasses and Bronzes—Welding of

(D.14443/45.—13 Sep. 1945.)

Attention is drawn to A.F.O. 5257/45 in Section 3 of this issue.