A.F.Os. 4849—4983/44

(*See* Diagram Issue No. 38/44)

*RESTRICTED*

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*Not to be communicated to anyone outside H.M. Service*

# ADMIRALTY FLEET ORDERS

ADMIRALTY, S.W.1,
14th September, 1944.

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,

St. V. Markham

*To all 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. 3758/44) 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. | |
|---|---|---|
| 4846. | Travelling and Subsistence Allowances—Civilian Non-Industrial Staff. | *Issued separately on 14th Sept., 1944.* |
| 4847. | Travelling Expenses—Cab Fares in London, The Home Ports, etc. | |
| 4848. | Billeting Regulations—Civilian Non-Industrial Staffs and Naval Officers Serving in Admiralty Billeting Areas. | |

*14th September, 1944.*

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

(*Station Limits : Fighting Efficiency of Ships : Naval Aircraft Administration : Internal Organization of Ships : Navigation and Seamanship : Fleet Exercises and Practices, etc.*)

4849. National Day of the Netherlands and Birthday of the Queen.
4850. Appointment of Senior Naval Staff Officer Military Department, India Office and R.I.N.L.O., Admiralty.
4851. Enemy Aircraft Shot Down or Damaged by Ships' Gunfire or Naval Aircraft.
4852. A.F.D. 54—Designation.
4853. H.M. Naval Establishments at Bermuda.
4854. Safety Equipment School, Eastleigh—Establishment of an Air/Sea Rescue Section.

SECTION 2.—PERSONNEL, PAY, SERVICES, DISCIPLINE, ETC.

4855. Honours and Awards—" London Gazette " Supplement of 5th September, 1944.
4856. Honours and Awards—1939–43 Star—Issue of Additional Ribbon.
4857. Honours and Awards.
4858. Honours and Awards—United States Navy.
4859. Honours and Awards—French Navy.
4860. Commendations by Commanders-in-Chief—REPORTS.
4861. Officers, Appointments—Promulgation.
4862. " Midshipmen's Sights ".
4863. Disability and Dependants' War Pensions—Officers.
4864. National Health and Pensions Insurance—Census of Officers from whose Pay Deductions for National Health and Pensions Insurance are not being made.
4865. Temporary Engineering Commissions—Selection of Ratings from the Lower Deck—Combined Operations Ratings.
4866. Accountant Branch Examinations—Distribution of Provisional Pamphlet on Naval Air Supply Duties.
4867. Telegraphist Air Gunners—Advancement.
4868. Royal Naval Air Units—Current Scales of Manning.
4869. Complement Amendments—Flying Target Training Ships.
4870. Cable Ship—Transferable Agreement—Introduction.
4871. Landing Craft Bases Manned Mainly by R.M. Personnel—Command and Allowances.
4872. Writer (Special) Branch—Transfer of Ratings Trained Abroad.
4873. W.R.N.S.—Pay Advances on Discharge to Invaliding, etc. Leave and while in Hospital.
4874. W.R.N.S.—Writer (Pay) and Writer (Pay) (D.E.M.S.)—Amalgamation.
4875. Unemployment Insurance—Form U.I. 3XS. for W.R.N.S. Personnel on Unpaid Leave.
4876. Visual Training Aids Employing Projected Images—Screen Siting and Audience Accommodation.
4877. R.N. Air Station, Belfast—Accounting Arrangements.
4878. Small Arms—Accidents.
4879. Cash Advances by R.N. Accountant Officers to Royal Marines belonging to R.M. Field Units.
4880. Separated and Divorced Wives and their Children—Maintenance—Lower Deck.
4881. Colonials—Special Allowance when on Leave.
4882. Special Victualling Allowance.
4883. Organization for Rapid Identification of Outbreaks of Influenza.
4884. Adult Education—Extension of Facilities—REPORT.
4885. Naval Canteen Service—Entry of Male Staff in the Royal Navy—Plain Clothes Gratuity or Civilian Clothing on Discharge.
4886. War Graves—Reports to Imperial War Graves Commission, Definition and Marking and Disposal of Title Deeds.
4887. Meals away from Lodgings.



SECTION 2.—PERSONNEL, PAY, SERVICES, DISCIPLINE, ETC.—*contd.*

4888. Officiating Minister of Religion.
4889. Officiating Ministers of Religion.
4890. The Royal Naval Benevolent Trust—Donations.
4891. Disposal of Amenities Gear.
4892. Naval Canteens—Navy, Army and Air Force Institutes—Balance Sheet as at 28th August, 1943.
4893. Sports—R.N. and R.M. Sports Control Board—Donation.

SECTION 3.—G., T., N., E., ETC., & STORES ; HULL, EQUIPMENT & FITTINGS.

*Gunnery.—(Guns, Mountings, Ammunition, Turrets, Directors, Fire Control, Diving Apparatus, Magazines, etc., and Stores.)*

4894. Aircraft—Guns, Hispano 20-mm.—Defective Gauges.
4895. Ammunition—O.Q.F. 2-pdr. Cartridges—Cases of R.L.B. 1942 Manufacture—Lots 6, 7 and 8—Precautions.
4896. Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition to.
4897. Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition to.
4898. Anti-Aircraft Fire Control—F.K.C.S. and H.A.C.S. R.T.Us., Marks IV, IV* and V.
4899. Guns—General—Lubricants—Oildag Wrongly Issued in lieu of Oil ZA.
4900. Guns—4-in.—Handrails for Gun Access Trunk Ladder—As. and As.
4901. Guns—20-mm. Oerlikon—Box, 300 knot Sight, Mark I—Modification.
4902. Gun Mountings—General—Variable Delivery Hydraulic Pumps—Use of Emergency Stop Push.
4903. Gun Mountings—4·7-in. C.P. Mark XXII Mountings and 4·5-in. C.P. Mark V and R.P.50 Mark V Mountings—Sighting Gear—Modified Range Dial Index Bracket.
4904. Gun Mountings—4-in. H.A. Twin Mark XIX, including R.P.50 Series Mtgs—Hauling Back Gear—Muzzle Adaptor Bush for Guns with Parallel Muzzle.
4905. Gun Mountings—40-mm. Bofors Marks IV and IV*—Errors in Deflection due to Creep of V.S.G. Units.
4906. Gun Mountings—20-mm., Mark VIIA* S/M—Replacing 20-mm., Mark VIIA S/M Mountings—As. and As.
4907. Gun Mountings—20-mm., Marks IV (U.S.), V (U.S.) and VI (U.S.), also Mark IIA and Mark IIIA—Lists of Spare Parts and Tools.
4908. Rangefinders—Elevation Errors—Air Disturbance Gear.
4909. Rangefinders—U.R. and U.K. Types—Discolouration of the Strip Field—REPORTS.
4910. Naval Stores for Maintenance of Guns.

*Torpedo.—(Torpedoes, Tubes, Mines and Minesweeping, Depth Charges, Paravanes, Electrical Equipment, Anti-Gas, Aircraft Torpedoes, etc., and Stores.)*

4911. Torpedoes—18-in., Mark XII—XV—Difference between Running Depth and Recorded Depth.
4912. Torpedo Stores—Washers, St. No. 11897—Introduction and Allowances.
4913. Blowing Heads, XII–XV " B " and " E "—Fitment of Strengthened Domes.
4914. British Substitutes for American Equipment for Use with 22·4-in., Mark 13 Type Torpedoes.
4915. Depth Charge Equipment—As. and As.
4916. Depth Charges, Mark X and X*—Modification to Top Lug, St. No. 6420.
4917. Dynamo Exploders and Associated Equipment—Allowances.
4918. Electric Machinery for (*a*) Mark V Searchlight Control System. (*b*) Target Bearing Indicators in Certain Hunt Class Destroyers.
4919. Gunnery Inspection and Trials, H.M.S." Vernon"—Fire Control Working-up Party.
4920. L.P. Junction Boxes—As. and As.
4921. Radiator A.P.7886 for Steering Compartment—As. and As.
4922. Telephones, Pattern 13224 and Pattern 13235—Reduction of Call-up Note.
4923. VC/VF and Navigation and Signalling Lamp Circuits—As. and As.

*Navigation.—(Navigation Stores, Sextants, Compasses, Charts, Anchors, Sails, etc.)*

4924. Marine Box Chronometers.

*Engineer.—(Main and Auxiliary Engines, Boilers, other Machinery in Charge of the Engineer Officer, including Catapults, Coal and Oil Fuel, and Engineering Stores.)*

4925. Diesel Engines—Spare Gear—Economy in Use.
4926. Boilers, Cylindrical—Cap Ferrules.
4927. Boiler Safety—Valves—Cockburn, Full-Bore—Corrosion of Spindles—REPORTS.
4928. G.M. Quad Unit Model 6051—Lubrication of Pitch Control Rod and Main Drive Gear Hub Splines—As. and As.
4929. Cylinders for Permanent Gases and Liquefiable Gases—Relaxations of Biennial Tests.
4930. Pump Impellers—Material of.

SECTION 3.—G., T., N., E., ETC. & STORES ; HULL, EQUIPMENT & FITTINGS—*contd.*

*Signals.—(W/T and V/S Apparatus, Radar, D.F., S.R.E., Wa/T and Stores.)*

4931. Addressees and Telephone Numbers of Various Radio Service Departments.
4932. R.N. Shore W/T Stations—Transmitters 8D—Modifications to Crystal Sockets in Pattern 53910, Crystal Control Unit.
4933. R.N. Shore Wireless Stations—Particulars of Communication Transmitters Installed—REPORTS.
4934. Radar Sets, Types 276/277/S/T/293—Soundproof Cabinet A.P.W.7556—Fitting of Baffle A.P.54477 or A.P.57136.
4935. W/T Sets, Types 57DM/DMR/CM/CMR—Modification to Pattern W.3794 Master Oscillator Unit.

*Aircraft.—(Technical.)*

4936. Aircraft Radio—Crystals—Repair.
4937. Seafire Aircraft—Modification to Arrester Hooks, Stores Ref. 27H/1942 and 27H/1943.
4938. Aircraft Radio—Transmitter-Receivers, T.R.1196 Series—Controllers, Electric, Type 4, T—R Switch Modification.
4939. Aircraft Radio—VH/F Crystals—Guard and Homing Frequencies.

*General.—(Hull, Armour, General Equipment and Fittings, etc., and Orders affecting two or more Departments.)*

4940. Aircraft—Avenger (T.B.F.I. T.B.M.I. and T.B.M.3.)—Interchangeability of Mainplanes.
4941. Aircraft Carriers—Provision of Methyl Bromide for Aircraft Fire Extinguishers.
4942. Aircraft—Compasses, Landing, Medium, Reference 6B/34.
4943. Sea Otter and Swordfish Aircraft—Exhaust System Anti-Glow Paint.
4944. Ammunition Supply—Smoke Generators, No. 26—Stowage Racks.
4945. Battery, Pattern W.2317, for Intermediate Signalling Lantern, Pattern W.2174—Charging Instructions—Pattern W.2318A Battery Box—Instructions for Conversion to Pattern W.2318B.
4946. Circulating Water Sea Inlet Chests—As. and As.
4947. Condensers, 30 mfd. (Electrolytic).
4948. Degaussing—D.G. Treatment of L.C.G. (M).
4949. Lubricating Oil Coolers and F.W. Heat Exchangers.
4950. Main Batteries—Wedging of.
4951. Radio Interference Suppressors, A.P.19449, A.P.19449A—Introduction.
4952. Shipment of Naval Aircraft Boats and Tenders—Procedure.
4953. Towing Equipment—As. and As.
4954. Use of Neoprene Sheathing in lieu of Tough Rubber Sheathing for A.P. Cables.
4955. Valve Amplifying Gear—Introduction of New Items.
4956. Wallets for Tools, Pattern 15—Allowances.

SECTION 4.—OTHER STORES—NAVAL STORES*, VICTUALLING STORES, MEDICAL STORES, CONTRACTS

(**All N.S. Orders not included under Section* 3.)

4957. Gas Cylinders for Engineering and Medical Purposes—Filling, Testing, Identifying, etc.
4958. Storage of Mapharside.
4959. Supplies of Fresh Provisions to Small Ships.
4960. Kits—Combined Operations Personnel.
4961. W.R.N.S.—Kit for Ratings Drafted to British Assault Area—REPORTS.
4962. Royal Marines borne on Ships' Books—Repairs, Alterations and Dry-cleaning of Uniform.
4963. Navigator's Yeoman—Badges.
4964. Waste—Salvage and Disposal of Oily Rags and Cotton Waste.
4965. Naval Maintenance Shuttle Service from Portsmouth—Limitation of Weight of Packages.

SECTION 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE

4966. A.M.S.Is.
4967. Amendments to Books.
4968. Ammunition Labels—Form O.6—Additions.
4969. Ammunition Labels—Form O.6—Additions.
4970. B.R. 207.—Drill for 12-pdr. Q.F. Guns on Low Angle Mountings, 1928—Obsolete.
4971. B.R. 912 (20)—Director Handbook—Elevation and Training Receivers of the C. CM. E. EM and F Types—Issue.



SECTION 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE—*contd.*

4972. B.R. 1057—Handbook for 40mm. Bofors Gun—Naval Water Cooled Type of British and American Manufacture—Issue.
4973. *Cancelled.*
4974. Naval Air Maintenance Orders.
4975. Publications for Flying Personnel—
"Survival on Land and Sea" and
"How to Survive on Land and Sea" } Distribution
4976. U.S.N. Air Operations Memoranda—Issue.
4977. H.M.S. "Whitehall"—Confusion with Whitehall, London.

SECTION 6.—SHORE ESTABLISHMENTS

4978. R.N. Medical Depot, Huthwaite—Installation of Trunk Subscribers Circuit.
4979. Industrial Employees Serving in H.M. Forces.—Rate of Pay.
4980. Allotments of Workmen Recruited from Outside Industry for Service at Establishments Abroad.
4981. Payment for Extra Attendance—Non-Industrial Overtime Classes—Fractions of an Hour.
4982. Female Industrial Telephone Operators—Revised Rates of Pay.
4983. Women Industrial Employees in Establishments at Home—Increase in Basic Rates and Revised Bonus.

*(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.

### 4849.—National Day of the Netherlands and Birthday of the Queen

(N. 4068/40.—14 Sep. 1944.)

The following message was sent from the First Lord to H.M. the Queen of the Netherlands :—

"On the occasion of Your Majesty's birthday and the National Day of the Netherlands, I desire on behalf of the Board of Admiralty and the Royal Navy to offer sincere congratulations to Your Majesty.

2. The success of the amphibious operations against the so-called Fortress of Europe, in which units of the Royal Netherlands Navy played their part, and the progress already made by the armies of the United Nations justify the hope that the enemy will be expelled from the Netherlands at no distant date and that Your people will be able to celebrate the next occasion of their National Day with their beloved Sovereign in their midst.

A. V. Alexander."

The following reply has been received :—

"Please accept my most sincere thanks for your congratulations on behalf of the Board of Admiralty and the Royal Navy. The Units of the Netherlands Navy have been proud to play their part in the successful amphibious operations side by side with their British comrades and I fully share your hope that at no distant date the Netherlands will once more be free.

Wilhelmina."

### 4850.—Appointment of Senior Naval Staff Officer Military Department, India Office and R.I.N.L.O., Admiralty

(M. 1946/44.—14 Sep. 1944.)

Commodore J. T. S. Hall, C.I.E., R.I.N., has been appointed Senior Naval Staff Officer on the staff of the Secretary, Military Department, India Office. His address is :— India Office, Whitehall, London, S.W.1. He will also act as Royal Indian Navy Liaison Officer with the Admiralty.

2. The following is a brief description of his duties and responsibilities in so far as Naval Authorities in general are concerned.

(*a*) He is charged with maintaining liaison in all matters concerning the Royal Indian Navy and in particular he is responsible for ensuring that the Flag Officer Commanding R.I.N., is informed, in the early stages, of developments of weapons and equipment so that H.M.I. ships and training establishments can be maintained in the most modern condition.

(*b*) He will assist the staff of the Military Department, India Office, in all matters relating to the proceedings of His Majesty's Indian ships in Home waters and the movements, training and employment, of R.I.N. personnel training with, or on loan to, the Royal Navy.

(*c*) He is available to advise on all matters concerning the Royal Indian Navy.

3. Naval authorities should ensure that Commodore Hall is given all facilities to enable him to carry out his duties. Correspondence should be addressed to the Senior Naval Staff Officer, India Office, Whitehall, London, S.W.1, except in regard to subjects under (*b*). Correspondence on these latter subjects should be addressed to the Joint Secretary, Military Department, India Office, Clarence House, Matthew Parker Street, S.W.1.



### *4851.—Enemy Aircraft Shot Down or Damaged by Ships' Gunfire or Naval Aircraft

(G.D. 0708/44.—14 Sep. 1944.)

Casualties to enemy aircraft by ships' gunfire are as follows from 12th April, 1940 to 31st August, 1944 :—

| | Confirmed | Probable | Damaged |
|---|---|---|---|
| *By H.M. Ships ... ... ... ... | 681 | 223 | 331 |
| *By H.M. Ships and merchant ships jointly | 163 | 29 | 21 |
| By merchant ships and fishing vessels ... | 145 | 48 | 120 |
| | 989 | 300 | 472 |
| Last reported totals (31st July, 1944) ... | 978 | 299 | 471 |
| Increases ... ... ... ... ... | 11 | 1 | 1 |

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

| Confirmed | Probable | Damaged |
|---|---|---|
| *H.M. Ships* | | |
| H.M. Ships "Beagle," "Oribi," "Onslaught" and "Tanatside" (2) | H.M.S. "Beagle" (1) | H.M.S. "Bryony" (1) |
| H.M.S. "Faulknor" ... (1) | | |
| H.M.S. "Kingsmill" ... (1) | | |
| H.M.C.S. "Alberni" ... (1) | | |
| H.M. L.C.F. 37 ... ... (1) | | |
| H.M. L.C.T. 1013 ... ... (1) | | |
| *H.M. Ships and Merchant ships jointly* | | |
| Nil | Nil | Nil |
| *Merchant ships and Fishing vessels jointly* | | |
| M/V "Northgate" ... (1) | Nil | Nil |
| Merchant ships off Normandy Coast ... ... ... (3) | | |

*Enemy aircraft shot down by Naval aircraft*

The results are as follows from the beginning of the war to 31st August, 1944 :—

| | Confirmed | Probable | Damaged |
|---|---|---|---|
| Present totals ... ... ... ... | 269 | 44 | 165 |
| Last reported totals (31st July, 1944) ... | 266 | 44 | 165 |
| Increases ... ... ... ... ... | 3 | 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. 4339/44 is cancelled.*)

### 4852.—A.F.D.54—Designation

(P. 04890/44.—14 Sep. 1944.)

A small floating dock to accommodate Fairmile M.Ls. has been constructed and is at present based at Alexandria. This floating dock has been designated A.F.D. 54.

2. Principal dimensions are as follows:—

| | *ft.* | *ins.* |
|---|---|---|
| Length overall ... ... ... ... ... | 108 | 0 |
| Length of pontoon ... ... ... ... ... | 84 | 0 |
| Breadth overall ... ... ... ... ... | 30 | 0 |
| Breadth between walls— | | |
| (*a*) at pontoon deck ... ... ... ... | 22 | 0 |
| (*b*) at top of walls ... ... ... ... | 25 | 9 |
| Maximum height of M.L. keel blocks ... ... | 3 | 6 |
| Depth of water available over keel blocks— | | |
| (*a*) at normal sinkage ... ... ... ... | 7 | 3 |
| (*b*) at maximum sinkage ... ... ... | 8 | 6 |
| Draught of dock at maximum sinkage ... | 17 | 0 |

Lifting capacity—about 120 tons.

2. The dock is operated by 2 in number petrol driven centrifugal pumps, situated in a lighter moored alongside, the pumps being connected to the suctions on the dock by lengths of suitable hose.

### 4853.—H.M. Naval Establishments at Bermuda

(M. 1993/44.—14 Sep. 1944.)

On 7th August, 1944, the Commodore-in-Charge, Bermuda, assumed command of H.M.S. "Malabar", comprising the R.N. Barracks, Bermuda and the Depot ship, Bermuda. The R.N. A/S Working-up base, Bermuda, was disbanded on 1st August, 1944.

2. The Royal Canadian Navy A/S Training establishment at St. George's commissioned on 1st August, 1944, as H.M.C.S. "Somers Isles" under the command of an Acting Captain, Royal Canadian Navy.

3. The Commodore-in-Charge, Bermuda, also holds the appointment of Commodore Superintendent, H.M. Dockyard, Bermuda.

(*A.F.O. 3592/43 is cancelled.*)

### 4854.—Safety Equipment School, Eastleigh—Establishment of an Air/Sea Rescue Section

(A. 67/44.—14 Sep. 1944.)

An Air/Sea Rescue Section has been established at the Safety Equipment School, R.N. Air Station, Eastleigh, in order to provide training for officers and ratings in Air/Sea Rescue.

2. Instruction will be given in the following:—

(*a*) Use of Safety Equipment in the Navy, with particular reference to Naval Air/Sea Rescue apparatus.

(*b*) Use of V/S, W/T, R/T, and A.S.D., as applied to Air/Sea Rescue.

(*c*) Navigation and search exercises.

(*d*) Rough water landings, dropping Air/Sea Rescue apparatus, recovery of survivors.

(*e*) Carrier based and shore based Air/Sea Rescue organization.

(*f*) First aid to rescued survivors.

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

### *4855.—Honours and Awards—"London Gazette" Supplement of 5th September, 1944

(H. & A.—14 Sep. 1944.)

CENTRAL CHANCERY OF THE ORDERS OF KNIGHTHOOD,
*St. James's Palace, S.W.1,*
*5th September, 1944.*

The KING has been graciously pleased to approve the award of the George Medal to:—

Temporary Acting Lieutenant Baron Phillips, M.B.E., R.N.V.R.,
for gallantry and undaunted devotion to duty.

The KING has been graciously pleased to approve the award of the British Empire Medal (Military Division) to:—

Joiner Fourth Class Fred Smith, C/MX.76910 (St. Helens),
for gallantry, as a member of a rescue party in swimming to and boarding an ammunition ship which caught fire and was liable to explode in Bombay Docks.

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ADMIRALTY,
*Whitehall,*
*5th September, 1944.*

The KING has been graciously pleased to give orders for the following appointments to the Distinguished Service Order and to approve the following awards:—

For gallantry, determination and undaunted devotion to duty as Liaison Officer with Commandos in the attack and capture of Mount Ornito, Italy, and during attacks on the islands of Solta, Mljet and Brac in the Adriatic, all of which operations were carried out under very heavy fire from the enemy:

*Bar to the Distinguished Service Order*

Admiral Sir Walter Henry Cowan, Baronet, K.C.B., D.S.O., M.V.O. (Ret.).

For undaunted courage, skill and devotion to duty in successful patrols in H.M. Submarines:

*To be Companions of the Distinguished Service Order*

Lieutenant George Edward Hunt, D.S.C., R.N. (Moffatt).
Lieutenant Ian Stewart McIntosh, M.B.E., D.S.C., R.N. (Wallington).

*Bar to the Distinguished Service Cross*

Lieutenant Barry Loraine Dudley Rowe, D.S.C., R.N. (London).

*The Distinguished Service Cross*

Temporary Lieutenant Hubert Charles Parker, R.N.V.R. (Bournemouth).

*The Distinguished Service Medal*

Acting Chief Petty Officer Roy Alfred Claxton, C/JX.140185 (Ipswich).
Acting Chief Petty Officer Hugh Clyde Williams, D/JX.137839 (Bangor).
Chief Engine Room Artificer Horace William Thornton, P/MX.52830 (Sheffield).
Petty Officer Sydney Douglas Hills, P/JX.127202 (Cosham).
Engine Room Artificer Fourth Class Cyril Gordon Haimes, D/MX.90759 (Plymouth).
Leading Seaman Alexander Orchiston Mowatt, P/SSX.21589 (Edinburgh).
Acting Leading Seaman Charles Richard Gresty, P/JX.132611 (Chester).
Acting Leading Stoker Charles Hugh Melborn Raymond, D/KX.146143 (Milford Haven).
Able Seaman Ronald Hill, D/SSX.28100 (Bere Alston).
Able Seaman John Eric Bishop, P/JX.361825 (Southall).
Able Seaman Horace Baden Smith, C/SSX.18530 (Derby).
Stoker First Class Sidney Frank Surridge, C/KX.139152 (Hainhill).

*Mention in Despatches*

Lieutenant Brian Harries Gordon Michael Baynham, R.N. (Walton-on-Naze).
Mr. Arthur Leslie Brewer, D.S.M., Warrant Engineer, R.N. (Dunoon).
Engine Room Artificer Third Class Cyril Albert Mabbett, D/MX.56298 (Seaton Delaval, Northumberland).
Petty Officer Telegraphist William Henry Pearce, C/JX.133348 (Gillingham).
Leading Seaman William Arthur Curtis, C/JX.180042 (Charing).
Leading Seaman Leonard Hall, D/JX.152503 (Rugeley).
Acting Leading Stoker Ernest James Byles, C/KX.137117 (Wellingborough).
Able Seaman Clifford Ernest Cough, D/JX.151356 (Newport, Mon.).
Able Seaman Harry Hinchliffe, C/JX.311827 (Tinwhistle).
Able Seaman Harry Hillier Lambert, C/JX.314991 (Sevenoaks).
Able Seaman Cyril Trigg, C/JX.168062 (Grimsby).
Stoker First Class Alfred Thompson, C/KX.96214 (Coseley, Staffordshire).

For gallantry, leadership and determination in landing operations which led to the capture of Elba :

*To be a Companion of the Distinguished Service Order*

Acting Temporary Lieutenant-Commander Harry Donald Davis, R.N.V.R. (London).

*The Distinguished Service Cross*

Lieutenant Peter William Spencer, R.N. (Newton Abbott).

For great courage, determination and skill in operations in Light Coastal Craft.

*Second Bar to the Distinguished Service Cross*

Temporary Acting Lieutenant-Commander Thomas George Fuller, D.S.C., R.C.N.V.R. (Ottawa).

*Bar to the Distinguished Service Cross*

Temporary Lieutenant John Scott Price, D.S.C., R.N.V.R.

*The Distinguished Service Cross*

Temporary Lieutenant Ralph Morris Cole, R.N.V.R. (Bristol).
Temporary Sub-Lieutenant John Edward Hickford, R.N.V.R. (Enfield).

*The Distinguished Service Medal*

Chief Motor Mechanic Fourth Class James Duncan Chaplain, P/MX.76827 (Dundee).
Able Seaman David McIntosh, D/JX.346559.
Able Seaman Christopher George Townsend, P/JX.325275.
Seaman Benjamin Grant Bremner, LT/JX.242826 (Wick).

*Mention in Despatches*

Temporary Lieutenant Brian Charles Coleman, R.N.V.R. (Newhaven).
Temporary Lieutenant Maurice Mountstephens, R.N.V.R. (Hereford).
Temporary Sub-Lieutenant William John Callow, R.N.V.R. (South Petherton).
Temporary Sub-Lieutenant Michael Somerset Hannington, S.A.N.F. (Mossel Bay, South Africa).
Chief Motor Mechanic Third Class Nelson John Algar, P/MX.76489.
Petty Officer Ronald George Lawson, D/SSX.26240.
Petty Officer Motor Mechanic Walter John Edwards, P/MX.89643 (Reading).
Acting Petty Officer Motor Mechanic Stanley Thomas Campbell, P/MX.117880.
Leading Seaman Frederick Edward Henry Hore, P/JX.263290 (Lee-on-Solent).
Able Seaman Jesse Hargrave, D/SSX.24855.
Able Seaman Charles Trevor Skinner, S.A.67730, S.A.N.F.(V), (Durban).

For courage, skill and devotion to duty while operating from, or serving in, H.M. Ships "Furious" and "Victorious" during many successful strikes at enemy shipping off the coast of Norway.

*Bar to the Distinguished Service Cross*

Acting Lieutenant-Commander (A) William Haig Martyn, D.S.C., R.N. (Calgary, Canada).

*The Distinguished Service Cross*

Temporary Lieutenant (A) Donald Stephen Miller, R.N.V.R.
Temporary Sub-Lieutenant (A) Harry Ashford, R.N.V.R. (Birmingham).
Temporary Sub-Lieutenant (A) Ian George William Robertson, R.N.V.R. (Bickley).



*Mention in Despatches*

Lieutenant George Cockburn Yorke, R.N. (Kenya).
Lieutenant (E) Hugh Richard Maurice Storey Ferguson, R.N. (Charlton Mackrell)
Temporary Lieutenant (A) Clifford Gordon Hurst, D.S.C., R.N.V.R. (Leicester).
Temporary Lieutenant (A) Leonard William Peck, R.N.V.R.
Temporary Lieutenant (A) Geoffrey Russell-Jones, D.S.C., R.N.V.R.
Temporary Sub-Lieutenant (A) Albert Edward Browse, R.N.V.R. (Dagenham).
Temporary Sub-Lieutenant (A) George Jackson Burford, R.N.V.R. (London).
Temporary Sub-Lieutenant (A) Dennis Harold Collett, R.N.V.R. (Oxford).
Temporary Sub-Lieutenant (A) Leslie Duncan Durno, R.N.V.R. (Invernice).
Temporary Sub-Lieutenant (A) John Claude Fairclough, R.N.V.R. (Halifax).
Temporary Sub-Lieutenant (A) John Marriott McCormick, R.N.V.R. (Worcester).
Temporary Sub-Lieutenant (A) Herbert William Pethick, R.N.V.R. (Torquay).
Temporary Sub-Lieutenant (A) James Watson, R.N.V.R. (Edinburgh).
Temporary Sub-Lieutenant (A) George Anthony Rawstron, R.N.Z.N.V.R. (Christchurch, New Zealand).
Temporary Sub-Lieutenant (A) Murray Rivett, R.N.Z.N.V.R. (Great Gransden, Bedfordshire).
Temporary Sub-Lieutenant (A) Desmond Edward Rowe, R.N.Z.N.V.R. (Christchurch, New Zealand).
Air Artificer Third Class Frederick Thomas Kyzer, FAA/FX.75842 (Fareham).
Acting Petty Officer Airman Arthur Howard Kimberley, FAA/FX.95538 (Wellington).
Acting Petty Officer Air Mechanic John Henry Albert Daughters, FAA/SFX.194 (Fulham).
Leading Seaman Arthur Roach, D/SSX.22039 (Wilsontown, Lanarkshire).
Leading Airman John Coulby, FAA/FX.95572 (Retford).
Leading Airman Harold Edward Hoyte, FAA/FX.86770 (Southport).
Acting Leading Airman Victor Smyth, FAA/FX.86754 (Newark).
Acting Leading Airman Thomas Spencer,FAA/FX.95752 (Bicester).
Leading Air Fitter Edward John James Maynard, FAA/FX.94414 (Eastham).
Leading Air Fitter Edward George Weeks, FAA/FX.109494 (Southall).

For skill and devotion to duty in H.M. Ships "Bunting," "Firefly," "Edward Walmsley" and "Berberis" in minesweeping operations :

*Bar to the Distinguished Service Cross*

Commander Leonard Ernest Pearson, D.S.C., R.N. (Ret.) (Rochester).

*The Distinguished Service Medal*

Leading Seaman Kenneth Vass, LT/X.7552(c) (Ipswich).

*Mention in Despatches*

Second Hand Frank Mitchell, LT/JX.225815 (Tilbury).
Signalman George Bernard Price, LT/JX.189254 (Hull).

For bravery and leadership in operations in the Adriatic :

*The Distinguished Service Cross*

Temporary Lieutenant Kenneth James Webb, R.N.R.

*Mention in Despatches*

Lieutenant-Commander Morgan Charles Giles, O.B.E., G.M., R.N.

For good services when their ships were damaged :

*Mention in Despatches*

Acting Lieutenant Jacky Perks, D.S.C., R.N.
Mr. Horace Rance Pead, Temporary Warrant Engineer, R.N.
Engineman George Gledhill, LT/KX.139569.
Engineman James Matthew Third, LT/KX.148820.
Leading Wireman Joseph Ayling, C/MX.97577.
Leading Wireman Denis Green, C/MX.97129.

For good services in H.M.S. "Tenacious" in action with enemy "E" and "R" Boats :

*Mention in Despatches*

Petty Officer Archibald James Ulyett, D/JX.133854 (Plymouth).

For distinguished services :

*Mention in Despatches*

Temporary Petty Officer Cook John Vernon Lee, P/MX.54983.
Able Seaman Andrew McIlquham McLean, D/SSX.22068.
Able Seaman Arthur Ross Pinnell, C/JX.160639.

For great bravery as members of a rescue party which was sent to help with casualties and damage caused by explosions at Bombay Docks :

*Posthumous Commendation*

Temporary Sub-Lieutenant Bryan Charlton, R.N.V.R. (Newcastle-on-Tyne).

*Commendation*

Able Seaman Thomas Edward Carr, P/SSX.22590 (Durban).

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The KING has been graciously pleased to give unrestricted permission for the wearing of the following decorations bestowed by King Haakon of Norway for services to Norway :—

*The Norwegian War Medal*

Acting Regulating Petty Officer David Johnson, D/SSX.15964.
Able Seaman John Clune Hague, D/SSX.24863.

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The following amendments, where underlined, are made to previous Orders of Honours and Awards under the headings shown :—

A.F.O. 3486/44.

*The British Empire Medal (Military Division)*

Bandmaster Second Class Arthur Lionel Joseph Bailey, R.M.B.X.265.

A.F.O. 4208/44.

*The Distinguished Service Medal*

Telegraphist Geoffrey James Bennett, P/JX.341030.
Seaman William Fredrick Larham, LT/JX.406544.

*Mention in Despatches*

Petty Officer Motor Mechanic Stanley Ingham, P/MX.98459.
Petty Officer Motor Mechanic George Amos, C/MX.704910.

A.F.O. 4444/44.

*The Distinguished Service Medal*

Petty Officer Alexander Barrow Monro, P/JX.145822.
Stoker First Class Kenneth Peel, P/KX.135977.

*Mention in Despatches*

Sergeant George Harman, 1485756, Fifth Regiment, Maritime Royal Artillery.

### *4856.—Honours and Awards—1939–43 Star—Issue of Additional Ribbon

See AFO 1155/45.

(H. & A. 425/44.—14 Sep. 1944.)

It is approved that as soon as sufficient supplies are available a further 2½ inches of the ribbon of the 1939–43 Star may be issued free to all qualified officers and men who need them for replacement purposes or for additional uniforms.

2. A further Order will be issued when supplies are available.

3. It is not yet possible to issue the ribbon on repayment.

*(A.F.O. 660/44.)*

### *4857.—Honours and Awards

(H. & A. 729/44.—14 Sep. 1944.)

The King has been graciously pleased to approve the following award for courage, skill and devotion to duty in successful patrols in one of H.M. Submarines.

*Mention in Despatches*

Temporary Sub-Lieutenant David Pels, R.N.V.R.

2. This award will not be gazetted.



### 4858.—Honours and Awards—United States Navy

(H. & A. 489/44.—14 Sep. 1944.)

The King has approved the following Honorary Appointments for distinguished services :—

*Companion of the Military Division of the Order of the Bath :*

Rear Admiral Frank Jacob Lowry, U.S.N.

*Commander of the Military Division of the Order of the British Empire :*

Captain James Hicks Foskett, U.S.N.

### *4859.—Honours and Awards—French Navy

(H. & A. 681/44.—14 Sep. 1944.)

The King has been graciously pleased to approve the following awards for good services in the 23rd (French) M.T.B. Flotilla in an attack against an enemy convoy :—

*Distinguished Service Cross*

Lieutenant de Vaisseau Pierre Louis Charles Iehle, F.N.F.L.
Enseigne de Vaisseau de 1ere classe Paul Bigault de Cazanove, F.N.F.L.

*Distinguished Service Medal*

Quartier-Maitre de 2eme classe Lucien Bousson, 458 F.N.42.

*Mention in Despatches*

Quartier-Maitre de 1ere classe Pierre Douarinou, 2191 F.N.40.
Second-Maitre Mecanicien Louis Dulac, 2397 F.N.40.
Second-Maitre Mecanicien Rene Boulic, 346 F.N.42.

2. These Awards will not be gazetted.

### *4860.—Commendations by Commanders-in-Chief—REPORTS

AFO 1156/45.

(N. 9740/44.—14 Sep. 1944.)

Officers and men who have been formally commended by their Commander-in-Chief (or senior officer if responsible direct to the Admiralty and not to a Commander-in-Chief) for specific acts, or for good service and devotion to duty, should have the commendation noted in their service records. Names of officers commended are to be reported to the Admiralty for this purpose. Notations for men should be made on the Service Certificate; those for Naval ratings are to be reported to the Director of Navy Accounts, Admiralty, and those for Royal Marines, to the Commandants of the R.M. Divisions concerned. Commendations are not to be noted in ships' ledgers.

2. The same arrangements apply to W.R.N.S. personnel similarly commended by the Commander-in-Chief, but commendations of W.R.N.S. ratings are to be reported to the Director, W.R.N.S., Admiralty.

*(K.R. & A.I., Article 606.)*

*(A.F.O. 5825/43 is cancelled.)*

### 4861.—Officers Appointments—Promulgation

(C.W.—14 Sep. 1944.)

Attention is drawn to the fact that when an officer is serving in one of H.M. ships or in a Naval establishment, any change in his appointment is communicated to him by insertion in the C.W. Daily List. Personal letters of appointment are not issued in these cases.

2. Care should accordingly be taken to communicate to officers serving in H.M. ships or establishments any changes in their appointments promulgated by C.W. Daily List, and to arrange for officers to take up their new appointments.

### 4862.—"Midshipmen's Sights"

(C.W. 44110/44.—14 Sep. 1944.)

A number of cases have occurred recently of midshipmen R.N. due for examination in navigation having failed to complete the requisite sets of sights, or indeed any set at all. Particular importance is attached to this part of midshipmen's training, observing that they receive no instruction in Astronomical Navigation during their subsequent courses as Acting Sub-Lieutenant. In this connection, the attention of Commanding Officers is drawn to A.F.O. 391/41, particularly the second clause of paragraph 1, which states that the *minimum* number of worked observations is to be one of each of the sets laid down in K.R. & A.I. Appendix XII, section III, paragraph 6 (iv).

(*A.F.O. 391/41.*)

### 4863.—Disability and Dependants' War Pensions—Officers

(P.M.2753/44.—14 Sep. 1944.)

The following is a summary of the present war pension arrangements for officers of the Naval Forces and their families. It is intended only as a general explanation and does not replace the regulations themselves.

OFFICERS, R.N., R.M., AND RESERVES

2. *Disability Awards.*—When an officer retires or returns to civil life he may be given an award for any disability which he then has which is due to, or has been made worse by, his Naval service. The amount of the award depends on the extent to which he is disabled, and on his rank. "Rank" here means his substantive rank when he leaves the Naval Service (or war substantive rank in the case of a Royal Marine officer holding a temporary commission) or any higher paid acting rank he held when he was wounded or injured, or was first removed from duty on account of the disability.

If he is totally disabled, he is given an award as follows :—

(*a*) Regular Officers eligible for service retired pay (all ranks) £150 a year in addition to service retired pay or an award under (*b*) if to his advantage.

(*b*) Temporary and Reserve Officers :—

| | £ |
|---|---|
| Rear-Admiral, or Major-General, R.M.... ... ... | 420 a year |
| Commodore 1st and 2nd Class, or Colonel-Commandant, R.M. ... .. ... ... ... | 375 a year |
| Captain, R.N., R.N.R., or R.N.V.R., or Colonel 2nd Commandant, Colonel, or Lieutenant-Colonel, R.M. | 330 a year |
| Commander, R.N., R.N.R., or R.N.V.R., or Major, R.M. ... ... ... ... ... ... ... | 300 a year |
| Lieutenant-Commander, R.N., R.N.R., or R.N.V.R., or Captain, R.M. ... ... ... ... ... | 270 a year |
| Lieutenant, R.N., R.N.R., or R.N.V.R., or Lieutenant, R.M. with 4 years' commissioned service or over. ... | 240 a year |
| Sub-Lieutenant and Acting Sub-Lieutenant, R.N., R.N.R., or R.N.V.R., 2nd Lieutenant, R.M., or Lieutenant, R.M., with under 4 years' commissioned service. Commissioned Officer from Warrant Rank, R.N., R.M., R.N.R., or R.N.V.R., Midshipman (A) ... | 210 a year |
| Midshipman, and Cadet after completion of shore training, R.N.,. R.N.R., or R.N.V.R., WarrantOfficer, R.N., RM., R.N.R., or R.N.V.R. ... | 180 a year |

If the officer was married before he was wounded or injured, or before he went sick, he is given, in addition, if totally disabled, an allowance for his wife and for his children born within nine months of his leaving the Navy as follows :—

Allowance for wife ... ... £36 a year.

Allowance for each child ... £30 a year.



Allowances for children will ordinarily terminate at the age of 18. An allowance may, however, be granted or continued after that age if the child is a student receiving full-time education at a University, college, secondary or technical school, or is an apprentice undergoing full-time training for any trade, business or profession and receiving not more than nominal wages, or is incapable of self-support owing to infirmity of a prolonged or permanent nature which commenced before the age of 18.

Under certain conditions an education allowance not exceeding £80 a year may also be granted in respect of any child of the age of 5 years and over for whom an allowance as above is payable.

If the officer is not totally disabled he gets an award according to the degree of disablement, total disablement being taken as 100 per cent. Thus, if he is 50 per cent. disabled, he gets an award of half as much as the officer who is totally disabled, and if he is 20 per cent. disabled, an award of one-fifth as much. If the officer is disabled, but his disablement is less than 20 per cent., he may be given a lump sum instead of disability retired pay. In assessing the percentage degree of disablement, the condition of the officer is compared with that of a normal healthy person of the same age, and individual earning capacity is ignored.

Where constant attendance on the officer is necessary on account of disablement for which pension is in payment at the 100 per cent. rate, an additional allowance not exceeding £100 a year may be granted.

3. If an officer is so seriously disabled as a result of service as to be unemployable, he may be eligible for a supplementary allowance of £26 a year. In addition, he may receive an allowance for his wife, even though his marriage took place after the date on which the disablement was sustained, and allowances for their children, even though they were born more than nine months after the end of his war service.

In determining whether an officer is unemployable, any earnings up to 20s. a week are disregarded.

4. An officer who is invalided from the Navy does not have to apply for his case to be considered, but an officer who leaves the Navy for some other reason will have to apply if he wishes to claim an award for disablement. He should write to the Secretary, Ministry of Pensions, Norcross, Blackpool, Lancs., giving his full name and rank, and stating what he is suffering from and why he thinks this is due to his service in the Navy.

5. *Widows' pensions and gratuities and children's allowances.*—If an officer dies as a result of his service (*see* paragraph 17), a pension may be awarded to his widow, provided as a rule, marriage took place before he was wounded or injured or before he went sick. Allowances may also be awarded for his children born within nine months of his leaving the Navy. The rate of pension awarded to the widow depends on her husband's rank as follows :—

| | *Pension* | *Additional gratuity for death in action. (See paragraph 6)* |
|---|---|---|
| Admiral of the Fleet ... ... ... ... | £700 a year | £2,000 |
| Admiral, or General, R.M.... ... ... ... | £540 a year | £1,500 |
| Vice-Admiral, or Lieutenant-General, R.M. ... | £440 a year | £1,250 |
| Rear-Admiral, or Major-General, R.M. ... ... | £350 a year | £1,000 |
| Commodore, 1st or 2nd Class, or Colonel-Commandant, R.M. | £290 a year | £800 |
| Captain, R.N., R.N.R., or R.N.V.R., Colonel 2nd Commandant, Colonel, or Lieutenant-Colonel, R.M. | £230 a year | £600 |
| Commander, R.N., R.N.R., or R.N.V.R., or Major, R.M. | £210 a year | £450 |

There are two scales of pensions for the widows of officers of the undermentioned ranks.

(i) a higher scale for the widow who :—

(*a*) is over 40 years of age, or

(*b*) has children receiving allowances, or

(*c*) cannot work owing to ill-health ;

(ii) a lower scale for the widow not unable to earn who is not yet 40 years of age and has no children eligible for allowances.

The two scales are :—

| | Pension | | Additional gratuity for death in action (see paragraph 6) |
|---|---|---|---|
| | Higher scale | Lower scale | |
| Lieutenant-Commander, R.N., R.N.R., or R.N.V.R., or Captain, R.M. | £180 a year | £170 a year | £300 |
| Lieutenant, R.N., R.N.R., or R.N.V.R., or Lieutenant, R.M., with 4 years' commissioned service or over. | £165 a year | £150 a year | £200 |
| Sub-Lieutenant, R.N., R.N.R., or R.N.V.R., Lieutenant, R.M., with less than 4 years' commissioned service or 2nd Lieutenant, R.M. | £150 a year | £130 a year | £150 |
| Acting Sub-Lieutenant, R.N., R.N.R., or R.N.V.R., or Commissioned Officer from Warrant Rank | £150 a year | £130 a year | £100 |
| Warrant Officer (other than Sergeant-Major, R.M.) | £125 a year | £105 a year | £80 |

A pension on the lower scale is put up to the higher scale as soon as the widow fulfils the conditions for the higher rate.

There are special rules is a widow has been separated from her husband. A divorced wife is not eligible for any award, but separation or divorce does not prevent an award to the children of the marriage.

6. An additional gratuity to the widow, together with pension, is awarded in cases where the officer has been killed in action or while on flying duty or while being carried on duty in aircraft under proper authority, or has in such circumstances sustained wounds or injuries from which he died within seven years of sustaining them.

7. Allowances are given for the officer's children while they are under 18 years of age and may be granted or continued after that age under the same conditions as set out in paragraph 2. The allowances are £36 a year for children of Commissioned Officers and £30 a year for children of Warrant Officers. Children's education allowances (not exceeding £80 a year for each child age 5 and over) may be payable in addition.

Thus, for example, the widow of a Lieutenant, R.N., with two children, gets a pension of £237 a year and may get education allowances for her children in addition.

Motherless children of Commissioned Officers get an allowance of £60 a year each and motherless children of Warrant Officers £45 a year each.

Allowances are also given in respect of step-children, illegitimate children, adopted children, and foster children, in certain circumstances.

8. If the widow of a Warrant Officer with a child is paying rent and rates of more than 8s. 0d. a week, she may get a supplement to her pension, provided that the total pension and allowances shall not exceed the amount which would be payable if her husband had been a Sub-Lieutenant. The amount of this supplement depends on the amount of her rent and rates and the highest rate is 12s. 0d. a week when the rent and rates are 20s. 0d. a week or more.

Thus the widow of a Warrant Officer, R.N., with two children may get a pension of £216 4s. 0d. a year, and education allowances in addition.

9. The widow of an officer who dies while serving does not have to apply for her case to be considered. She will be sent a form which she should fill up and send to the Ministry of Pensions.



If an officer dies within seven years of his discharge and his widow thinks that his death is due to his Naval service and wishes to claim a pension, she should write to the Secretary, Ministry of Pensions, Norcross, Blackpool, Lancs. She should give her husband's full name and rank, and say whether he was getting disability retired pay.

10. *Pensions for parents and other dependants.*—Where a pension is not payable to a widow (or unmarried dependant—*see* paragraph 13) a pension may be awarded to the father or mother of an officer whose death is due to war service if the parent is in need arising from old age, or infirmity or other adverse condition which is not merely of a temporary nature. A parent who is not in need at the date of the son's death will have the right to apply at a later date should his circumstances worsen. In considering an application from a parent, regard is had to the amount of support which the deceased gave or might be expected to have given had he survived. The maximum rates in the case of a Commissioned Officer are usually £75 a year for one parent or £100 for both and, in the case of a Warrant Officer, £60 a year for one parent or £80 for both.

Where a widow's pension is payable, pension can be paid also to a parent if the parent, besides being in need, had been dependent on the deceased for the last six months of his war service and continuously up to the date of his death.

11. Where the widow or unmarried dependant of a member is not in receipt of pension, a pension may be awarded to a grandparent, step-parent, godmother, brother, sister, half-brother or half-sister, who was dependent on the deceased officer and is in need and incapable of self-support. The maximum pension for an adult dependant is £54 a year in the case of a Commissioned Officer and £50 in the case of a Warrant Officer.

12. A parent or dependent relative of an officer has to apply if he or she wishes to be considered for a pension. They should write to the Secretary, Ministry of Pensions, Norcross, Blackpool, Lancs, stating their relationship to the officer, and giving his full name, rank and the date of his death.

13. *Officers with unmarried dependants living as wives.*—A disabled officer with an unmarried dependant living as a wife (provided she has been continuously maintained by him as a wife throughout the period beginning six months before commencement of his war service) may be entitled in addition to his own disability pension, to similar allowances in respect of his unmarried dependant and his children as if he had been married. No allowance in respect of an unmarried dependant is payable, unless she has a child of the officer in her charge, or is over 40 years of age or cannot work owing to ill health.

If the officer dies as a result of his service, his unmarried dependant may, upon making the necessary claim, receive an allowance at the rate of £60 a year for twelve months, or, whilst she has in her charge a child of the officer and is receiving an allowance in respect of such child, £95 a year in addition to the child's allowance. These allowances may be continued after such periods if and for so long as the unmarried dependant is in pecuniary need and incapable of self-support. Allowances are given to the children of the deceased officer maintained by the unmarried dependant on the same rates as and on similar conditions to those set out in paragraph 7.

Special conditions apply where there is a separated wife or widow.

### Women Officers

14. The rules for women officers of the Naval Forces are generally the same as for male officers, but there are some differences as shown below.

15. *Disability Awards.*

The awards for total disablement are as follows :—

| | £ |
|---|---|
| Women officers with status above that of Commander, R.N. | 270 a year |
| Women officers with status of Commander, R.N. ... ... | 235 a year |
| Women officers with status of Lieutenant-Commander, R.N. | 205 a year |
| Women officers with other Commissioned Officer status ... | 175 a year |
| Women officers with status of Warrant Officer, R.N. ... | 150 a year |

Additional family allowances are payable in the case of married women officers at the same rates as for male officers, except that no allowance is payable in respect of any child of whom the husband is the father unless an allowance for the husband is payable. No allowance is payable for a husband unless he has been maintained by his wife normally throughout the period of at least six months prior to the end of her war service and continuously thereafter up to the date of any award in respect of her disablement, and unless he is unable to work and is in pecuniary need.

16. *Awards in respect of death.*—If a woman officer dies as a result of service leaving dependant children, allowances for such children are payable at the same rate and under the same conditions as for male officers' children, except that where the widower is alive no allowance may be granted in respect of any child of whom he is the father unless a pension for the widower is payable. A pension is not payable to the widower of a married woman officer unless he was maintained by her continuously for the period stated in paragraph 15, they were not separated at the date of her death, and he is unable to work and is in pecuniary need.

Pensions for parents and other dependants are payable at the rates and under the conditions shown in paragraph 10 above.

REGULATIONS

The full Naval War Pensions Regulations are contained in "Statutory Rules and Orders, 1944, No. 99", which are published at the end of the Appendix to the Navy List.

17. *Entitlement.*—The rules for deciding whether disablement or death is due to war service for pension purposes are widely drawn and admit all cases except those in which the disablement or death has in fact nothing to do with Naval service. Even where the Ministry of Pensions do not consider the disablement or death to be due to war service, the claimant to pension has the right of appeal to an independent Appeal Tribunal, which has power to override the decision of the Ministry.

*Naval Auxiliary Personnel serving under T.124 and similar agreements*

Special regulations provide for the payment of war pensions at Naval rates in the case of Naval Auxiliary personnel who are disabled or lose their lives as a result of injuries caused by enemy action or by what are described in the regulations as "war risk injuries" sustained by reason of their service. These regulations are contained in "Statutory Rules and Orders, 1944, No. 499" which are published at the end of the Appendix to the Navy List. Where disablement or death is not due to such injuries, but is accepted as attributable to service, compensation is payable under civil regulations.

18. *General.*—This summary deals only with straightforward cases. The pension regulations have other rules which are not mentioned here, but which apply in special cases, such as those in which a claim to a disability award is not made until after seven years, or in which death does not occur until after seven years.

**4864.—National Health and Pensions Insurance—Census of Officers from whose pay deductions for National Health and Pensions Insurance are not being made**

See AFO 3305/45.

(P.M. 1371/44.—14 Sep. 1944.)

A certain number of cases have come to light where insurance deductions from officers' pay are not being made but are clearly liable. In order to ensure, in so far as is possible, that errors, resulting in non-deduction of insurance contributions, are discovered and the position corrected at an early date, *all* officers from whose pay insurance deductions are not being made should be asked to make the following declaration *on 10th October, 1944.* Accountant Officers are notified that the census declaration is required from each such non-insured officer who is in receipt of naval full pay, with the exception of those holding permanent commissions or warrants on the active list. This covers (*a*) retired officers and warrant officers re-engaged or re-employed irrespective of whether or not there has been an interval between date of retirement and date of re-engagement or re-employment; (*b*) officers and warrant officers recalled from the Reserves; (*c*) officers appointed to temporary commissions or warrants during the war, whether appointed from the lower deck or direct from civil life; (*d*) officers on agreements T.124X, T.124T, and Cable Ship agreement; and (*e*) officers of the W.R.N.S.



"Attention is drawn to the fact that no deductions are at present being made from your pay for National Health and Pensions Insurance.

Officers who are liable to be insured for health and pensions purposes, and for whom contributions are not being made by deductions from pay *may be liable for arrears of contribution*, or find that their insurance rights, including title to contributory pension, have been prejudiced.

You are, therefore, asked to re-affirm that you are *not* insurable for National Health and Pensions purposes, if such is the case. If you come within the following two categories, you are compulsorily insurable :—

(i) All officers who were insurable, either compulsorily (*see* note below) or as voluntary contributors, for any of the purposes of National Health and/or Contributory Pensions Insurance, for however short a period during the two years immediately prior to commencement of present war service. NOTE.—Compulsory contributors include both persons insured for health and pensions in the ordinary way and such persons as civil servants, employees of Local and Public Authorities, etc., who, during civil life, were insured for widows' and orphans' pensions only, and also persons who held "Certificates of Exemption".

(ii) All Officers who have been commissioned from the ranks, and who have not signed an option form signifying their desire to be excluded from insurance.

DECLARATION OF INSURABILITY

Name..... H.M.S.....
(in block letters) Ship's Book No.....

(*a*) I declare that, in the light of the above information I $\frac{\text{am}}{\text{am not}}$ liable for insurance under the National Health and Pensions Scheme.

(*b*) I $\frac{\text{have}}{\text{have not}}$ signed an option form on being commissioned from the ranks, signifying my desire to be excluded from Insurance.

Signature.....
Rank..... Date....."

2. The completed declarations should be forwarded to the Director of Navy Accounts (Branch 3), and where possible should be on one side of quarto size paper.

3. In cases in which paragraph (*a*) of the Declaration of Insurability is in the affirmative ,the declaration should be accompanied by a list showing, so far as can be stated, the names of the ships in which the officer served and the periods of service therein.

4. In the cases referred to in paragraph 3, Accountant Officers should institute the appropriate quarterly charges beginning with the first full quarter of the insurable officer's service in his present ship and notify the Director of Navy Accounts (Branch 3) of the action taken, in order that the question of earlier arrears can be considered. All future transfer pay documents in such cases should be noted "INSD. NHP. Quarterly contribution.....charged to....."

5. Attention is again drawn to the necessity for the correct notation of insurance particulars on Transfer Lists and pay documents as provided in Item 7 on Forms S.45 of the November, 1943, reprint. (A.F.O. 1902/43, paragraph 4 (*b*) and (*c*), and A.F.O. 3919/43, paragraph 4 (*b*) and (*c*), refer.)

(*A.F.O.s 1902/43 and 3919/43.*)
(*A.F.O. 3591/44 is cancelled.*)

**4865.—Temporary Engineering Commissions—Selection of Ratings from the Lower Deck—Combined Operations Ratings**

See AFO 5930

(C.W. 48935/44.—14 Sep. 1944.)

A.F.O. 799/44 is to be *amended* as follows:—

Paragraph 11, Line 14 (sub-paragraph). *After* "Patrol Service Central Depot, Lowestoft", *add* "Establishments should report to H.M.S. 'Copra' all discharges of Combined Operations personnel to the Engineers' Selection Board at Portsmouth"

(*A.F.O. 799/44.*)

***4866.—Accountant Branch Examinations—Distribution of Provisional Pamphlet on Naval Air Supply Duties**

(C.W. 48940/44.—14 Sep. 1944.)

The Provisional Pamphlet on Naval Air Supply duties referred to in the Appendices to A.F.O. 2704/44 is now available to candidates for the following examinations:—

Paymaster Lieutenant-Commander, Part I.
Paymaster Sub-Lieutenant, Part II.
Warrant Supply Officer.
Supply Chief Petty Officer (A.F.O. 2354/43).
Chief Wren Supply (F.A.A. Stores category) (A.F.O. 698/43).

2. Copies of the pamphlet have been distributed to all Command, Fleet, and Staff Accountant Officers at home and abroad to whom application should be made through the usual channels for copies for individual candidates stating the date of the examination which they intend to take.

3. This pamphlet has been produced to assist candidates in working up for examination in air stores and only sufficient copies have been printed to meet the demands expected from candidates before the revised edition of B.R. 4, Part II—Naval Aircraft Instructions—is ready for distribution. It is emphasized, therefore, that the pamphlet is for the exclusive use of intending examination candidates and copies are not to be distributed to other personnel.

*(A.F.Os. 698/43, 2354/43 and 2704/44.)*

**4867.—Telegraphist Air Gunners—Advancement**

(N. 14275/44.—14 Sep. 1944.)

Attention is drawn to the fact that A.F.O. 1222/39 (not in Annual Volume) has been superseded.

2. Advancements of Telegraphist Air Gunners in temporary substantive rating and in non-substantive rating are to be made in accordance with A.F.O. 4926/43.

*(A.F.O. 4926/43.)*

**4868.—Royal Naval Air Units—Current Scales of Manning**

(N. 14043/44.—14 Sep. 1944.)

The following addition is to be made to A.F.O. 1759/44:—

TABLE VI.

*Air Arm.* R.N. and R.A.F. Table of equivalent rates for drafting purposes—

| *Naval.* | *R.A.F.* |
|---|---|
| Chief Air Artificer (A.E.) ... ... | *Warrant Officer Fitter I, II, IIA, or IIE |
| Air Artificer I, II, III (A.E.)... ... | Flight Sergeant Fitter I or II |
| Air Artificer IV (A.E.) ... ... | Sergeant Fitter I or II |
| Chief Air Artificer (L.O.) ... ... | †Warrant Officer Elect. I, W.E.M. or Fitter Armourer |
| Air Artificer I, II, III (L.O.)... ... | Flight Sergeant W.E.M. or Fitter Armourer |
| Air Artificer IV (L.O.) ... ... | Sergeant W.E.M. or Fitter Armourer |
| C.P.O. Air Fitter (E) ... ... ... | Flight Sergeant Fitter IIE |
| P.O. Air Fitter (E) ... ... ... | Sergeant Fitter IIE |
| Leading or A.F. (E) ... ... ... | Cpl. or L.A.C. or A.C. Fitter IIE |
| C.P.O. Air Fitter (A) ... ... ... | Flight Sergeant Fitter IIA |
| P.O. Air Fitter (A) ... ... ... | Sergeant Fitter IIA |
| Leading or A.F. (A) ... ... ... | Cpl. or L.A.C. or A.C. Fitter IIA |
| C.P.O. Air Fitter (L) ... ... ... | Flight Sergeant Electrician I |
| P.O. Air Fitter (L) ... ... ... | Sergeant Electrician I |
| Leading or A.F. (L) ... ... ... | Cpl. or L.A.C. or A.C. Electrician I |
| C.P.O. Air Fitter (O) ... ... ... | Flight Sergeant Fitter Armourer |
| P.O. Air Fitter (O) ... ... ... | Sergeant Fitter Armourer |
| Leading or A.F. (O) ... ... ... | Cpl. or L.A.C. or A.C. Fitter Armourer |
| C.P.O. Air Mechanic } A or E or L... | No equivalent |
| P.O. Air Mechanic } A or E or L... | No equivalent |



| | |
|---|---|
| Leading Air Mechanic (A or E) ... | Corporal Flight Mechanic A or E |
| Air Mechanic (A or E) ... ... | L.A.C. or A.C. Flight Mechanic A or E |
| Leading Air Mechanic (L) ... ... | Corporal Electrician II |
| Air Mechanic (L) ... ... ... | L.A.C. or A.C. Electrician II |
| C.P.O. Air Mechanic (O) ... ... | Flight Sergeant Armourer |
| P.O. Air Mechanic (O) ... ... | Sergeant Armourer |
| Leading Air Mechanic (O) ... ... | Corporal Armourer |
| Air Mechanic (O) ... ... ... | L.A.C. or A.C. Armourer |
| C.P.O. Radio Mechanic ... ... | Flight Sergeant W.E.M. or W.O.M. |
| P.O. Radio Mechanic (A.R.) ... } | Sergeant W.E.M. or W.O.M. |
| P.O. Radio Mechanic (A.W.) ... } | Sergeant W.E.M. or W.O.M. |
| Leading Radio Mechanic (A.R.) ... } | Corporal or L.A.C. or A.C. W.E.M. or W.O.M. |
| Leading Radio Mechanic (A.W.) ... } | Corporal or L.A.C. or A.C. W.E.M. or W.O.M. |
| C.P.O. Photographer (A) ... ... | Flight Sergeant Photographer |
| P.O. Photographer (A) ... ... | Sergeant Photographer |
| Leading Photographer (A) ... ... | Corporal or L.A.C. or A.C. Photographer |

*Notes.*

1. Instrument makers and repairers are drafted in accordance with the rules applying Leading or Air Fitters (L).

* Fitters IIA and IIE, being single tradesmen, are drafted in accordance with the rules that apply regarding Chief and P.O. Air Fitters (A) and (E).

† Electricians and W.E.Ms. to fill vacancies in (L) complement and Fitter Armourers in (O) complement only.

*(A.F.O. 1759/44.)*

**4869.—Complement Amendments—Flying Target Training Ships.**

(N. 14015/44.—14 Sep. 1944.)

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

*H.M. Destroyers ("Town" Class) (except "Lewes"), employed as Flying Training Target Ships* (Admiralty Letter N.11642/44 of 16 May 1944).

*Add:* 1 Q.R.3, 1 L.R.3, 1 Q.O. } Without substantive alteration.

*Amend* note (*c*) *to read* as follows:—

"(*c*) In "Clare," "Newport" and "Burnham," whilst Asdics are fitted *add* 1 H.S.D. and 2 S.D., without substantive alteration."

*H.M.S. "Amazon," whilst employed as Flying Training Target Ship* (Admiralty Letter N.11642/44 of 23 August 1944).

*H.M.S. "Rosemary," whilst employed as Flying Training Target Ship* (Admiralty Letter N.11642/44 of 16 May 1944).

*Add:* 1 Q.R.3, 1 L.R.3, 1 Q.O. } Without substantive alteration.

*H.M. Destroyers ("Vees") (formerly "Repeat W" and "V" and "W" Classes) employed as Flying Training Target Ships* (Admiralty Letter N.11642/44 of 16 May 1944).

*Add:* 1 Q.R.3, 1 L.R.3 } Without substantive alteration.

**4870.—Cable Ship—Transferable Agreement—Introduction**

See A.F.O. 5640/46

(N/A/S.M.428/44.—14 Sep. 1944.)

A.F.O. 251/44, paragraph 50 (i) is amended as follows:—

Line 2. *Delete* from "Personnel to ..... operates" and *substitute* the following:

Personnel at the Cable Ship Depot will be borne on the books of H.M.S. "Claverhouse" (for "Ubiquity").

Personnel serving afloat in Home Waters will be borne as follows —

(a) Vessels attached to Force Pluto on the books of the Accountant Officer, H.M.S. " Shrapnel ".

(b) Other Admiralty Cable Ships in *Home Waters* on the books of the Accountant Officer, H.M.S. " Claverhouse ".

Personnel serving afloat *Abroad* will be borne on the books of the Accountant Officer at the base from which the Cable Ship concerned operates.

Detailed instructions as to the method of payment are to be issued to the vessels by the Accountant Officers concerned.

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

**4871.—Landing Craft Bases Manned Mainly by R.M. Personnel—Command and Allowances**

(C.W./N. 31682/43.—14 Sep. 1944.)

The authority given by A.F.O. 3795/43 for Royal Marine officers to be employed as Executive Officers in certain types of vessels has been extended to cover landing craft bases (including landing craft Naval training establishments) where these are manned mainly by R.M. personnel.

2. These bases, and the units based on them, will continue to be administered in accordance with C.A.F.O. 1732/43, and the R.M. officer appointed in command will exercise all the powers of the Commanding Officer of a Naval Shore Establishment.

3. Command money and entertaining allowance will be payable to the Commanding Officer at the rates and under the conditions applicable to Naval officers in shore appointments. First Lieutenant's allowance will be governed by the conditions of A.F.O. 4402/43, the R.N. ranks specified in that Order being read as including R.M. officers of equivalent rank. Adjutant's allowance is not payable.

4. For the purpose of these allowances the equivalent rank of R.M. officers will be as follows:—

| | |
|---|---|
| Lieutenant-Colonel, R.M. ... | Captain, R.N. |
| Major, R.M. ... ... ... | Commander, R.N. |
| Captain, R.M. ... ... ... | Lieutenant-Commander, R.N. |

5. The rates of command money, entertaining allowance and First Lieutenant's allowance will be authorized by the Director of Navy Accounts (Branch 4).

6. This A.F.O. applies only to landing craft bases and training establishments administered as H.M. ships under the command of a R.M. officer. Should a landing craft base be taken over as a R.M. establishment, it will be treated in the same way as any other R.M. establishment, subject to any special orders which may be issued at the time.

7. Orders for the administration of a landing craft base as a Naval shore establishment under the command of a R.M. officer will be issued by the Admiralty.

(*A.F.Os. 3795/43, 4402/43 and C.A.F.O. 1732/43.*)

**4872.—Writer (Special) Branch—Transfer of Ratings Trained Abroad**

(N. 18970/44.—14 Sep. 1944.)

A certain amount of confusion is arising over the transfer to the Writer (Special) Branch of ratings trained abroad.

2. In particular, insufficient attention is being paid to paragraphs 7 and 13 of A.F.O. 3387/43, with the result that some ratings have not received the special allowance of one shilling per day or have been transferred with loss of pay.



3. Ratings who are trained abroad should, on completion of training, be informed of the choice they may make. Their decision, together with the date of completion of the course of special training, should always be reported as soon as possible to Admiralty (for Director of Naval Intelligence), the Commodore, R.N.B. Chatham, and the Commodore of the man's depot.

4. The necessary authorization for transfer will be given by the Admiralty and the arrangements for transfer (including the issue of a new official number where necessary) will be made by the Commodore, R.N.B. Chatham.

(*A.F.O. 3387/43.*)

**4873.—W.R.N.S.—Pay Advances on Discharge to Invaliding, etc., Leave and While in Hospital**

(N. 14805/44.—14 Sep. 1944.)

The arrangements laid down in A.F.O. 3670/43 to ensure the prompt settlement of the balance of pay due to Naval ratings on invaliding are to be regarded as equally applicable, where appropriate, to W.R.N.S. ratings.

2. In conformity with the provisions of paragraphs 17 and 18 of that Order, W.R.N.S. ratings who are discharged to invaliding leave before their pay documents are received are to be given advances of pay by the hospital concerned as shown below, provided they are discharged to their homes within the usual three days of the date of survey:—

| | |
|---|---|
| (a) Wrens ... ... ... ... ... | £4 0 0 |
| (b) Leading Wrens and above ... ... | £4 10 0 |

3. Where, for any reason, such ratings are detained in hospital for a longer period and are thus not entitled to the full amount of leave allowance, the amount advanced should be reduced accordingly.

4. A.F.O. 6261/42 (as amended by A.F.O. 131/43) and A.F.O. 1070/44 contain instructions for making pay advances to ratings (including W.R.N.S. personnel) on discharge from hospital to convalescent leave.

5. A.F.O. 687/44 outlines the arrangements under which Service patients (including W.R.N.S. personnel) may be given advances of pay whilst sick in home hospitals.

(*A.F.Os. 6261/42, 131/43, 3670/43, 687/44 and 1070/44.*)

**4874.—W.R.N.S.—Writer(Pay) and Writer(Pay)(D.E.M.S.)—Amalgamation**

(N. 17896/44.—14 Sep. 1944.)

The W.R.N.S. category of Writer(Pay)(D.E.M.S.) has become redundant and, as from the date of this Order, all ratings belonging to that category are to be transferred to the Writer(Pay) category with retention of existing rating, seniority and rate of pay, and included, for drafting and advancement, on the rosters of the Command in which they are serving.

2. The conditions in paragraph 1 above are to be applied to any transfers from Writer(Pay)(D.E.M.S.) to Writer(Pay) which may already have been approved on other terms.

3. The Specialized Section of the Appendix to A.F.O. 1901/43 is to be amended by deletion of " Writer(Pay)(D.E.M.S.) " and detail.

(*A.F.O. 1901/43.*)

***4875.—Unemployment Insurance—Form U.I.3XS. for W.R.N.S. Personnel on Unpaid Leave**

(P.M. 1370/44.—14 Sep. 1944.)

Form U.I.3XS. for W.R.N.S. personnel should not be rendered to the Ministry of Labour and National Service, C. and R.O. Acton, London, W.3, in respect of the periods of unpaid leave of less than one month's duration.

2. In the case of a short period of unpaid leave being extended beyond the limit of one month, Form U.I.3X.S. should immediately be rendered by the Accountant Officer on whose books the person concerned was borne for pay on the day prior to the commencement of the unpaid leave.

3. The form should show the period of service from date of entry to date of discharge to unpaid leave. If, however, the person concerned has been granted a previous period of unpaid leave, the form should show date of *re-entry* from this period of unpaid leave, to date of discharge to present period of unpaid leave.

4. This form is intended to show periods of service, not periods of unpaid leave.

(*A.F.Os. 1902/43, 959/44, 2334/44 and 3946/44.*)

(*A.F.O. 2839/44 is cancelled.*)

**4876.—Visual Training Aids Employing Projected Images—Screen Siting and Audience Accommodation**

See AFO 5304/46. " 6112/46.

(T.S.D. 2408/43.—14 Sep. 1944.)

*Position of Screen and Audience (c/f A.F.O. Diagram 292/44).*—With reference to A.F.O. 2975/44 and paragraph 3 of A.F.O. 792/44, where use is made of cinematograph projectors, still projectors, slide lanterns, or epidiascopes for training purposes, it is important that their instructional value should not be impaired by eye-strain. Wrong positioning of the screen or bad arrangement of the seating may induce this, and the fact that the entire audience can see the whole of the screen cannot be taken as an indication that eyestrain is avoided.

2. In order to avoid eyestrain from the causes outlined above, the following rules are issued for guidance:—

(*a*) *Height of screen.*—Screens should be mounted so that the *bottom* of the picture image is 6 ft from the floor of the auditorium.

(*b*) *Distance of the front row of the audience from the screen.*—No member of the audience should be seated nearer the screen than a distance equal to one and a half times the *depth* of the picture image, plus 3-ft. 3-in.

(*c*) *Distance of rear row of audience from screen.*—The back row of the audience should not be seated further away from the screen than a distance equal to $5\frac{3}{4}$ times the *width* of the picture.

(*d*) *Width of rows of seats.*—The extremities of rows of seats should not extend beyond lines drawn towards the sides of the auditorium from the edges of the picture and at 60° to the plane of the screen.

*Note.*—Limitations of the dimensions of buildings, and in some cases of the capabilities of equipment available, may render it impossible to use a screen which is sufficiently large for the length of the room in question. In such cases the provisions (*a*), (*b*), and (*d*) above should be adhered to, and the distance of the rear row of the audience given in (*c*) should be ignored, except in so far as the size of classes under instruction will allow. Greater eyestrain will be experienced if the audience is seated nearer to, or further from the sides of the screen than the limits given above, than if it is seated at a greater distance from the screen.

3. *Position of loudspeakers.*—Where perforated screens are supplied the loudspeaker should be placed behind and in the centre of the screen. In cases where opaque screens are used (e.g. 16 mm. installations), the loudspeaker should normally be mounted immediately below the bottom of the screen and as high up as possible. Loudspeakers should not be placed behind unperforated screens.

4. *Seating, etc.*—Experience has shown that mental concentration is made harder, and the value of instruction consequently impaired, where the seats in instructional cinemas or classrooms are not fitted with backs, or where other conditions are present which tend towards the discomfort of classes under instruction, at the expense of their powers of concentration. Wherever possible, therefore, back rests are to be fitted to all seats in these rooms. Provision should also be made for adequate heating of these rooms and facilities provided for note-taking.

5. It is appreciated that limitations of accommodation at sea may render strict application of this Order impracticable. In such cases reference should be made to the note to paragraph 2 above.



6. This Order does not apply to Dome Teachers, Portobels, or other such training devices.

(*A.F.Os. 792/44 and 2975/44.*)

**4877.—R.N. Air Station, Belfast—Accounting Arrangements**

(A/N. 16132/44.—14 Sep. 1944.)

The accounts of R.N. Air Station, Belfast, are to be transferred from H.M.S. "Caroline" to H.M.S. "Gadwall" on 1st October, 1944.

(*C.A.F.O. 1123/43.*)

**4878.—Small Arms—Accidents**

(N.L./G.D. 033/44.—14 Sep. 1944.)

Their Lordships note with concern that the number of fatal accidents with small arms continues to rise. In almost every case the accident would have been avoided if the firer had observed the elementary rules for safety when handling any rifle, pistol or machine gun, viz.:—

(1) Never point a gun at a friend.
(2) Don't stand in front of the muzzle.
(3) When you pick up a gun, don't assume it is unloaded; make sure.
(4) Don't leave a loaded gun lying about.
(5) Don't play about with a gun you don't understand. If you have to handle one, keep it pointing safe.
(6) Remember, more accidents are caused by pistols than by any other weapon.

The elementary rules are capable of wide expansion but should be understood and acted on in their simplest form by every officer and man who wears a uniform.

2. The accident is almost always caused by a light-hearted fool who, by failure to observe the above rules, frequently kills himself, but more often shoots his messmate.

3. The largest single preventable cause of accident is the issue of loaded pistols to sentries in circumstances where a cudgel or sidearms would have been a better selection. Officers should be guided in this respect by orders from the Commander-in-Chief or Administrative authority.

4. Their Lordships are aware that the vast majority of officers, petty officers and men understand and observe the rules of commonsense when handling arms. They ask for their renewed co-operation by supervision and example in reducing this waste of life.

5. Attention is called to the following points which were issued in A.F.O. 561/44 and are reprinted for convenience:—

(*a*) No man should be allowed to handle a lethal weapon until it is certain that he understands how it works. This order applies even to rifles, and more so to less common weapons such as Sten guns and foreign arms.
(*b*) Sentries should be posted in an orthodox manner by a responsible rating. If sentries relieve each other at their own convenience and without supervision, an accident will occur sooner or later.
(*c*) Sentries should not be allowed to carry loaded weapons except under exceptional circumstances and particular care must then be taken to enforce safety precautions.
(*d*) Certain weapons, including revolvers and Sten guns, are liable to fire if dropped with a round in the chamber. In the case of revolvers, this danger can be obviated if the chamber under the hammer (i.e., at 12 o'clock) is kept unloaded. This precaution will not prevent the revolver from firing if the trigger is pulled.
(*e*) Sentries should normally be armed with rifles, which are less dangerous to friendly personnel than other weapons. Moreover, a rifle is fitted with a safety device in the form of a safety catch and magazine cut-off.
(*f*) Ammunition issued to sentries should be carefully accounted for.
(*g*) Skylarking with weapons, believed to be unloaded, is a fruitful cause of accidents.

(*A.F.Os. 561/44 and 4715/44 are cancelled.*)

**4879.—Cash Advances by R.N. Accountant Officers to Royal Marines belonging to R.M. Field Units**

(N.15880/44.—14 Sep. 1944.)

Acceptance in full will be given for all transfers of cash in respect of payments made to Royal Marines under A.F.O. 666/44, receipted Forms S.5 being completed mmediately and returned to the Accountant Officer concerned.

2. The H.B.L. Ships Book number, which is shown in page 2 of the Pay Book (S.43A) is always to be quoted on Acquittance Rolls and Forms S.1039. These forms should be prepared in order of numerical sequence of ships book number, separate forms being used for ranks of each R.M. Division or Depot, R.M., i.e., Chatham, Portsmouth, Plymouth, Exton or R.M. Engineers.

*(A.F.O. 666/44.)*

*(A.F.O. 445b/44 is cancelled.)*

***4880.—Separated and Divorced Wives and their Children—Maintenance—Lower Deck**

See AFO 4074/45.

(N. 20568/43.—14 Sep. 1944.)

The following *amendments* are to be made to A.F.O. 408/44 :—

Paragraph 6 (c). *Delete and substitute :—*

" (c) In the event of the rating re-marrying, the second wife will be entitled to qualifying allotment and allowance as wife. The divorced wife's order or deed will be met by allotment (compulsory or otherwise) from the balance of the man's pay up to the limit allowed by the Naval Discipline Act, provided the man is left with not less than 1*s*. a day ; to this will be added such part of Marriage Allowance as may be necessary to bring the total up to the amount of the order or deed or to the total of qualifying allotment and marriage allowance whichever is the less. A compulsory stoppage cannot be made to meet a deed."

Paragraph 8. *Delete and substitute :—*

" 8. *Unmarried Dependant living as Wife who has separated from the Rating.*—No allowance will be paid for the woman, but provided an allowance has been in issue for her children it will be continued in respect of any child living with a guardian nominated by the rating, other than the unmarried dependant concerned, if the mother holds no affiliation order and the man allots the necessary amount to the guardian."

Paragraph 9, line 3. *Delete :—*

" Except under paragraph 8 above, no.....". and *substitute* " No.....".

*(A.F.O. 408/44.)*

AFO. 5524/44

**4881.—Colonials—Special Allowance when on Leave**

(N. 9102/44.—14 Sep. 1944.)

The following arrangements for the payment of a special allowance of 5*s*. a day during periods of leave in the United Kingdom, including Northern Ireland, have been approved by the colonial governments concerned, and are to be brought into effect on 1st October, 1944.

2. Personnel serving under Admiralty Agreement T.124 and variants are ineligible for payment of the special allowance.

3. Payment is restricted to ratings (including W.R.N.S.) and other ranks who are domiciled in the following colonies and who came to the United Kingdom after 1st September, 1938 :—

British Honduras.
British Solomon Islands Protectorate.
Ceylon.
Cyprus.
Falkland Islands.
Fiji.
Gibraltar.
Gilbert and Ellice Islands.
Gold Coast.
Kenya.
Malta.
Mauritius.
Nigeria.
Northern Rhodesia.
Nyasaland.
St. Helena.
Sierra Leone.
Tanganyika.
Trinidad.
Uganda.
Windward Islands.
Zanzibar.



4. Payment of the special allowance is to be made at the same time and for the same period as normal leave allowance and in addition thereto.

5. The special allowance will be payable during the period of the present emergency and thereafter, in the case of personnel serving for hostilities only, until demobilization. Payment to personnel remaining in the Service after the war is to cease on the termination of hostilities or on the date of transfer into the Royal Navy or Royal Marines on a permanent basis, whichever is later.

6. The special allowance is not payable for the period of leave pending discharge.

7. Payments should be entered in the miscellaneous credits column of the ship's ledger and described as " special allowance (name of colony) "—e.g., " special allowance (Cyprus) ".

8. The onus of claiming the special allowance will rest on the individual. Any instance of uncertainty as to a claimant's eligibility is to be referred to the Admiralty for decision. Full details should be furnished.

**4882.—Special Victualling Allowance**

See AFO 1951/40

(V. 2/6525/44.—14 Sep. 1944.)

Attention is drawn to the fact that the full rates of provision allowance are payable only to officers and ratings who feed themselves without access to any kind of service facilities.

2. Where naval personnel, including W.R.N.S., are called upon to provide themselves with food only from outside sources (i.e., where mess gear, cooking facilities, fuel for cooking, etc., are provided from public funds) the full rates of provision allowance are not applicable and such personnel, both officers and ratings, should be credited with the current rate of Special Victualling Allowance, *vide* A.F.O. 1329/44, paragraph 1.

3. This arrangement applies not only to personnel afloat, but also to personnel on shore.

4. Local authorities, however, may represent the matter through the usual administrative channels if the rate of Special Victualling Allowance is not considered adequate owing to the very isolated position of any establishment concerned, very small numbers messed, or other exceptional circumstances.

5. Ratings in receipt of Special Victualling Allowance should be paid grog money under the usual conditions when rum cannot be provided.

6. Instructions regarding the issue of ration books to personnel in receipt of Special Victualling Allowance are contained in A.F.O. 4984/44, Sections I and L.

7. This allowance should not be confused with the special rates of victualling allowance in force for certain areas abroad (A.F.O. 5719/43, Appendix C (*b*)) or with the Special Landing Craft Victualling Allowance (A.F.O. 2793/44).

*(A.F.Os. 5719/43, 1329/44, 2793/44 and 4984/44.)*

*(A.F.O. 2815/41 is cancelled.)*

**4883.—Organization for Rapid Identification of Outbreaks of Influenza**

(M.D.G. 49703/44.—14 Sep. 1944.)

A limited amount of influenza vaccine (active against viruses A and B) will be available next winter. Recent trials in the U.S.A. suggest that use of this vaccine may reduce the incidence of influenza three- or four-fold. Immunity after vaccination is believed to last only for a month or two. Since vaccine will be in short supply it will be made available only if the beginnings of an outbreak have been detected. For this reason it will be necessary to have " spotters " distributed over the country to identify an outbreak as early as possible.

2. To co-operate in this " spotting " scheme material should be sent for test to the address below. Do not send material from cases of tonsillitis or running colds with fever. It is particularly where signs of a small outbreak of influenza

appear that 5 c.c. of blood (or, better, the serum, say 2 c.c., taken off from it) are required. Two samples from each patient are necessary, the first taken as early as possible in the disease (within 48 hours of onset), the second 10 to 14 days after onset. This is because the diagnosis of influenza by this means depends on detecting a rise in level of antiviral bodies. The samples may be sent immediately they are obtained, or kept in a refrigerator and all sent together. Six pairs of sera from any one outbreak will be sufficient. In addition, it is desirable to test for virus a limited number of garglings taken early in the illness, but only where it is possible to send them direct to Hampstead by messenger; they should be kept cold if possible; 15 c.c. of garglings in equal parts of broth and saline are adequate. Specimens should be sent to :—

Dr. C. H. Andrewes,
National Institute for Medical Research,
London, N.W.3.

AFO. 5881/44.

**4884.—Adult Education—Extension of Facilities—Report**

(N. 28670/43.—14 Sep. 1944.)

Item (ii) of A of Appendix III to A.F.O. 1525/43 should be expanded as follows :—

"In the case of folk dancing, eurythmics and ballet dancing, where there are sufficient pupils who are intending to pursue any of these arts professionally after the war, or where the practice of them is resorted to for training or keep fit purposes, the expense of teachers (whether Service or civilian) should be borne on Navy Votes.

Where, however, the practice is purely for enjoyment purposes, the participants should bear any teaching expenses involved: the Naval Service immediately concerned affording, without charge, whatever accommodation may be available."

*(A.F.O. 1525/43.)*

**4885.—Naval Canteen Service—Entry of Male Staff in the Royal Navy—Plain Clothes Gratuity or Civilian Clothing on Discharge**

(V/1/4347/44.—14 Sep. 1944.)

N.A.A.F.I. Canteen Staff entered in the R.N. are not entitled to receive on discharge plain clothes gratuity or civilian clothing as a charge to Government funds, and an addition to this effect is to be made to paragraph 6, A.F.O. 2238/42.

*(A.F.O. 2238/42.)*

**4886.—War Graves—Reports to Imperial War Graves Commission, Definition and Marking, and Disposal of Title Deeds**

See AFO. 3142/46.
" " 1697/46.

(N.L. 19224/43.—14 Sep. 1944.)

Registers of service casualties during the war are being compiled by the Imperial War Graves Commission, Wooburn House, Wooburn Green, High Wycombe, Bucks. To enable these registers to be completed in regard to the Naval Forces and the Royal Marines, the officers named in K.R. & A.I., Article **1135**, Clause 1 (*b*), are to forward to the Commission, in duplicate, particulars of all deaths of ratings and Royal Marine ranks from whatever cause, stating full names, rank or rating, official number, decorations, ship, date and cause of death, and name and address of next-of-kin.

2. In addition, as full information as possible regarding the burial of both officers and men, and also of any enemy dead buried under the direction of the Naval authorities, is to be forwarded to the Commission, in duplicate, by the authorities concerned.

3. *Definition of a War Grave.*—A summary of the various categories now eligible for a war grave, so far as the Royal Navy is affected, is given below. Deaths occurring in the conditions indicated on and after 3rd September, 1939, and during the war period will be accepted by the Commission for treatment as war graves :—

(*a*) Officers and men of the Armed Forces of the Crown, raised in the United Kingdom, or in any dominion, colony, possession or mandated territory, including the Women's Royal Naval Service and Queen Alexandra's Royal Naval Nursing Service.



(*b*) Such officers and men dying after discharge from wounds inflicted or accidents occurring while on active service, or from sickness contracted or commencing on, or aggravated by active service.

(*c*) Officers and men of the Merchant Navy, fishing fleets and lighthouse and pilotage services, whose deaths are due to enemy action at sea; also all absolutely unidentifiable bodies washed or brought ashore in the United Kingdom.

(*d*) Auxiliary Coastguards dying on duty or as a result of injury on duty.

(*e*) N.A.A.F.I. personnel—

(i) If enrolled as members of the Services—on the same footing as the Armed Forces.

(ii) If not—only those dying overseas or from wounds inflicted overseas.

(*f*) V.A.D. members under contract serving with the Armed Forces—on the same footing as the Armed Forces.

(*g*) Newspaper correspondents on duty in H.M. ships.

4. It is emphasised that the inclusion of the categories stated above in those eligible for a war grave does not confer a right to a Service funeral, or a grant to relatives in aid of funeral expenses, where entitlement to such does not already exist.

5. *Marking of Graves.*—The Commission is following the same practice as for the graves of those who fell in the war of 1914–18, namely :—

(*a*) Abroad, cemeteries will be formed and uniform headstones of a simple pattern will be erected wherever the forces of the British Commonwealth have been engaged.

(*b*) In the United Kingdom, the Commission are prepared to erect the same standard headstone over all war graves, not only those in Service cemeteries or reserved plots in public cemeteries, but also in those cases of single and private burial if the relatives so desire.

6. Headstones cannot, however, be erected now, either at home or abroad, but as a temporary measure, the Commission will, wherever possible, arrange for the graves to be marked by specially designed wooden crosses, by the Shield of David in the case of Jewish graves, or by other appropriate form of memorial.

7. No permanent memorials are to be erected over war graves at Admiralty expense and no private memorials or headstones are to be erected in Naval cemeteries or Service plots in civil cemeteries as it is desired that all war graves shall be marked eventually by the Commission's standard headstone.

8. *Disposal of Title Deeds.*—All deeds of grant, certificates of ownership or other documents of title relating to war graves, which have been or may be issued to Commanding Officers, should be forwarded, under registered cover, to the Commission for safe custody as soon as the retention of the documents locally is no longer required, accompanied by a note of the name and Service particulars of the deceased where that information does not appear in the document itself.

9. In addition to those relating to graves of members of the United Kingdom and Dominion Forces, the above applies also to documents of title relating to the graves of members of Allied and Enemy Forces, and to the graves of members of the United Kingdom, Dominion and Allied Merchant Navies dying from enemy action at sea.

10. Deeds of grant and other documents of title should be made out to "The Imperial War Graves Commission, their Successors and Assigns" in order to obviate the need for a transfer of rights to the Commission at a later date.

*(A.F.Os. 5982/43 and 30/44 are cancelled.)*

**4887.—Meals Away from Lodgings**

(N. 31842/43.—14 Sep. 1944.)

Men on lodging and provision allowance who are prevented from returning to their lodgings for meals owing to the exigencies of the Service and who are away over 5 hours, should be placed on subsistence allowance

for the hours of absence (which will not normally exceed 9), the appropriate deduction from provision allowance being made in accordance with K.R. **1666, 1a.**

*(R.A., N.A.S., No. 2472/966/10, 26 Dec. 1943.)*

*(K.R. & A.I., Article 1666, 1a.)*

*(A.F.O. 2937/43.)*

### 4888.—Officiating Minister of Religion

(C.E. 51936/44.—14 Sep. 1944.)

The following appointment has been approved :—

Church of England—

R.N. Personnel at R.N. Training Unit, Northampton Polytechnic, Northampton Square, London, E.C.1. — Rev. G. H. Perman, St. Peter's Vicarage, Wyclif Street, Clerkenwell, London, E.C.1.

2. The usual facilities are to be afforded.

### 4889.—Officiating Ministers of Religion

(C.E. 51936/44.—14 Sep. 1944.)

The following appointments have been approved :—

*Church of England*

Bathurst ... ... ... Rev. R. N. Coate, B.A., Asst. to the Bishop of Grambin, Bathurst. (Appointment to date 1st January, 1944.)

*Church of Scotland and the Free Churches*

R.N.A.S. Hinstock ... ... Rev. James Baynham, The Manse, Wistanswick, Market Drayton, Shropshire.

Port Glasgow ... ... Rev. J. A. Kinloch, Ardmore, Port Glasgow.

Toward ... ... ... Rev. J. G. Withycombe, The Manse, Toward, Argyll.

Appledore ... ... ... Rev. Bertram Hardy, The Manse, Appledore, N. Devon.

Wemyss Bay ... ... Rev. G. T. Innes, c/o South Church, Skelmorlie, Renfrew.

The appointment of the Rev. J. B. Kat as Officiating Minister to United Board personnel at Dover has been extended to include Church of Scotland Presbyterian personnel.

*Methodist*

H.M.S. " Bunting " ... Rev. H. Roberts, M.A., 52, Chevallier Street, Ipswich.

Highgate ... ... ... (H.M.S. " President V ") Rev. Lawrence O. Brooker, Archway Central Hall, Highgate, N.19. (Vice Rev. J. MacKay)

Mill Hill ... ... ... Rev. T. Bernard Jones, 31, Langley Park, Mill Hill, N.W.7. (Vice Rev. J. E. Noble)



Eton ... ... ... ... (H.M.S. " President III ") Rev. T. Francis Glasson, M.A., B.D., 34, Clarence Road, Windsor. (Vice Rev. J. Bonsall)

Gravesend ... ... ... Rev. George E. Gregory, " Madeley ", The Avenue, Gravesend. (Vice Rev. H. Colley)

Weymouth ... ... ... Rev. Alan L. Whittard, 4, Russell Avenue, Weymouth. (Vice Rev. R. E. Allport)

Fowey ... ... ... Rev. James Sankey, B.A., B.Sc., Wesley Manse, Tywardreath, Par, Cornwall. (Vice Rev. W. Basil Bowyer)

St. Ives and Carbis Bay (Cornwall) ... Rev. Norman Page, 9, Pednolver Street, St. Ives. (Vice Rev. F. J. Brewer)

Scilly Isles ... ... ... (St. Mary's) Rev. J. L. C. Shrewsbury, B.A., " Sunleigh ", St. Mary's, Isles of Scilly. (Vice Rev. G. Davies)

Sidmouth ... ... ... Rev. Donald Male, Wesley House, Sidmouth, Devon. (Vice Rev. N. J. Chew)

Teignmouth ... ... ... Rev. Francis B. James, Wesley House, Haldon Avenue, Teignmouth, S. Devon. (Vice Rev. A. J. Summerfield)

Hull ... ... ... ... Rev. A. J. Howitt, 369, Holderness Road, Hull. (Vice Rev. Walter T. Rose)

Leeds... ... ... ... (Headingley College) Rev. Norman H. Snaith, M.A., Ashlea, Wesley College, Headingley, Leeds, 6. (Vice Rev. G. H. Charnley)

Liverpool ... ... ... Rev. Clement H. H. Pugsley, 13, Sefton Road, Litherland, Liverpool, 21. (Vice Rev. H. C. Smith)

Fleetwood ... ... ... Rev. A. Walter Selby, 1, Mount Road, Fleetwood, Lancs. (Vice Rev. Wm. J. Tubb)

Dartmouth ... ... ... Rev. C. F. Burdon Hunter, The Anchorage, Berry Head Road, Brixham, S. Devon. (Vice Rev. W. J. Martyn)

Worthydown ... ... Rev. T. L. Barlow Westerdale, 162, Stockbridge Road, Winchester. (Vice Rev. A. L. Whittard)

| | |
|---|---|
| Flowerdown ... ... | Rev. Michael R. Slader,<br>1a, City Road,<br>Winchester.<br>(Vice Rev. A. L. Whittard) |
| Ryde and Nettlestone ...<br>(H.M.S. " Puckpool ")<br>(H.M.S. " Boadicea ") | Rev. H. Bramwell Howard,<br>" Lamorna ", Garfield Road,<br>Ryde, Isle of Wight.<br>(Vice Rev. H. O. MacRow) |
| Alsager ... ... ...<br>(H.M.S. " Excalibur ") | Rev. G. Kenneth Eustice,<br>" Donnington ",<br>Alsager, Stoke-on-Trent.<br>(Vice Rev. E. S. Cheeseright) |
| Wetherby ... ... ...<br>(H.M.S. " Cabot ") | Rev. Ernest C. Hollis,<br>Wesley House,<br>Wetherby, Yorks.<br>(Vice Rev. J. T. Webb) |
| Rosyth ... ... ... | Rev. Frank Foxon,<br>27, King's Road,<br>Rosyth, Dunfermline.<br>(Vice Rev. E. Harrop) |
| Leith and Granton ... ...<br>(H.M.S. " Lockinvar ") | Rev. Ernest G. Panton,<br>7, Bonnington Terrace,<br>Edinburgh.<br>(Vice Rev. A. G. Kick, M.C.) |
| Aberdeen ... ... ...<br>(Kingseat R.N. Hospital) | Rev. Fred James,<br>18, Ferryhill Place,<br>Aberdeen.<br>(Vice Rev. W. L. Doughty) |
| Dundee ... ... ... | Rev. A. Park Gilbertson,<br>7, Albany Terrace,<br>Dundee, Angus.<br>(Vice Rev. P. C. Mellor) |
| North Isles ... ... ... | Rev. James E. Melling,<br>Wesley Manse,<br>Haroldswick, Shetland.<br>(Vice Rev. F. A. Smith) |
| Freshwater and Yarmouth, etc. | Rev. John T. Salisbury,<br>Wesley Villa,<br>Freshwater, Isle of Wight.<br>(Vice Rev. W. H. Farmery) |

The usual facilities are to be afforded.

The following appointments of Officiating Ministers have been cancelled :—

*Church of England*

| | |
|---|---|
| W.R.N.S. Establishment, Baron Court. | Rev. N. C. Woods,<br>63, Ladbrooke Grove,<br>W.4.<br>(deceased) |
| Idsworth ... ... ... | Rev. S. H. Biddlecombe,<br>Blendworth Rectory,<br>Horadran, Hants.<br>(deceased) |
| R.N.A.S. Dale ... ... | Rev. T. W. Griffiths, M.A.,<br>St. Brides Rectory,<br>Haverfordwest. |



***†4890.—The Royal Naval Benevolent Trust—Donations**

(P.M. 2884/44.—14 Sep. 1944.)

The Royal Naval Benevolent Trust (Head Office, 10, New Road, Rochester, Kent) wishes to acknowledge with warm appreciation the following donations:—

| | |
|---|---|
| H.M.S. " Volcano " ... | £60 from Officers under instruction during the last two years. |
| M.T.B. " 639 " ... ... | £15 15*s.* 7*d.* from late Commanding Officer being balance of Ship's Fund. |

See AFO 1442/46 **4891.—Disposal of Amenities Gear**

(D.P.S. 654/44/W.—14 Sep. 1944.)

With reference to A.F.O. 4905/43, Section V, the situation as regards the movement of Naval personnel may become fluid in the near future. Some bases and establishments in this country may close down, and new ones will be opened overseas.

2. Bases and establishments closing down or reducing complement should immediately inform R.N. War Amenities Fund whether any of the following items can be surrendered:—

(*a*) Radio sets (state type), radio diffusion sets, electric and portable gramophones, microphones, loud speakers, and gramophone records.

(*b*) Stage equipment, including curtains, footlights, lime lights, etc.

(*c*) Billiard tables and accessories.

(*d*) Pianos and musical instruments.

(*e*) Sports gear and indoor games—if in sufficiently good condition for re-issue.

(*f*) Libraries—if supplied through R.N. War Libraries.

(*g*) Miscellaneous, such as bicycles, cigarette making machines, electric irons and furniture.

3. R.N. War Amenities Fund will re-allocate any of this gear that is surrendered, or will arrange for such items as wireless sets and pianos to be forwarded to the makers for re-conditioning.

4. It may be that Canteen Committees who own such items may wish to present them to the Royal Naval War Amenities Fund for the benefit of new bases forming overseas, especially as personnel from bases in this country are liable to transfer to such new bases. Any gifts of this nature will be most gratefully received and acknowledged by R.N.W.A.F.

5. Details of disposal stocks of gift woollen comforts should be reported to the Royal Naval War Comforts Committee, who will re-allocate these as necessary.

6. Care should be taken to distinguish between amenities gear and Naval stores articles, such as gymnastic gear, boxing rings, etc. Information as to the disposal of such items should be obtained from the nearest Naval Store Officer.

(*A.F.O. 4905/43.*)

***4892.—Naval Canteens—Navy, Army and Air Force Institutes—Balance Sheet as at 28th August, 1943**

(V. 2/5889/44.—14 Sep. 1944.)

(*Included in Notice Boards Issue only.*)

***4893.—Sports—R.N. & R.M. Sports Control Board—Donation**

(N.—14 Sep. 1944.)

(*Included in Notice Boards Issue only.*)

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

### 4894.—Aircraft—Guns, Hispano 20 mm.—Defective Gauges

(A.S/G. 1381/43.—14 Sep. 1944.)

Gauges, unlocking plate rod holes, R.A.F. stores Ref. 8D/2392, and gauges, magazine carrier way depth, R.A.F. stores Ref. 8D/2391, for 20 mm. Hispano guns are not allowed to H.M. ships (except H.M.S. "Unicorn" and Maintenance Ships) or R.N. Air Stations, Repair Yards, etc., and any held should be returned to the appropriate R.N. Armament Depot forthwith.

2. Some of the gauges, Ref. 8D/2392, which have been issued are now known to be defective.

3. All gauges, Ref. 8D/2392, held in store at R.N. Armament Depots or received from service as a result of this order should be checked by Inspecting Officers and any which do not conform with the following dimension should be set aside "restricted":—

9·997 — 0·005 mm. dia. and 10·15 + 005 mm. dia.

4. Disposal instructions for the restricted gauges will be given by Director of Armament Supply (A.17), Bath, on receipt of reports of quantities held on 30 November, 1944.

5. The restriction on the use of gauges, Ref. 8D/2391, at R.N. Armament Depots has now been lifted.

(*"R" message 673 is cancelled.*)

### 4895.—Ammunition—O.Q.F. 2-pdr. Cartridges—Cases of R.L.B. 1942 Manufacture Lots 6, 7 and 8—Precautions

(A.S. 7783/43.—14 Sep. 1944.)

*R.N.A. Depots Only.*—Attention is directed to A.F.O. 4814/43 in respect of 2-pdr. ammunition assembled with cartridges, cases of R.L.B. manufacture—Lots 6, 7 and 8.

2. To date, only two reports in accordance with paragraph 5 of the above-quoted A.F.O. have been received.

3. The quantity of cases eliminated up to 30th September, 1944, is to be reported as soon as possible after that date.

(*A.F.O. 4814/43.*)

### 4896—Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition to

(A.S. 05180/42.—14 Sep. 1944.)

A sample of each of the undermentioned lots and sub-lots is to be landed for test at the nearest N.A. depot as opportunity offers from each H.M. ship having these lots, and sub-lots on board.

| *Lot No.* | *Size* | *Cartridges into which filled* |
|---|---|---|
| R.N.2870 | 4¼ M.C. | Q.F. 6 and 3-pdr. Hotchkiss |
| R.N.2870Y | 4¼ M.C. | Q.F. 6 and 3-pdr. Hotchkiss |
| R.N.2872 | 4¼ M.C. | Q.F. 6-pdr. Hotchkiss |
| R.N.2872Y | 4¼ M.C. | Q.F. 6-pdr Hotchkiss |
| R.N.2877 | 4¼ M.C. | Q.F. 6 and 3-pdr. Hotchkiss<br>M.L. 9·5-in. D.C.T. 4 ozs. |
| R.N.2877Y | 4¼ M.C. | Q.F. 6 and 3-pdr. Hotchkiss<br>M.L. 9·5-in. D.C.T. 4 ozs. |

2. On receipt, Officers-in-Charge of N.A. depots are to arrange for each individual sample to be dealt with promptly in accordance with paragraph 4 of A.S. 05180/42, dated 11th February, 1943, together with a sample of each lot and sub-lot held in store.



### 4897.—Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition to

(A.S. 10489/44.—14 Sep. 1944.)

All cartridges containing cordite of the following sub-lots on board sea-going ships are to be landed forthwith.

| *Lot No.* | *Size* | *Cartridges into which filled* |
|---|---|---|
| R.N.C.217C 7/44 | S.C.280 | B.L. 15-in. gun. |
| R.N.C.236C 7/44 | S.C.280 | B.L. 15-in. gun |

2. At depots abroad, cordite in all cartridges so received together with any in store is to be destroyed forthwith.

3. At home depots, any cartridges or bulk cordite of the above sub-lots required for trials, experiments or gunnery school firings may be retained until 31st January, 1945.

### 4898.—Anti-Aircraft Fire Control—F.K.C.S. and H.A.C.S. R.T.Us., Marks IV, IV* and V.

(G. 015733/44.—14 Sep. 1944.)

In C.A.F.O. 2585/42 a foot-operated range rate cut switch was suggested as an optional alternative to the built-in switch operated by pushing in the handwheel of R.T.Us., Marks IV and IV* and V. This suggestion has been widely adopted, but the internal switch has not always been disconnected. It is an advantage for this to be done to prevent accidental operation of the switch when moving the range handwheel from the fast to the slow position. Ships should arrange accordingly, if necessary, when the foot-operated switch is fitted.

(*C.A.F.O. 2585/42.*)

### 4899.—Guns—General—Lubricants—Oildag Wrongly Issued in Lieu of Oil Z.A.

*Dockyards and Naval Store Depots*

(N.S./G. 013860/44.—14 Sep. 1944.)

It has come to light that a ship demanding "Oil Colloidal Graphited Z.A." was supplied with "Oildag Colloidal Graphite in Oil, Concentrated".

2. Such instances may have disastrous results, and it is of the utmost importance that the correct lubricants demanded are issued, and care taken to avoid confusion between those with similar descriptions.

3. Full particulars of correct lubricants for gunnery application are given in B.R. 292.

(*B.R. 292.*)

### 4900.—Guns—4-in.—Handrails for Gun Access Trunk Ladder—As. and As.

*H.M. Submarines. "S" and "T" Classes*

(G. 010594/44.—14 Sep. 1944.)

Item No. "S" class ... 528 } Classification "A".
Item No. "T" class ... 532 }

2. In order to facilitate manning and returning from the 4-in. gun, handrails are to be fitted to the ladders of the gun access trunk.

3. These handrails are to be fitted at the next refit and guidance drawings will be supplied by Admiralty D.N.C. Department on application.

4. Separate instructions have been issued for new construction submarines.

**4901.—Guns—20-mm. Oerlikon—Box, 300 knot Sight, Mark I—Modification**

(A.S./G. 1497/44.—14 Sep. 1944.)

The following modification is approved:—

| | |
|---|---|
| *Gun* ... ... ... ... | Oerlikon, 20-mm. |
| *Part affected* ... ... | Box sight, 300 knot, Mark I. |
| *Purpose* ... ... ... | To accommodate Mark I or Mark II foresight. |
| *Nature of modification* ... | Rearrangement of internal fittings. |
| *Drawing* ... ... ... | A.F.O. Diagram 293/44 or N.O.D. 3132/17. |
| *By whom to be done* ... | Staffs of ships, bases or R.N.A. depots. |
| *Degree of urgency* ... | As necessary. |

**4902.—Gun Mountings—General—Variable Delivery Hydraulic Pumps—Use of Emergency Stop Push**

(G. 1198/44.—14 Sep. 1944.)

An increasing number of failures of V.S.G. and swashplate pumps has been reported. These failures have coincided with or occurred shortly after the pump has been stopped whilst on load.

2. As this emergency method of stopping the pump may be contributory to pump failures, the use of the emergency push is to be restricted to emergency use only. On all other occassions of stopping the pump the normal procedure of opening the bye-pass and then stopping the pump is to be employed.

**4903.—Gun Mountings—4·7-in., C.P., Mark XXII Mountings and 4·5-in., C.P., Mark V and R.P. 50, Mark V, Mountings—Sighting Gear—Modified Range Dial Index Bracket**

*Ships concerned*

(G. 04741/44.—14 Sep. 1944.)

The range dial index bracket item 1/41400 G.B. on most mountings in service is situated so that the range dial graduations have to be read in a partly inverted position.

2. To overcome this difficulty new range dial brackets to the dimensions given on A.F.O. Diagram No. 295/44 should be made and fitted, with the assistance of Dockyards or Repair Ships as necessary.

3. With the fitting of these new index brackets, adjustment of the range dial will be required. The sight should be set to zero range as indicated by the original index bracket. The new bracket should then be shipped and the range dial adjusted to register zero range with the new index bracket.

**4904.—Gun Mountings—4-in., H.A. Twin, Mark XIX, including R.P. 509 Series Mtgs.—Hauling Back gear—Muzzle Adaptor Bush for Guns with Parallel Muzzle**

*Ships concerned, H.M. Dockyards and Repair Establishments*

(G. 010350/44.—14 Sep. 1944.)

4-in. Mark XVI* guns fitted to 4-in. Mark XIX mountings are now being manufactured with parallel muzzles.

2. In order to prevent the muzzle caps of the hauling back gear from flying off when the gun starts to buffer during run out, when carrying out slip tests, the muzzle caps now being manufactured are modified as shown on A.F.O. Diagram 291/44.



3. The modifications consist of:—

(*a*) The mouth of the cap is radiused to enable it to fit over the slightly increased diameter of the new gun muzzle.

(*b*) An adaptor bush is supplied for use with guns with parallel muzzles.

4. The muzzle caps of existing sets of hauling back gear should be modified as shown and where facilities are available adaptor bushes should be made.

The work is to be carried out by ship's staff with the assistance of dockyards and repair establishments.

5. Commanding Officers of ships concerned are to insert an item in their next defect list to cover the work of making the adaptor bush.

6. As an interim measure, if facilities are not available or time does not permit of making the adaptor bush, some simple form of light clip can be made to clamp tightly round the gun muzzle, behind the muzzle cap, and the latter secured to the clip.

Alternatively, the muzzle cap can be securely lashed to the gun muzzle.

7. Authorities holding copies of drawing No. N.10932 should modify them in accordance with A.F.O. Diagram 291/44.

A note should be added to drawing No. N.10799 to read as follows:—

"For guns fitted parallel muzzle an adaptor bush item 56/N.10932 should be fitted."

**4905.—Gun Mountings—40-mm. Bofors, Marks IV and IV*—Errors in Deflection due to Creep of V.S.G. Units**

*Ships and Shore Establishments*

(G. 013994/44.—14 Sep. 1944.)

Experience has shown that the V.S.G. units of the Bofors Mark IV mounting tend to develop a creep after being some time in service. The creep is not obvious, unless personnel concerned are aware that it may develop, and if undetected it will produce errors sufficient to prevent hitting.

2. The creep can be readily detected by carefully watching the training (or elevation) output shaft for movement when the training (or elevation) rate drum is set to zero, with all motors, including constant speed, running.

3. If in these circumstances, there is any movement of the output shaft, the following procedure should be adopted:—

*To Reset Zero Rate—*

(1) Rate drum at zero.

(2) Switch-off rate and amount motors.

(3) Slacken off 3 screws on slipping wheel of V.S.G.

(4) Reset V.S.G. to pointers provided in rack.

(This rack can be moved in either direction when slipping wheel is freed).

(5) Tighten screws and check for creep as above with constant speed motor running.

(6) If still showing error repeat (1)–(4).

*Note.*—The final setting of the V.S.G. slipping wheel is extremely critical and very fine adjustment is necessary to obtain true zero.

Up and down readings of zero rate are necessary to obtain true zero as some backlash is always present.

Elevation V.S.G. slipping wheel is bevel wheel.

Training V.S.G. slipping wheel is spur wheel.

**4906.—Gun Mountings—20-mm. Mark VIIA* S/M—Replacing 20-mm. Mark VIIA S/M Mountings—As. and As.**

*H.M. Submarines, Dockyards and Bases concerned*

(G. 014710/44.—14 Sep. 1944.)

Item numbers:—

| | | |
|---|---|---|
| "S" class ... ... ... ... ... | 540 | Classification A* |
| "T" class ... ... ... ... ... | 544 | |
| Minelayer and "River" classes ... ... | 522 | |

2. The 20-mm. Mark VIIA* S/M mountings are now becoming available at Coventry and are to replace all 20-mm. Mark VIIA S/M mountings.

3. The 20-mm. Mark VIIA* S/M mountings are 20-mm. Mark VIIA S/M mountings modified by the fitting of ball thrust pivot bearings. This has been done in order to enable grease to be used instead of oil, as called for on A.F.O. 2344/44, grease being preferable for submarine use. Once the 20-mm. Mark VIIA* S/M mountings are installed, lubrication of the centre pivots by oil is to be discontinued and non-floating grease should be used.

4. The 20-mm. Mark VIIA S/M mountings already in service are to be replaced at the earliest opportunity.

5. The work should be treated as an A. and A. and carried out by dockyards or bases concerned.

6. Replaced mountings are to be returned to G.M.O., Coventry, for conversion to Mark VIIA* S/M in due course.

7. Henceforth, 20-mm. Mark VIIA* S/M mountings will be issued for all new construction submarines.

(*A.F.O. 2344/44.*)

**4907.—Gun Mountings—20-mm. Marks IV (U.S.), V (U.S.), and VI (U.S.), also Mark IIA and Mark IIIA—Lists of Spare Parts and Tools**

*Dockyards and Depots, including Armament Depots at Home and Abroad*

(G. 015745/44.—14 Sep. 1944.)

In order to arrange a further distribution of 20-mm. Oerlikon, Mark IV (U.S.), Mark V (U.S.) and Mark VI (U.S.), also Mark IIA and Mark IIIA mounting spares and tools, to meet future requirements, information is required showing present stocks of spares and tools available at home and abroad.

2. Dockyards, depots and stations at home and abroad, including Naval Armament Depots which have received quantities of U.S. mounting spares and tools with their gun spares, should compile a detailed list of the former (Vote 8111G items) held in stock for the above mountings. They should also compile a list of spares held for Marks IIA and IIIA mountings. Nil returns are not required.

3. Armament Depots should obtain the assistance of the local Gun Mounting Officer where available.

4. The lists should be forwarded to D.N.O., Admiralty, Bath, as soon as possible, observing that this information is urgently required.

5. These spares are not to include spare mountings in stock.

**4908.—Rangefinders—Elevation Errors—Air Disturbance Gear**

(G. 08298/44.—14 Sep. 1944.)

The attention of Commanding Officers of all H.M. ships equipped for long range anti-aircraft fire is drawn to A.F.O. 3481/44, upon the removal of elevation errors in rangefinders. A number of reports have been received from sea, and the very large number of readings which these reports contained give positive evidence that, on occasion, large elevation errors are present in rangefinders, and that these errors are substantially removed when the air disturbance gear is in operation.



2. Ships who have rendered satisfactory reports, and proved in so doing that their air disturbance gear is efficient, have been informed separately that no further reports are required. It is desirable however, that other ships should continue to forward reports, in order that additional information may be gained as to the performance and efficiency of individual Q.G.2 units.

3. Possible causes of failure to obtain a reduction in elevation errors are as follows, and it is recommended that, where necessary, the system should be overhauled and attention paid to these points:—

(*a*) Constriction in the connection between pump and rangefinder.

(*b*) A break in the system, caused by vibration or friction.

(*c*) In the case of U.K. Mark IV rangefinders, fitted with air-jet tubes by ships' staffs, a leak may exist through a small annular gap between the spigot of the end reflector casting and the inner diameter of the rangefinder tube.

(*d*) In all rangefinders where air-jet tubes have been fitted by ships' staffs, sealing may have been omitted from the inner ends of the jet tubes. A detailed inspection of the whole system should be made to ensure that a surge of air is, in fact, delivered through the holes in the jet tubes.

4. Under certain conditions, only low values of elevation error may exist, and the use of air disturbance gear in these cases may not provide any conclusive proof as to its value and efficiency. These conditions are where the temperature has been steady for some hours, irrespective of whether the steady temperature is high or low. Where the temperature is changing rapidly, as frequently happens during the day after a relatively cold night, elevation errors are fairly certain to be present, and tests carried out at this time should produce conclusive results.

5. Should no faults be found in the system, and tests still indicate that the air disturbance units are not functioning properly, it is desirable that an inspection of the gear should be made, where possible, by a representative of the Admiralty Gunnery Establishment. Commanding Officers of ships in home waters should communicate direct with the Admiralty if such an inspection is desired.

(*A.F.O. 3481/44.*)

**4909.—Rangefinders—U.R. and U.K. Types—Discolouration of the Strip Field—REPORTS**

*Ships concerned*

(G. 06233/44.—14 Sep. 1944.)

Recent reports from ships, usually as a result of rangefinder vibration trials, have indicated that the strip-fields in U.R. and U.K. types of rangefinders suffer from a slight yellow discolouration. Opinions differ as to the degree of colour shown, but it appears to be generally concluded in these ships, that the instruments are defective and that the accuracy of rangetaking will suffer, particularly in poor light conditions.

2. Efforts are being made to eliminate this colour from instruments now being produced, and the real effect of the discolouration in existing instruments has been investigated. It is probable that the "difference in colour" between the fields in an instrument is being interpreted as a "difference in brightness", and this leads to the conclusion that, in conditions of failing light, objects in the strip-field will disappear before objects in the adjacent fields. Experiments have shown, however, that this is not the case, and that an instrument containing a yellow-tinged strip-field is not in any way optically inferior to an instrument in which this peculiarity is not evident.

3. One possible effect, however, is the psychological one upon the rangetaker concerned, in that he may feel that the instrument is defective, and be unable to produce readings of the highest standard, although in fact, his readings will propably be unaffected by the difference in fields. Commanding Officers of ships concerned should ensure that their rangetakers are informed of the substance of this order, particularly where the rangefinders are known to have a pronounced discolouration of the strip-field.

4. Reports from ships are required as to whether this peculiarity has been observed in the instruments fitted, and whether any adverse effect upon the rangetaker or the accuracy of rangetaking has been experienced. Nil reports are not required.

### 4910.—Naval Stores for Maintenance of Guns

*90 ft. and 75 ft. Motor Fishing Vessels*

(N.S. 27046/44.—14 Sep. 1944.)

When armed, 75 ft. and 90 ft. motor fishing vessels are to carry the following stores for the maintenance of guns :—

| Patt. No. | Description | Denom. | Quant. | Remarks |
|---|---|---|---|---|
| | *E.8* | | | |
| — | Grease, No. 0 ... | lb. | 7 | A—Quantities are already included in the Sea Store Establishments. |
| — | Zebo grate polish ... | tin | 1 | |
| | *E.9* | | | |
| T.801 ... | Cotton waste ... | lb. | A | |
| | *E.10* | | | |
| T.805 ... | Flannelette ... | yds. | 12 | |
| | *E.12* | | | |
| — | Cloth, emery ... | shts. | A | |
| | *K* | | | |
| — | Oil, special, mineral | galls. | ½ | |

2. Vessels concerned, in commission, should forward demands to their storing yards accordingly. Supply to vessels of new construction should be arranged by supplying yards or depots in the usual manner.

3. The Sea Store Establishment Lists concerned should be amended.

*(W.P.S. Humber JTRB/2156/RG.—4 Jul. 1944.)*

### 4911.—Torpedoes—18-in., Mark XII–XV—Difference between Running Depth and Recorded Depth

(T. 09106/44.—14 Sep. 1944.)

The introduction into service of 18-in. blowing heads of various types with recorder pockets in different positions relative to the nose has been suspected of causing rather more variation between the depth as shown on the depth and roll recorder and the actual running depth than is indicated in paragraphs 160–184 of C.B. (R) 4233.

2. A comparison has now been made between the recorded and screen depths in a large number of runs made on the range with 18-in., Mark XII–XV torpedoes fitted with various types of blowing head and Mark III depth and roll recorders.



3. From these results the following rules have been compiled :—

| Type of Blowing Head | Mean Recorder Error | | Limits of Recorder Error covering 99 per cent. of results | |
|---|---|---|---|---|
| | Torpedo Speed Setting | | Torpedo Speed Setting | |
| | *High* | *Low* | *High* | *Low* |
| *Non-Duplex*, viz. :— 18-in. XI A or B; 18-in. XII–XV A, C, D and F; 18-in. XII–XV H (Long) | Recorder reads 3 ft. deep | Recorder reads 1½ ft. deep | Zero to 6 ft. deep | 1½ ft. shallow to 4½ ft. deep |
| *Duplex*, viz. :— 18-in. XII–XV B and E (Recorder in forward pocket) | Recorder reads 7 ft. shallow | Recorder reads 5½ ft. shallow | 4 ft. to 10 ft. shallow | 2½ ft. to 8½ ft. shallow |

4. The above recorder errors have only been confirmed during the steady part of the run, and do not necessarily apply to the commencement of the run when conditions of torpedo speed and inclination are probably different.

5. Tank trials are in progress and it is hoped that it will be posible in due course to indicate what further corrections must be applied to the initial dive.

6. C.B. (R) 4233 will be amended.

### 4912.—Torpedo Stores—Washers, St. No. 11897—Introduction and Allowances

(A.S. 9114/44.—14 Sep. 1944.)

Difficulty has been experienced in assembling Washers St. No. 1382 on the strainer for fuel bottles of 18-in. Marks XII and XV type torpedoes. To overcome this, a new pattern washer of larger bore has been introduced.

2. The new pattern washers will be accounted for as follows, viz. :—

*Section IV.*—Washers, celluloid, strainer, fuel bottles, St. No. 11897.

3. Washers St. No. 1382 will, however, still be required for fitment to the lubricant bottles for reducers of 18-in. Marks XII and XV type torpedoes.

4. Consequent on the foregoing, the following alterations will be made to the contents of chests, spare gear, 18-in. Marks XII–XII*** and XV, viz. :—

*Withdraw* " Washers, St. No. 1382 ... 6 No."
*Add* " Washers, St. No. 11897 ... 6 No.".

5. Fleet, Light Fleet and Escort Carriers, N.A. Stations, M.A.T.M.Us., Depot Ships and Bases for M.T.Bs. concerned are to adjust chests carried to the revised allowances from the nearest Torpedo Depot.

6. Torpedo store accounts and labels of chests are to be amended as necessary.

### 4913.—Blowing Heads XII–XV "B" and "E"—Fitment of Strengthened Domes

(A.S. 9833/44.—14 Sep. 1944.)

It has been decided to fit strengthened domes to 18-in. Mark XII–XV " B " and " E " blowing heads similar to those already fitted to XII–XV " C " and "D" heads, vide C.A.F.O. 1471/43.

2. The modifications will be carried out by torpedo depots under category " C " of A.F.O. 3169/43 as soon as nose casings are received from manufacturer. Heads on board and at naval air stations should be exchanged for capped heads by arrangement with the nearest torpedo depot.

3. The fitment of nose caps does not increase the maximum permitted entry speed which remains 210 knots, vide C.A.F.O. 1471/43.

4. An unmodified XII–XV " B " or " E " head may be expected to stand entries up to this speed, provided the torpedo does not roll in air.

5. It has been found, however, that severe denting is liable to occur if the torpedo does roll, as the shock then comes on a part of the nose which is not supported by internal longitudinals, and it is to overcome this that nose caps are being fitted.

*(C.A.F.O. 1471/43 and A.F.O. 3169/43.)*

## 4914.—British Substitutes for American Equipment for Use with 22·4-in., Mark 13 Type Torpedoes

(T. 09128/44.—14 Sep. 1944.)

| Stock Part or Stock Group Number | Name of Material | British Substitutes or action to be taken | Pattern No. | Sub-head |
|---|---|---|---|---|
| | *Torpedo Handling Gear* | | | |
| G.5015 | Resting chocks—universal for all Marks and Modifications ... | Standard 18-in. torpedo trestle with crutches, Pattern 1068A, fitted with an adaptor—C.A.F.O. Diagram 87/44. | — | — |
| G.2863 | Hoisting-in strap—Mark 13 Modifications ... ... ... | Strops, ribbon, 22·4-in.—C.A.F.O. 1634/43 ... | — | — |
| G.2860 | Sluing tools for afterbody ... ... ... ... ... | Not considered necessary ... ... ... ... | — | — |
| G.1686 | Blocks with rolls for holding air flasks—universal for all Marks and Modifications. | Only for stations authorized to carry out air flask tests | — | — |
| G.2638 | Slings for afterbody ... ... ... ... ... ... | Not considered necessary—C.A.F.O. 2602/43 ... | — | — |
| | *Adjusting and Testing Equipment* | | | |
| | Motor for gyro adjusting stand ... ... ... ... | British supply, according to available electrical power | — | — |
| | Switch for gyro adjusting stand motor ... ... ... | | | |
| | Motor for exploder mechanism testing outfit ... ... ... | Air jet to be used in lieu.—A.F.O. 4828/43 ... ... | — | — |
| | Switch for motor for exploder mechanism testing outfit ... | | | |
| | Single plunger hydraulic test pump ... ... ... ... | Test apparatus pumps, hand, vertical, 5,600 lbs./sq. in. | 2013A | B.8 |
| | Fluid pressure scale for testing pressure gauges ... ... | | | |
| G.2983 | Magnetic crack testing outfit ... ... ... ... ... | Not considered necessary. ... ... ... ... | — | — |
| | *Bench Tools* | | | |
| | Electric bench grinding machine ... ... ... ... | Similar British machines ... ... ... ... | — | — |
| | Motor for bench grinding machine ... ... ... ... | | | |
| | Switch for motor as bench grinding machine ... ... ... | | | |
| | Bench drilling machine ... ... ... ... ... ... | | | |
| | Motor for bench drilling machine ... ... ... ... | | | |
| | Switch for motor for bench drilling machine ... ... ... | | | |
| | Bench lathe as per Spec. O.D. No. 749, Item 1 ... ... | | | |
| | Motor for bench lathe ... ... ... ... ... ... | | | |
| | Controller for motor on bench lathe ... ... ... ... | | | |
| G.5006 | Special spring chucks for reclaiming bearings to go with bench lathe—for all Marks and Modifications. | Not supplied. Ship spare or return torpedo ... | — | — |
| G.2859 | Shaft straightening press complete with shaft and centres ... | | | |
| | Portable grinding machine similar to handles, grinder ... | | | |
| G.2965 | Lapping and polishing machine ... ... ... ... ... | No British substitute. Not considered necessary ... | — | — |
| | Motor for lapping machine ... ... ... ... ... | | | |
| | Switch for motor for lapping and polishing machine C.2 ... | | | |
| | Bench vise, 4½-in. jaw ... ... ... ... ... ... | Vises, parallel, 4½-in. ... ... ... ... ... | 2955 | B.11 |
| | Bench vise, 6-in. jaw ... ... ... ... ... ... | Vises, parallel, 6-in. ... ... ... ... ... | 2986 | B.11 |
| | Bench vise, 3-in. jaw ... ... ... ... ... ... | Vises, parallel, 3¼-in. ... ... ... ... ... | 2954 | B.11 |
| G.2537 | Block for holding horizontal steering engine, Mark 13—Modifications | Not considered necessary ... ... ... ... | — | — |
| | *Measuring Instruments* | | | |
| | Beam scales, capacity 1,000 lb. ... ... ... ... | Steelyards... ... ... ... ... ... ... | 2890 | B.10 |
| | Spring balance, 50 by ½ lb., capacity 50 lb. ... ... ... | Spring balance ... ... ... ... ... ... | 1467 | B.10 |
| | Surface plate, 6-in. × 6-in., with cover ... ... ... | Plates, surface ... ... ... ... ... ... | 1804 | B.11 |
| | Surface gauge ... ... ... ... ... ... ... | Gauge, surface ... ... ... ... ... ... | 1093 to 1097 | B.11 |
| | Vernier calibers, 12-in. ... ... ... ... ... ... | No British substitute. Not considered necessary ... | — | — |
| | Inside micrometer calibers ... ... ... ... ... | Callifers, micrometer, inside ... ... ... ... | 4267 | B.11 |
| G.1806 | Bevel protractor ... ... ... ... ... ... ... | Inclinometer ... ... ... ... ... ... | 1534 | — |
| SP.10386 | Micrometer, depth gauge, 4-in. base ... ... ... ... | Gauge, micrometer, depth 0 to 2½-in. ... ... ... | 3873 | B.11 |
| | Magnifying glass ... ... ... ... ... ... | Glasses magnifying (British gyro spare part box) ... | St. No. 1402 | T.E.O. |
| | *Hand Tools* | | | |
| SP.9395 | Hammer, ½-lb., bronze ... ... ... ... ... ... | Hammer, engineers, 8-oz. ... ... ... ... | 1199 | B.11 |
| | Shoe knife ... ... ... ... ... ... ... | Knives, shoemakers ... ... ... ... ... | 1529 | B.11 |
| | Mallet, wood, large ... ... ... ... ... ... | Mallet, coppering ... ... ... ... ... | 439A | E.12 |
| | *Drills, Taps, etc.* | | | |
| | Electric hand drill... ... ... ... ... ... ... | Machine, drilling, electrical, portable ... ... | — | F.1 |
| | Breast drill ... ... ... ... ... ... ... | Drills, breast ... ... ... ... ... ... | 647 | B.11 |
| | Hand drill ... ... ... ... ... ... ... | Drills, hand ... ... ... ... ... ... | 648 | B.11 |
| | Twist drills, No. 1 to No. 60 (set) ... ... ... ... | Similar British type ... ... ... ... ... | — | B.11 |
| | Screw extractors (sets) ... ... ... ... ... ... | Extractors, screw set ... ... ... ... ... | 3881 | B.11 |

| Stock Part or Stock Group Number | Name of Material | British Substitutes or action to be taken | Pattern Number | Sub-head |
|---|---|---|---|---|
| | *Air Pressure Fittings* | | | |
| G.2577 | H.P. air valve " A " ... ... ... ... ... ... | Standard British Air Service—Special adaptors for connecting British pipes to American test sets. | — | B.8 |
| G.2578 | H.P. air valve " B " ... ... ... ... ... ... | | | |
| SP.13298 | Nuts for air pipe (air line) ... ... ... ... ... | | | |
| SP.13301 | Collar for air pipe (air line) ... ... ... ... ... | | | |
| SP.762 | Collar for air pipe, $\frac{3}{8}$-in. ... ... ... ... ... ... | | | |
| SP.1836 | Collar for air pipe, $\frac{7}{32}$-in. ... ... ... ... ... | | | |
| G.2579 | H.P. air valve " G " ... ... ... ... ... ... | | | |
| | H.P. air pipe about $\frac{7}{16}$-in. × $\frac{11}{16}$-in. ... ... ... ... | British standard type ... ... ... ... ... | — | B.6 |
| | H.P. air pipe $\frac{1}{4}$-in. × $\frac{3}{8}$-in. ... ... ... ... ... | | | |
| | H.P. air pipe, $\frac{1}{8}$-in. × $\frac{7}{32}$-in. ... ... ... ... ... | | | |
| G.1053 | Air charging pipe, 15-ft. ... ... ... ... ... | Charging pipes for torpedoes ... ... ... ... | 2015A | B.8 |
| G.1054 | Air charging pipe, 30-ft. ... ... ... ... ... | | | |
| SP.433 | Nuts for charging pipes ... ... ... ... ... | | | |
| SP.6143 | Collars for charging pipes ... ... ... ... ... | | | |
| SP.7740 | Nipple for coupling nut $1\frac{1}{8}$-in. × $1\frac{3}{8}$-in. × 14 thread each end | Adaptor for use with British standard type ... ... | T.456A (A.F.O. 3574/43) | T.E.O. |
| SP.7212 | Air charging pipe connecting nipple ... ... ... ... | | | |
| G.2580 | High pressure fitting " F " ... ... ... ... ... | | | |
| SP.4380 | High pressure air valve for testing panel ... ... ... | Not required ... ... ... ... ... ... | — | — |
| | *Miscellaneous Material* | | | |
| — | Combination oil stones ... ... ... ... ... ... | Similar British pattern... ... ... ... ... | — | B.11 |
| — | Assorted oil stones ... ... ... ... ... ... | | | |
| — | Silver solder ... ... ... ... ... ... ... | Solder, silver ... ... ... ... ... ... | 3989 | B.7 |
| — | Gasoline, blow torch ... ... ... ... ... ... | Blow lamp ... ... ... ... ... ... | 2899 or 2900 | B.9 |
| — | Oxy-acetylene torch ... ... ... ... ... ... | — | — | B.3 |
| — | M.P. oxygen regulator ... ... ... ... ... ... | — | — | B.3 |
| — | Cylinder of oxygen ... ... ... ... ... ... | — | — | E.7 |
| — | Cylinder of acetylene gas ... ... ... ... ... | — | — | |
| — | Acetylene gas regulator ... ... ... ... ... | — | — | B.3 |
| — | Length of oxygen hose ... ... ... ... ... ... | I.R. tubing, 3-ply ... ... ... ... ... | C.2440 | E.2 |
| — | Length of acetylene hose ... ... ... ... ... | I.R. tubing ... ... ... ... ... ... | 407 | E.2 |
| — | Electric soldering iron (light) ... ... ... ... ... | Irons, soldering, electric ... ... ... ... | 4383 | F.2B |
| — | Electric soldering iron (medium) ... ... ... ... | | 4383A | F.2B |



| | | | | |
|---|---|---|---|---|
| — | Alcohol ... ... ... ... ... ... ... ... | Methylated spirits ... ... ... ... ... | 107 | E.7 |
| — | Hot running torpedo oil purchased under annual contract by the Bureau of S. & A. | Oil, T.L.H.R. | — | E.9 |
| — | Light lubricating oil, forced feed and motor cylinder oil, light, symbol 2110, purchased under annual contract by the Bureau of S. & A. | Oil, T.L.S. | — | E.9 |
| — | Compounded steam cylinder oil, symbol 6135, purchased under annual contract by the Bureau of S. & A (600–w or its equivalent). | Oil, T.L.U. | — | E.9 |
| — | Petrolatum purchased under Navy Dept. Specifications 14 P1. The Federal Stock Catalogue numbers for this material are 14P 100 for 5-lb. cans and 14 P110 for 10 lb. cans. | * Petrolatum, soft, to CS.1869 to be obtained from Army. | — | E.8 |
| | | Also see A.F.O. 3573/43 * As recommended by Joint Advisory Committee for Service lubricants. | | |
| — | Naval torpedo station tail backing compound, obtained only by requisition to tenders bases or stations. | Grease ... ... ... ... ... ... ... | 553 | E.8 |
| G.1653 | Finger lights ... ... ... ... ... ... ... | Apparatus, electric, for examination of torpedoes ... | 4653A | F.2A |
| | Wax tapers ... ... ... ... ... ... ... | Wax tapers ... ... ... ... ... ... | 558 | E.8 |
| — | Grinding compound, fine, in $\frac{1}{4}$-lb. tins, grade G–2A carborundum compound, microscopic, fine, $\frac{1}{4}$-lb. tins, G.2. | Paste, carborundum ... ... ... ... ... | 911 | E.12 |
| | | | 912 | E.12 |
| — | Carborundum, grade FFF ... ... ... ... ... | Powder, carborundum ... ... ... ... ... | — | E.12 |
| | Lapping dust (Hindoston powder) ... ... ... ... | | | |
| — | Wax wrapping paper for gyros, 12-in. wide ... ... ... | Any suitable paper—grease-treated ... ... ... | — | — |

### 4915.—Depth Charge Equipment—As. and As.

*" Colony " Class Frigates*

(T. 1354/44.—14 Sep. 1944.)

The following modifications to depth charge arrangements of " Colony " class frigates are approved :—

(1) *Projectors.*—(*a*) The foremost pair of projectors to be re-angled at 95° and the after pair to be on beam bearing of 90°.

(*b*) Pull off attachment for British primer and pistol safety clips to be fitted (Drawing M.S. Sk.20202/7.)

(2) *Roller Loading Racks.*—(*a*) The roller loading racks are to be fitted on the left-hand side of the projectors looking outboard on both the port and starboard sides.

(*b*) Modify the horizontal clearances of the racks to suit British Standards and to enable depth charges to be loaded into the racks with the pistol end of charge on the right-hand side of the rack looking outboard. Parbuckling arrangements to be fitted for loading. (Drawing M.S. 20202/11.)

(3) *Rails.*—(*a*) Stop bars to be made easily removable. (Drawing M.S. Sk.20202/1.)

(*b*) Parbuckling arrangements to be fitted for loading. (Drawing M.S. Sk.20202/2.)

(*c*) Pawls to be removed from top rail.

(*d*) Locking arrangements to be fitted at the traps. (Drawing M.S. Sk.20202/4.)

(*e*) Rails to be modified to take British primer and pistol pull off safety gear.

(*f*) Rails are to be checked and made readily adjustable for British or American type depth charges and are not to be welded in a set position for either type of charge. Where rails are welded to take British charges only, the welding is to be removed.

(4) *Depth Charge Communications.*—Standard D.C. Communications in accordance with C.A.F.O. 976/44.

(5) *Firing Circuits.*—A safety switch is to be fitted in the firing circuits of, and adjacent to, each projector.

(6) *Stowage and Transport Arrangements.*—(*a*) Standard transporting slings, four in number, to be supplied. (Drawing M.S. Sk.20064/2.)

(*b*) Detonator locker to be fitted to hold 7 boxes of detonators and positioned in Gunners Store or equivalent compartment.

(*c*) Stowage to be provided for 4 boxes of projector impulse cartridges in small arms magazine.

*Note.*—Copies of M.S. drawings necessary for the modification of these items can be obtained on application to the Superintendent of Mine Design, Leigh Park House, Havant, Hants.

(7) The Captain (D), Greenock, is to insert the following items in the Class List of As. and As. :—

(*a*) to cover the work involved in paragraphs 1, 2, 3 and 6 above ;
" To modernise depth charge equipment " Classification " A."

(*b*) To cover the work involved in paragraphs 4 and 5 above ;
" To fit depth charge communications " Classification " A*."

(*C.A.F.O. 976/44.*)

### 4916.—Depth Charges, Marks X and X*—Modification to Top Lug, St. No. 6420

(T. 1651/44.—14 Sep. 1944.)

Top lugs, St. No. 6420, supplied with depth charges, Marks X and X*, are slightly too long to fit between the top stop and the spring catch in Q.R., Mark VIII* torpedo tubes.



2. All ships are to carry out the following modification to top lugs, St. No. 6420 :—

Reduce the overall length from 6·16-in. to $6{\cdot}0 \pm {}^{\cdot 00}$-in. This reduction in length is to be made at the end of the lug farthest from the 0·375-in. diameter hole.

### 4917.—Dynamo Exploders and Associated Equipment—Allowances

*Ships, Bases and Dockyards concerned*

(N.S. 015347/44.—14 Sep. 1944.)

With reference to A.F.O. 2620/44, paragraph 13, the allowances of dynamo exploders, Mark VII, Pattern 21068, steel cases, Pattern 197A, and cable reels, Pattern 239, and the first supply quantities of electric cable, for use with this exploder, are shown in the appendix to this order.

2. The dynamo exploder and reel will replace the following items at present allowed for demolition purposes :—

| *Pattern* | *Description* |
|---|---|
| 147 | Box, battery, to contain receptacle, Pattern 2631, and 8 cells, Pattern 3361. |
| 161 | Firing key. |
| 1982 | Reel for electric cable. |

3. The appendix to this order gives details also of the requirements of tubing, Pattern 9244, and Chatterton's compound, Pattern 2292, to implement the provisions of A.F.O. 2620/44.

4. The allowances shown for submarines are to be drawn only when required for a special operation, and for this purpose four times the requirements of one submarine are to be carried on board each submarine depot ship, in addition to the allowance shown for the depot ship's own use.

5. Ships concerned in commission and bases should forward demands as necessary to their storing yards to complete to the requirements shown in the appendix. Supply to ships concerned of new construction should be arranged by warrant yards and supplying yards and depots in the usual manner.

6. Unless they can be utilized for any other service, any boxes, Pattern 147, keys, firing, Pattern 161, and reels, Pattern 1982, held on board should be returned to the dockyard on receipt of the dynamo exploders. The boxes, Pattern 147, and reels, Pattern 1982, should be brought to produce by dockyards. Keys, firing, Pattern 161, should be returned to store.

7. *Dockyards and R.N. Store Depots only.*—Supplementary demands, D. 273, should be forwarded as soon as possible by yards/depots at home for requirements estimated to meet the demands anticipated. Yards/depots abroad should also demand as necessary, but the following interim supply will be despatched as stated :—

| *Pattern* | *Description* | *Quantity* | *From* | *To* |
|---|---|---|---|---|
| 21068 | Dynamo exploder ... | 20 | Portsmouth | Alexandria |
| 21068 | Dynamo exploder ... | 80 | Portsmouth | Colombo |
| 21068 | Dynamo exploder ... | 60 | Portsmouth | Durban |
| 21018 | Dynamo exploder ... | 50 | Portsmouth | Gibraltar |
| 21068 | Dynamo exploder ... | 50 | Portsmouth | Malta |
| 197A | Cases, steel ... ... | 20 | Preston | Alexandria |
| 197A | Cases, steel ... ... | 50 | Severn area | Ceylon |
| 197A | Cases, steel ... ... | 50 | Severn area | Durban |
| 197A | Cases, steel ... ... | 20 | Preston | Gibraltar |
| 197A | Cases, steel ... ... | 20 | Preston | Malta |

8. The Sea Store Establishments concerned will be amended.

*Appendix*

| Sub-head and item | Pattern | Description | Classes of ships and allowances or first supply quantity per ship: Capital ships; cruisers over 8,000 tons; repair and depot ships; fast minelayers; coastal force bases; H.M.S. "Adventure" | Aircraft carriers; cruisers under 8,000 tons; all minelayers and controlled minelayers except fast minelayers and H.M.S. "Adventure" | Flotilla leaders and destroyers; monitors; frigates; sloops; surveying vessels; river gunboats; base ships (other than coastal force base ships) | Submarines (for special operations only—*see* paragraph 4) | Remarks |
|---|---|---|---|---|---|---|---|
| F2C | 21068 | Dynamo exploders, Mark VII. | (Class I) 4 | (Class II) 2 | (Class III) 1 | (Class IV) 1 | For normal use with dynamo exploder. |
| F1C | 1888 | Cable, electric, single core... | 1,000 yds. | 1,000 yds. | 500 yds. | 500 yds. | For use of complete wire circuits on shore. |
| F1C | 991A | Cable, electric, twin core ... | 1,000 yds. | 1,000 yds. | 500 yds. | 500 yds. | For handling and running either cable on demolitions. One reel of this pattern is already allowed to certain ships. The existing allowances of reels, Pattern 1982, (B.10), are withdrawn. |
| E.4 | 239 | Reels with handle ... | 2 | 2 | 1 | 1 | |
| B.10 | 197A | Cases, steel, for testing detonators. | 1 | 1 | 1 | Nil | |
| F2A | 9244 | Tubing, insulating, flexible | 25 ft. | 20 ft. | 15 ft. | 15 ft. | First supply quantity for use in connection with general demolition work. |
| F2B | 2292 | Compound Chattertons ... | 1 lb. | 1 lb. | 1 lb. | 1 lb. | To be taken from stock on board ship. |





**4918.—Electric Machinery for (a) Mark V Searchlight Control System; (b) Target Bearing Indicators in certain Hunt Class Destroyers**

(D. 12610/44.—14 Sep. 1944.)

Reports have been received from H.M. ships of defects leading to breakdowns of ¼ H.P. motors for S/L training and elevating oil units, ⅛ H.P. motors for S/L sight stabilizer oil units and motor alternators for S/L control, all manufactured by *The Electro Dynamic Construction Co. Ltd.*

2. All such machines are to be dismantled at an early date and modified as stated below :—

(*a*) *Motors.*—The square ended lugs inside the magnet frame are to be well chamfered and slightly rounded to give more space for the field coils, which may have been damaged by them in the original assembly. Any sharp edges or projections liable to cause damage are to be removed or chamfered. Extra micanite insulation should be provided for the field coils if necessary.

(*b*) *Motor Alternators.*—The field coils are to be arranged so that the connections are at the slip-ring end to give the greater clearance to the end bracket.

(*c*) *All Machines.*—The field coil connection leads are to be shortened; these are unduly long and in consequence are packed in too tightly.

(*d*) The bolted connections between the field coils are to be wrapped with additional insulation where necessary.

(*e*) When reassembling, all joints and covers must be made watertight.

(*f*) When modifications are complete, a notice "modified to A.F.O. 4918/44" is to be fixed securely in the terminal box lids.

3. In "Blencathra," "Quorn," "Avondale," "Tyndale," "Lamerton," "Brocklesby," "Farndale," "Atherstone" and "Krakowlak," the motor alternators supplied for the target bearing indicator gear were drawn from a stock of searchlight motor alternators, and the same procedure should be followed for these machines.

4. This work is to be carried out in cruisers and above by ships' staffs as opportunity offers. For destroyers the work is to be normally entered as a defect item to be carried out by Depot ships or Base repair staffs. Machines in stock at dockyards should be modified locally at the first available opportunity.

5. Normally, modified machines only should be issued in future. Due to urgency, however, it may be necessary to supply an occasional machine to ships without modification. If a modification notice is absent from the terminal box, ships' officers should arrange modifications immediately.

(*This order is to be retained until complied with.*)

**4919.—Gunnery Inspection and Trials—H.M.S. "Vernon"—Fire Control Working-up Party**

(T. 1276/44.—14 Sep. 1944.)

In order to assist ships' electrical staffs, with particular reference to the complex fire control systems now being installed, a special team of officers and ratings, to be known as the "Vernon" Fire Control Working-up Party, is being formed and will be administered by the Captain, H.M.S. "Vernon" (EL). The duties of this team will be :—

(*a*) To visit each ship nearing completion in order to assist officers and key ratings in becoming familiar with their fire control systems. As these systems are the responsibility of the Warship Electrical Superintendent and the Gun Mounting Overseer until they are handed over to ship's staff on completion of fire control trials, it will be necessary for the team to obtain the concurrence and co-operation of these officers beforehand and in particular to obtain their prior consent before operating any part of the systems or making use of any of the apparatus for training or other purposes. The dates of the visits should be arranged with the approval of the Admiral Superintendent, Contract Built Ships.

(*b*) To witness the fire control operational and R.P.C. trials, giving such advice to ships' officers as may be desirable.

(*c*) To remain in the ship during the working-up period to advise the ship's staff regarding any early difficulties with the system and to instruct them in details of maintenance and the tracing of faults.

2. This working-up party will consist of both officers and ratings, but its size and composition will vary according to the class of ship concerned. It is at present the intention that, in the case of small ships, one senior rating only shall remain during the working-up period: All arrangements regarding dates, accommodation, etc., will be made by the Captain, H.M.S. "Vernon," with the ship concerned.

3. Until this new organization has become fully effective, Fire Control Operational Trials will be attended by officers from H.M.S. "Vernon" (EL) under A.F.O. 4011/42, paragraph 2.

(*A.F.O. 4011/42.*)

### 4920.—L.P. Junction Boxes—As. and As.

*H.M. Submarines*

(D. 11256/44.—14 Sep. 1944.)

Item numbers:—

| | |
|---|---|
| "T" Class 546 ... ... ... ... | Classification "A." |
| "S" Class 542 ... ... ... ... | |
| "U" Class 533 ... ... ... ... | |
| Minelayers and "River" Classes 523 | |

2. Approval has been given to replace the non-watertight L.P. junction boxes in the control room by weatherproof type in all operational submarines.

3. In vessels where trouble has been experienced by salt water entering non-watertight junction boxes due to spray or minor flooding, canvas covers should be fitted to these boxes pending the completion of the A. and A.

4. Separate instructions are being issued by Admiralty for vessels under construction.

(*Admiral (S), 8 Jun., 1944, No. S.M. 732/973.*)

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

### 4921.—Radiator A.P. 7886, for Steering Compartment—As. and As.

*"U" Class Submarines*

(N.S. 30564/44.—14 Sep. 1944.)

"U" Class Item No. 523, Classification "B".

2. It has been authorized to fit a radiator, pattern 7886, in the steering compartment of "U" class vessels in which this compartment is used as an accommodation space.

3. A socket, Pattern 4472, and a plug, Pattern 4473, with a supply from a variable pressure junction panel is to be fitted for this radiator.

4. The work is to be carried out by ships' or depot ships' staff, and the stores required should be demanded in the usual manner.

5. Separate action is being taken regarding vessels under construction.

### 4922.—Telephones, Pattern 13224 and Pattern 13235—Reduction of Call-up Note

*Capital Ships, Cruisers, Aircraft Carriers, Repair and Depot Ships*

(N.S. 31249/44.—14 Sep. 1944.)

Experience has shown that the call-up noise made by telephones, Patterns 13224 and 13235, when fitted in cabins and offices is sometimes louder than is necessary for the prevailing conditions.



2. When experience indicates that a reduced call would be advantageous, this can be obtained by the replacement of the existing 0·25 m.f. condenser in the telephone concerned by a condenser of 0·01 m.f. capacity. Condenser Pattern 9776, should be used for this purpose.

3. Care is to be taken when fitting this condenser to ensure that it is adequately secured by suitable packing against movement due to shock and vibration, and that the connecting wires do not "earth".

4. Ships concerned in commission should demand the number of condensers, Pattern 9776, required from their storing yards or depots. To provide for ships concerned under construction, arrangements should be made for ten condensers, Pattern 9776, to be included in the first outfit of consumable Naval stores by the warrant yards and supplying yards and depots.

5. B.R. 359—Establishment of Naval Stores for Electrical and Torpedo purposes—will be amended.

### 4923.—VC/VF and Navigation and Signalling Lamp Circuits—As. and As.

*"Rotherham" to "Caesar" Class Destroyers*

(T. 1529/44.—14 Sep. 1944.)

In view of the approved method of operating the supply system with the interconnecting cables between switchboards "dead", in destroyers of "Rotherham" and later classes, it has been decided that VC/VF and navigation and signalling lamp circuits should have alternative supplies, one from the forward switchboard and one from the after switchboard.

2. Commanding Officers of all destroyers and flotilla leaders, from "Rotherham" class to "Caesar" class inclusive, should include an item in the next list of As. and As., Classification "A", to modify the supply arrangements for VC/VF and navigation and signalling lamp circuits. The circuits should be fed from the port side of one switchboard and from the starboard side of the other switchboard.

3. In order to economize in work involved, the supplies from aft should be taken from the nearest boiler room boxes supplied from the after switchboard.

### 4924.—Marine Box Chronometers

(H.C. 2326/43.—14 Sep. 1944.)

The shortage of marine box chronometers has now been overcome and further information regarding second-hand chronometers is therefore no longer required.

(*A.F.O. 320/44.*)

(*C.A.F.O. 942/43 is cancelled.*)

### 4925.—Diesel Engines—Spare Gear—Economy in Use

*H.M. Ships with Diesel Main or Auxiliary Machinery, Dockyards and Repair Bases*

(D. 14818/44.—14 Sep. 1944.)

There is evidence of extravagant use of spare gear for diesel engines ashore and afloat. In view of the shortage of diesel spares, strict economy is to be observed and the following instructions for representative items are for general guidance. Special instructions for General Motors engines apply in particular to Models 3–71, 268A, 567, 278 and 278A:—

(*a*) *Cylinder Liners.*—Low temperatures, particularly at light load, can treble the rate of wear of liners and rings. Running on light load is to be avoided and circulating water is to be regulated to give the following outlet temperatures:—

| | |
|---|---|
| Fresh water cooling ... ... ... ... | 150° F. max. |
| Direct salt water cooling ... ... ... ... | 125° F. max. |
| General Motors fresh water cooling ... ... | 160/180° F. max. |

The limit for liner wear is 0·5 per cent. (except for G.M. Model 3–71, where it is 0·3 per cent.), measured on the diameter of the bore at the point of maximum wear, i.e. in the region of the two upper piston rings on the top dead centre. The wear after running 1,000 hours is a guide as to the total life of a liner.

(*b*) *Pistons.*—The rate of wear of cast-iron skirts is very small. Slight scratching or scoring is not sufficient reason for renewal. The limit of wear of ring grooves (for parallel rings) is from 10 to 15 thousandths plus the makers' recommended clearance when new—measured by feeler gauge without removing the ring to clean the groove.

(*c*) *Piston Rings.*—These are not to be removed if free or unbroken. Detergent lubricating oil (Admiralty O.E.30HD, or U.S. Symbol 9250) will reduce considerably the liability to stick. Gap clearance is to be neglected as long as the ring still has spring in place, and its radial thickness is not reduced by more than one-third.

For scraper rings the maker's instructions are to be closely followed to avoid excessive lubricating oil consumptions.

(*d*) *Main and Crankpin Bearings.*—Bearings that have been running satisfactorily and are not unduly worn are not to be discarded for minor defects such as pin holes or local surface blemishes unless these are the origin of cracks. The condition of bearings is to be judged by—

(i) Recommended oil pressure being maintained when the engine is hot.

(ii) Clock micrometer readings between the crank webs being within approved limits (an A.F.O. defining this is being issued).

If both the above are satisfactory, visual examination of bearings may, at the discretion of the refitting authority, be omitted at periodic overhauls.

(*e*) *Exhaust and Inlet valves.*—In general, valves are not to be renewed unless it is impossible to obtain a good seating by grinding-in or refacing.

(*f*) *Special Joints and Gaskets.*—These are to be removed with care to avoid damage and used again if serviceable.

2. *Salvage.*—Parts removed that cannot be reconditioned locally are to be treated with preservatives and forwarded as directed :—

American spares *vide* C.A.F.O. 809/44.

British spares *vide* A.F.O. 3708/44.

When whole engines are returned they are to be complete and are not to be stripped of fittings.

(*Admiralty General Messages 350A and 510A.*)

(*C.A.F.O. 809/44, A.F.Os. 4175/41 and 3708/44.*)

### 4926.—Boilers, Cylindrical—Cap Ferrules

*Admiralty Trawlers and "Flower" Class Corvettes.*

(D/N.S. 23897/44.—14 Sep. 1944.)

A number of reports have been received of failure of plain tubes in the boilers of Admiralty trawlers and "Flower" Class Corvettes caused by "necking" of tubes adjacent to the combustion chambers.

2. In all cases where "necking" in these tubes is observed in its early stages, and when renewal of plain tubes becomes necessary in the boilers of vessels of these classes excepting those fitted with superheaters, Admiralty type malleable cast iron cap ferrules are to be fitted to the tube ends in the combustion chambers, *vide* Schedule 186.



3. Stocks of ferrules will be provided at H.M. Dockyards and R.N. Store Depots as follows, and the quantities *necessary to increase existing stocks to these figures* have been requisitioned for purchase :—

| Pattern No. | Dimensions of Ferrules | | Chatham | Portsmouth | Devonport | Rosyth | *See Note below* | | |
|---|---|---|---|---|---|---|---|---|---|
| | Diameter of Cap | Diameter of Ferrule | | | | | Tyne Area | Mersey Area | Clyde Area |
| | in. | in. | | | | | | | |
| *For corvettes* with Cylindrical boilers. | | | | | | | | | |
| 114 ... ... | $3\frac{7}{16}$ | $2\frac{6}{32}$ | — | 3,500 | — | — | — | 1,000 | 500 |
| With Howden Johnson boilers. | | | | | | | | | |
| 115 ... ... | $3\frac{7}{16}$ | $2\frac{7}{32}$ | — | 1,500 | — | — | 300 | 300 | 300 |
| *For trawlers*, Admiralty type. | | | | | | | | | |
| 125 ... ... | $3\frac{11}{16}$ | $2\frac{14}{32}$ | 2,000 | 2,000 | 2,000 | 2,000 | 600 | 700 | 700 |
| "Fish" and "Hill" Classes. | | | | | | | | | |
| 128 ... ... | $4\frac{5}{16}$ | $2\frac{30}{32}$ | — | 500 | — | 300 | — | 200 | — |
| "Military" Class | | | | | | | | | |
| 129 ... ... | $4\frac{9}{16}$ | $3\frac{5}{32}$ | — | 400 | — | 300 | — | 300 | — |

*Note* :—Delivery will be made as follows :—

*Tyne Area.*—R.N.Store Depot, No. 4 Shop, L.N.E.R., Greensfield Works, Gateshead.

*Mersey Area.*—Patterns 114 and 115. R.N. Store Depot, Bedford New Mills, Leigh. Patterns 125, 128 and 129. Area Naval Store, Wapping L.M.S. Goods Station, Liverpool.

*Clyde Area.*—R.N. Store Depot, Inchgreen Goods Yard, Greenock.

(*A.F.O. 1112/44 is cancelled.*)

### 4927.—Boiler Safety-Valves—Cockburn Full-Bore—Corrosion of Spindles—REPORTS

*Destroyers and Fast Minelayers*

(D. 12988/44.—14 Sep. 1944.)

Safety valve spindles made of 13 per cent. chromium steel are liable to severe corrosion, and the associated scale will prejudice the operation of the valves unless it is removed.

2. The action is attributable to attack by sea water and/or by solutions of the products of combustion (particularly from the galley funnel where this is incorporated in the main funnel).

3. It is, accordingly, important that safety-valve box drains shall be maintained in an efficient condition and that the valves shall be cleaned at regular intervals.

4. Safety-valve spindles in Destroyers and Fast Minelayers are to be examined at the next convenient opportunity.

Valves and spindles made of 13 per cent. chromium stainless steel, which are found to have corroded or wasted sufficiently to necessitate replacement, are to be replaced by new valves in similar material, chromium-plated by an approved process by an approved firm, and scale and spray traps on the lines indicated in A.F.O. Diagram No. 298/44 are to be fitted, the work being treated as a defect.

5. Any cases of severe corrosion or wasting are to be reported to the Admiralty.

**4928.—G.M. Quad Unit, Model 6051—Lubrication of Pitch Control Rod and Main Drive Gear Hub Splines—As. and As.**

*L.C.I. (L), L.C.H.*

(D. 13043/44.—14 Sep. 1944.)

An external oiling tube has been added to the gearbox of the model 6051 G.M. diesel engine, to provide positive lubrication for the pitch control rod and main drive gear hub splines. The modification has been incorporated in new construction gearbox, serial No. 701.

2. Details of the fitting of the oiling tube are as follows:—

(i) Remove either the L.A. or the L.C. engine from the port quad and either the R.A. or the R.C. engine from the starboard quad.

(ii) Remove pitch control shaft tube assembly.

(iii) Drill and tap hole in the gearbox at " C ", Fig. 1, A.F.O. Diagram No. 297/44, and in the pitch control shaft housing support as shown at " B ". The hole in the pitch control shaft housing must be drilled at right angles to the support. *Note.*—Care must be taken not to get any metal chips in the gearbox or in the pitch control mechanism.

(iv) Install union nipple assembly " B ", making sure that the oil pipe is aimed to direct the flow of oil on the spline shaft at the point where the shaft enters the drive hub.

(v) Install connector and spline oiling tube assembly, " A ".

(vi) Install pipe clamp, and bolt to clutch housing as shown at " D ".

(vii) Re-assemble pitch control shaft tube assembly, removed in operation (ii).

(viii) Re-assemble engines to gearbox.

3. The necessary parts required to carry out this modification should be obtained locally.

4. This work should be carried out as an item of alterations and additions when craft are in hand for refit and engine change.

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

**4929.—Cylinders for Permanent Gases and Liquefiable Gases—Relaxations of Biennial Tests**

(D. 12930/44.—14 Sep. 1944.)

For the duration of the war, the periodical pressure test of permanent gas and liquefiable gas cylinders is to be carried out at four-yearly intervals instead of two-yearly intervals.

2. No amendment to Engineering Manual (B.R.16) will be issued, but a suitable notation should be placed in the margin opposite clause 310 (5).

*(Rosyth Yard letter, 5 Aug., 1944, No. 3444.)*

*(B.R. 16.)*

*(A.F.O. 3157/42 is cancelled.)*

**4930.—Pump Impellers—Material of**

(D. 12312/44.—14 Sep. 1944.)

A schedule of materials for pump impellers for all pumps supplied for machinery and hull purposes is given below. Any request to depart from this schedule should be referred to Admiralty for decision.

(1) *Monel impellers.*

Fire and bilge pumps (*see also* aluminium bronze).
Hull and fire pumps.
Extraction pumps (excluding de-aerator extraction during war, F.W. stage in distilling plant pumps and drain cooler extraction pumps).
Distilling plant pumps—sea water and brine stages (*see also* aluminium bronze).



Water service pumps—motor driven.
Hydraulic plant (including accelerator pumps), circulating and extraction stages.
Turbo-generators, circulating and extraction pumps.
Drain cooler circulating pumps—S.W. stages.
Fresh water pumps (Rotary Centrex).

(2) *Pumps normally fitted with monel impellers, but for which Hidurax No. 1 (D.T.D. 412) aluminium bronze impellers are acceptable when monel is not available.*

Fire and bilge pumps in destroyers.
Sea water and brine stages of distilling plant pumps in destroyers.

(3) *Hidurax No. 1 (D.T.D. 412) aluminium bronze impellers.*

Sea water circulating pumps in submarines, both motor and main engine driven.
Hydraulic fluid combined cooler pump, S.W. end.
Ballast pumps in submarines.
Sub-pressure pumps in submarines.
Wee Mac fresh water pumps for Pneupress system.
Fresh water cooling pumps for gun mountings.

(4) *B.S. 1023/4 (87/6/5/2) impellers.*

Main circulating—turbine driven.
Auxiliary circulating, main circulating and water service (engine driven).
1,000-ton emergency pumps.
150- and 350-ton salvage pumps.
Hull and portable pumps (electrically, diesel and petrol driven) and portable feed water transfer pumps.
Feed transfer pumps.
De-aerator extraction pumps.
Feed heater drain pumps.
Refrigerator circulating pumps.
Forced lubrication pumps.
Brine pumps (calcium chloride).
Belt driven bilge and other pumps.
Fuel pumps.
F.W. stage of distilling plants.
Drain cooler extraction pumps.
Hydraulic fluid cooler combined pumps, F.W. stage.
Diesel generator circulating pumps.

2. For repair work material is to be as above except that where monel or aluminium bronze cannot be obtained in the time available, nickel bronze can be accepted.

*(A.F.O. 663/42 is cancelled.)*

**4931.—Addressees and Telephone Numbers of Various Radio Service Departments**

(R.E. 12465/44.—14 Sep. 1944.)

The following particulars of addressees, telephone numbers and telegraphic addresses of the agents of the various radio service departments are promulgated for information.

*The Marconi International Marine Communication Co., Ltd.*

*List of Depots in Great Britain, Northern Ireland and Eire*

| | *Telephone.* | *Telegrams.* |
|---|---|---|
| *London Depot—* | | |
| Mr. C. T. Sanders, The Marconi I.M.C. Co., Ltd., 220, Barking Road, East Ham, E.6. | Grangewood 0066 (Private 'phone No. Buckhurst 2341) | Marintcom, London |
| *Aberdeen Depot—* | | |
| Mr. A. C. Lewis, Depot Manager, The Marconi I.M.C. Co., Ltd., 158, Market Street, Aberdeen. | Aberdeen 5332 (Private 'phone No. Aberdeen 5139) | Thulium, Aberdeen |

| | Telephone. | Telegrams. |
|---|---|---|
| *Avonmouth Depot*—(Area : South bank of Bristol Channel from Gloucester southwards to Morte Point, but not including any port in Barnstaple Bay). | | |
| Mr. A. E. Moore, Depot Manager, The Marconi I.M.C. Co., Ltd., 10, Portview Road, Avonmouth. | Avonmouth 438 | Thulium, Avonmouth |
| *Belfast Depot*— | | |
| Mr. H. G. Underwood, Depot Manager, The Marconi I.M.C. Co., Ltd., York Branch Dock, Belfast. | Belfast 44346 (Private 'phone No. Belfast 57992) | Thulium, Belfast |
| *Cardiff Depot*— | | |
| Mr. F. Beatson, Depot Manager, The Marconi I.M.C. Co., Ltd., 8, New Street, Cardiff. | Cardiff 6601/2 (Private 'phone No. Cardiff 5570) | Thulium, Cardiff |
| *Dublin Depot (Eire)*— | | |
| Mr. J. Fogarty, Depot Manager, The Marconi I.M.C. Co., Ltd., 49, North Wall, Dublin. | Dublin 72400 (Private 'phone No. Dublin 73638) | Thulium, Dublin |
| *Falmouth Depot*— | | |
| Mr. C. J. A. Gill, Depot Manager, The Marconi I.M.C. Co., Ltd., No. 15 Building, The Docks, Falmouth. | Falmouth 855 (Private 'phone No. Falmouth 727) | Thulium, Falmouth |
| *Fleetwood Depot*— | | |
| Mr. H. M. Palmer, Depot Manager, The Marconi I.M.C. Co., Ltd., Orient Buildings, Station Road, Fleetwood | Fleetwood 398 (Private 'phone No. Thornton 3170) | Thulium, Fleetwood |
| *Glasgow Depot*— | | |
| Mr. J. P. Dawson, Joint Depot Manager, The Marconi I.M.C. Co., Ltd., 9, India Street, Glasgow, C.2. | Glasgow 8392/3 | Thulium, Glasgow |
| Mr. J. M. O'Meara, Joint Depot Manager | Private 'phone No. Glasgow Western 5975 | |
| *Great Yarmouth (See Lowestoft Depot)*— 1, Fish Wharf, Great Yarmouth. | | |
| *Grimsby Depot*— | | |
| Mr. A. P. Frost, Depot Manager, The Marconi I.M.C. Co., Ltd., Surtees Street, Grimsby Docks, Grimsby. | Grimsby 4501 (Private 'phone No. Swallow 243) | Thulium, Grimsby |
| Grimsby Agent : | | |
| Mr. Ernest Harrison, 63, Cleethorpe Road, Grimsby. | Grimsby 2596 and 2705 | Harbour Phone, Grimsby |
| *Hull Depot*— | | |
| Mr. J. R. Thomson, Depot Manager, The Marconi I.M.C. Co., Ltd., 30, Albion Street, Hull. | Hull 16144 St. Andrews Dock Central 37876 | Thulium, Hull |
| *Leith Depot (Edinburgh)*—(Area : East of Scotland from, and including Dundee, *southwards* to the English border including the Tay and Forth Estuaries)— | | |
| Mr. N. B. Wheeler, Depot Manager, The Marconi I.M.C. Co., Ltd., 54, Constitution Street, Leith. | Leith 36761 (Private 'phone No. Granton 84396) | Thulium, Leith |



| | Telephone. | Telegrams |
|---|---|---|
| *Liverpool Depot*— | | |
| Mr. J. S. Smith, Depot Manager, The Marconi I.M.C. Co., Ltd., 24, Chapel Street, Liverpool, 3. | Liverpool Central 6222/3/4 (Private 'phone No. Burton Wirral 312) | Thulium, Liverpool |
| *Note.*—All goods to be addressed to 4, Lancelots Hey, Chapel Street, Liverpool, 3. | | |
| *Lowestoft Depot*— | | |
| Mr. F. H. Hunt, Depot Manager, The Marconi I.M.C. Co., Ltd., 12, Suffolk Road, Lowestoft. | Lowestoft 767 (Private 'phone No. Lowestoft 774) | Thulium, Lowestoft |
| *Manchester* (Under supervision of Liverpool Depot)— | | |
| Mr. W. I. McGhee, Local Inspector, 538, Chester Road, Old Trafford, Manchester. | Trafford Park 2295 | |
| *Milford Haven Depot*— | | |
| Mr. D. Dodds, Depot Manager, The Marconi I.M.C. Co., Ltd., The Docks, Milford Haven. | Milford Haven 313 | Thulium, Milford Haven |
| *Newcastle Depot*— | | |
| Mr. T. J. Chapman, Depot Manager, The Marconi I.M.C. Co., Ltd., Marconi House, Collingwood Street, Newcastle-on-Tyne. | Newcastle-on-Tyne 27381 (Private 'phone No. Gosforth 54025) | Thulium, Newcastle-on-Tyne |
| *North Shields* (Under supervision of Newcastle Depot)— | | |
| Mr. W. V. Helm, Local Inspector, The Marconi I.M.C. Co., Ltd., Fish Quay, North Shields. | North Shields 1221 | |
| *Oban Depot*— | | |
| Mr. R. C. Cox, Depot Manager, The Marconi I.M.C. Co., Ltd., Royal Naval Offices, Oban. | Oban 2363, Ex. 58 | |
| *Southampton Depot*— | | |
| Mr. J. C. Hawkhead, Depot Manager, The Marconi I.M.C. Co., Ltd., Havelock Chambers, (First Floor), Queen's Terrace, Southampton. | Southampton 3067 (Private 'phone No. Southampton 74772) | Thulium, Southampton |
| *Swansea Depot*— | | |
| Mr. P. G. T. Sloggett, Depot Manager, The Marconi I.M.C. Co., Ltd., Marconi House, York Street, Swansea. | Swansea 3649 | Thulium, Swansea |

*List of Depots Abroad*

| | Telephone. | Telegrams. |
|---|---|---|
| *Algiers Depot*— | | |
| Mr. W. N. Templeton, Inspector-in-Charge, The Marconi I.M.C. Co., Ltd., 2eme Etage, 33 Boulevard Bugeaud, Algiers. | | |
| *Bombay Depot*— | | |
| Mr. T. A. Simpson, Depot Manager, The Marconi I.M.C. Co., Ltd., 32, Nicol Road, Ballard Estate, Bombay. | Bombay 22994 (After office hours : Bombay 35295) | Thulium, Bombay |

| | Telephone. | Telegrams. |
|---|---|---|
| *Calcutta Depot—* | | |
| Mr. T. M. Phillips, The Marconi I.M.C. Co., Ltd., Temple Chambers, 6, Old Post Office Street, Calcutta. | Calcutta 2696 | Thulium, Calcutta |
| *Cape Town Depot, S. Africa—* | | |
| Mr. F. R. M. Preedy, Depot Manager, The Wireless Agency, Ltd., Marine Depot, 6th Floor, Boston House, Strand Street, Cape Town, S. Africa. | | |
| *Colombo Depot, Ceylon—* | | |
| Mr. J. R. Stapleton, Depot Manager, The Marconi I.M.C. Co., Ltd., c/o Messrs. Mackinnon Mackenzie & Co., 19, Victoria Arcade, York Street, Colombo, Ceylon. | Colombo 4820 | Marconi Marine Company, Colombo |
| *Durban Depot, S. Africa—* | | |
| Mr. H. J. Gallagher, Depot Manager, The Marconi I.M.C. Co., Ltd., Security Buildings, 345, Smith Street, Durban, S. Africa. | Durban 25012 | Thulium, Durban |
| *Freetown Depot, Sierra Leone—* | | |
| Mr. T. F. Lees, Depot Manager, The Marconi I.M.C. Co., Ltd., G.P.O. Box 96, Prince of Wales Building, King Tom, Freetown, Sierra Leone. (Secret correspondence to be addressed to Mr. Lees, c/o S.N.O., Freetown). | Naval Exchange 46 or 90. | |
| *Gibraltar Depot—* | | |
| Mr. C. E. Tuck, Depot Manager, The Marconi I.M.C. Co., Ltd., Waterport, Gibraltar. | Gibraltar Automatic 977 (Private address: Bristol Hotel, Gibraltar: Phone No. Automatic 618) | |
| *Kilindini Depot, Mombassa, Kenya—* | | |
| Mr. J. I. Morse, Depot Manager, Temporary address: The Marconi I.M.C. Co., Ltd., c/o Senior Naval Officer, Kilindini, Kenya. | | |
| *New York Depot, U.S.A.—* | | |
| Mr. S. D. Sloggett, Depot Manager, The Marconi I.M.C. Co., Ltd., 23/25, Beaver Street, New York. | Hanover 2-0160 (After office hours: 'phone Main 4—1736). | Thulium, New York |
| *Port Said Depot—* | | |
| Mr. J. R. Kingsford, Depot Manager, The Marconi I.M.C. Co., Ltd., 76, Rue Ibrahim, Port Said, Egypt. | Port Said 781 | Thulium, Port Said |
| *Trinidad Depot (Port of Spain)—* | | |
| Mr. N. R. Hodges, Depot Manager, The Marconi I.M.C. Co., Ltd., British Naval Office, Trinidad, Port of Spain. | | |
| *Taranto Depot—* | | |
| Mr. Alexander Fairbairn, Marconi Inspector, 13, Via Pitagora, Taranto. | | |
| *Naples Depot—* | | |
| Mr. A. Ashcroft, Marconi Inspector, c/o N.C.S.O., Naples, Dock House, Naples. | | |



*List of Bases*

| | Telephone. |
|---|---|
| *Ardrossan Base* (Under the supervision of Glasgow Depot)— | |
| Mr. H. C. Maguire, Marconi Representative, W/T Station, Naval Base, Ardrossan, Ayrshire. | Ardrossan-Saltcoats 900, Extension 63. (If no reply is received from 63, Extension 7 may be used for urgent messages). |
| *Dover Base* (Under supervision of East Ham Depot, London)— | Dover 1250, Extension 87 |
| Mr. J. E. Dallaston, Marconi Technical Asst., W/T Office, 3rd Floor, 26 Waterloo Crescent, Dover. | (*Note.*—In the absence of Mr. Dallaston, messages for him will be accepted by either Extension 4, including after office hours or Extension 39). (Private 'phone No. Kearsney 292.) |
| *Dundee Base—* | |
| Mr. J. H Prince, Marconi Representative, c/o P.O. Tel. Wisker, Royal Naval Base, 68 East Dock Street, Dundee. | Dundee 82433 |
| *Greenock Base—* | |
| Mr. J. H. Cheevers, Marconi Representative, c/o Office of Captain "D", Albert Harbour, Greenock. | Greenock 2280, Extension 143 |
| *Kirkwall Base* (Under supervision of Aberdeen Depot)— | |
| Mr. J. A. Fraser, Marconi Representative, c/o Mrs. Boyd, Willowburn Road, Kirkwall. | Kirkwall Naval 14 |
| *Londonderry Base—* | |
| Mr. W. J. Agnew, Marconi Representative, 3, Woodleigh Terrace, Londonderry. | Londonderry 3211, Extension 320 |
| *Plymouth Base—* | |
| Mr. W. D. Lacey, Marconi Representative, 69, St. Levan Road, Devonport. | Devonport 106. Telegrams: Thulium, Devonport. |
| For goods sent by post:— | |
| Mr. W. D. Lacey, Marconi Representative, c/o Port Wireless Officer, H.M. Dockyard (North), Devonport. | |
| Heavy goods:— | |
| Mr. W. D. Lacey, Marconi Representative, Receiving Room Extension, H.M. Dockyard (North), Devonport. | |
| *Portsmouth Base—* | |
| Mr. H. G. Moss, Marconi Representative, East Block, Royal Naval Staff, Officers' Mess, H.M. Dockyard, Portsmouth. | Portsmouth 74571, Extension 2693. (If no reply is received from Extension 2693 try Extension 2480 or 2481 (Trawler Base) which will take any message. Alternatively the duty Wren, Extension 2419, will pass on messages containing instructions or requests to telephone back.) |
| *Methil* (under the supervision of the Leith Depot Manager)— | |
| Marconi Representative, c/o Convoy signals Officer, Naval Control, Methil, Scotland. | Leven 454, Extension 44 |

*The International Marine Radio Company Limited*

*List of Principal Home and Overseas Depots*

| *Address.* | *Telephone* | *Telegrams.* |
|---|---|---|
| *Aberdeen—* | | |
| International Marine Radio Co., Ltd., 34a, Marichal Street. Res. Eng., Mr. D. A. Breen. | Aberdeen 1086 | |
| *Belfast—* | | |
| International Marine Radio Co., Ltd., Howard Building, 26, Howard Street. | Belfast 28311 | |
| After office hours, Res. Eng., Mr. R. Pinkerton. | Belfast 55318 | |
| *Brightlingsea—* | | |
| International Marine Radio Co., Ltd., c/o Mr. A. Ellis, 21, Victoria Place. | Brightlingsea 89 | |
| After office hours: 54, Spring Road | Brightlingsea 86 | |
| *Bristol Channel Ports*—Refer to Cardiff. | | |
| *Cardiff—* | | |
| International Marine Radio Co., Ltd., Salvage Buildings, Clarence Road. | Cardiff 2849 | Intelcomar |
| After office hours, Area Representative, Mr. J. C. Wilkie. | Cardiff 8459 | |
| *Dundee—* | | |
| International Marine Radio Co., Ltd., c/o Radio Electric (Dundee), Ltd., 17/23 Ash Street. | Dundee 3039–3030 | Radio-Electric |
| After office hours ... ... ... | Dundee 81893 | |
| *Falmouth—* | | |
| International Marine Radio Co., Ltd., c/o W. Murt, Electrical Eng., The Moor. | Falmouth 315 | |
| After office hours: Mr. W. G. Breach, Hillside, Carnon Downs, Falmouth. | | |
| *Glasgow—* | | |
| International Marine Radio Co., Ltd., 121, Douglas Street, C.2. | Douglas 7348–9 | Intelcomar |
| After office hours: Area Representative, Mr. W. F. Steward. | Bearsden 2097 | |
| *Grimsby—* | | |
| International Marine Radio Co., Ltd., Fish Dock Road, Grimsby. | Grimsby 4052 | |
| After office hours: Res. Eng., Mr. C. Collins. | Grimsby 2447 | |
| *Harwich*—Refer to Brightlingsea. | | |
| *Hull—* | | |
| International Marine Radio Co., Ltd., 8, Pier Street. | Hull 35385 | Intelcomar |
| After office hours: Res. Eng., Mr. C. F. O'Reilly. | Hull 17321 | |
| *Kirkwall (Orkney)—* | | |
| International Marine Radio Co., Ltd., c/o Alexander Sutherland, Junction Road. | Kirkwall 15 | |



| *Address* | *Telephone.* | *Telegrams.* |
|---|---|---|
| *Leith and Firth of Forth—* | | |
| International Marine Radio Co., Ltd., 92, Ferry Road, Leith. | Leith 37379 | |
| After office hours: Res. Eng., Mr. R. G. Boyce. | Leith 37786 | |
| *Lerwick (Shetlands)—* | | |
| Mr. P. J. Johnson, Garth Cottage, South Road. | Lerwick 149 | |
| *Liverpool—* | | |
| International Marine Radio Co., Ltd., Cunard Building, Water Street. | Central 8861–2 | Intelcomar |
| After office hours: | | |
| Area Representative, Mr. J. D. Gibson, | Eastham 1567 | |
| Res. Eng., Mr. L. F. Haslam ... | Wallasey 3953 | |
| *London—* | | |
| International Marine Radio Co., Ltd., 55/57, Mason's Hill, Bromley, Kent. | Ravensbourne 2617–8 | |
| After office hours: Res. Eng., Mr. A. M. Staig. | Putney 1637 | |
| *Lowestoft and Gt. Yarmouth—* | | |
| International Marine Radio Co., Ltd., c/o Messrs. Boardley & Roberts, Ltd., 5/7, St. Peter's Street, Lowestoft. | Lowestoft 885 | |
| After office hours ... ... ... | Pakefield 126 | |
| *Manchester.* Refer to Liverpool. | | |
| *Middlesbrough—* | | |
| International Marine Radio Co., Ltd., c/o Mr. H. Hewitt, Radio Engineer, Norton Street. | Middlesbrough 2775 | |
| After office hours ... ... ... | Linthorpe 88775 | |
| *Milford Haven—* | | |
| International Marine Radio Co., Ltd., The Docks. | Milford Haven 148 | |
| *Newcastle-on-Tyne—* | | |
| International Marine Radio Co., Ltd., Marine House, 17, Silver Street. | Newcastle 24749 | Intelcomar |
| After office hours: Area Representative, Mr. J. McIntyre. | Newcastle 55453 | |
| *Plymouth—* | | |
| International Marine Radio Co., Ltd., 12, Flora Cottages. | Plymouth 61376 | |
| After office hours: Res. Eng., Mr. W. G. Reid (same address). | | |
| *Portland.* Refer to Southampton. | | |
| *Portsmouth—* | | |
| International Marine Radio Co., Ltd., c/o Senior Naval Stores Officer, No. 11 Store, H.M. Dockyard. | Portsmouth 74571 Extension 2333 | |
| After office hours—Res. Engr., Mr. C. S. Gordon. | Portsmouth 6632 | |
| *Sheerness.* Refer to London. | | |

| Address | Telephone. | Telegrams. |
|---|---|---|
| *Southampton—* | | |
| International Marine Radio Co., Ltd., 23, Oxford Street. | Southampton 76559 | |
| After office hours ... ... ... | Hythe 3115 | |
| *Wick—* | | |
| International Marine Radio Co., Ltd., c/o R. Finlayson & Co., Electrical Engineers, 11, Lower Dunbar Street. | Wick 143 | |
| *Dublin—* | | |
| International Marine Radio Co., Ltd., c/o Standard Telephones & Cables, Ltd., Molesworth House, South Frederick Street. | Dublin 61229 | Microphone |
| *Aden—* | | |
| A. Beese & Co. (Aden), Ltd. ... ... | | Besse Aden |
| *Sydney—* | | |
| Standard Telephones & Cables (Pty), Ltd., 258/274, Botany Road, Alexandria. | MX 0444 | Relay |
| *Melbourne—* | | |
| Standard Telephones & Cables (Pty), Ltd., 588, Bourke Street. | Central 8336, 8949 | Relay |
| *Brisbane—* | | |
| Edgar V. Hudson (Pty.), Ltd., 47, Charlotte Street. | B.3733 | Qupee |
| *Adelaide—* | | |
| Unbehaun & Johnstone, Ltd. (Adelaide), 58, Gawler Place. | Central 3900 | Delville |
| *Perth—* | | |
| M. J. Bateman, Ltd., 12, Milligan Street | B.9346 | Exide |
| *Trinidad* (Port of Spain)— | | |
| Contractors, Ltd., 44, South Quay ... | | Alston |
| *Montreal, Quebec—* | | |
| Dominion Sound Equipments, Ltd., 1620, Notre Dame Street, W. | Fitzroy 9663 and Wilbank 3044 | |
| *Halifax, N.S.—* | | |
| Dominion Sound Equipments, Ltd., 86, Hollis Street. | B.7010 | |
| *Vancouver, B.C.—* | | |
| Dominion Sound Equipments, Ltd., 820, Cambie Street. | Seymour 7400 | |
| *Toronto, Ontario—* | | |
| Dominion Sound Equipments, Ltd., 131, Simcoe Street. | Waverley 6131 | |
| *St. John, N.B.—* | | |
| Dominion Sound Equipments, Ltd., 127, Wright Street. | 3–7327 | |
| *Quebec—* | | |
| Dominion Sound Equipments, Ltd., 4, Leclerc Avenue. | 4–1914 | |
| *Colombo—* | | |
| Brown & Co., Ltd., Lanka Works, Darley Road. | 9251 (7 lines) | Metal |



| Address | Telephone. | Telegrams |
|---|---|---|
| *All Ports, Egypt—* | | |
| International Marine Radio Co., Ltd., Collovich Building, Rue Fouad, Port Said. Res. Eng., Mr. L. Varmen. (After office hours, same address.) | Port Said 2508 | |
| *Gibraltar—* | | |
| International Marine Radio Co., Ltd., c/o Mackintosh & Co., Ltd., 52, Irish Town. Res. Eng., Mr. F. J. S. Alcock. | 356 and 359 | Dehesa |
| *Akureyri—* | | |
| Mr. Grimur Sigurdsson, P.O. Box 92. | | |
| *Reykjavik—* | | |
| Mr. S. Egilsson, Electrical Engineer, P.O. Box 735. | | |
| *Bombay—* | | |
| Res. Eng., Mr. W. MacFarlane, c/o Jost's Engineering Co., Ltd., The Great Social Building, Sir Phirozeshah Mehta Road. | 20254 | Jost |
| *Calcutta—* | | |
| Standard Telephones & Cables, Ltd., Wellesley House, 7, Wellesley Place. (P.O. Box No. 413.) | 1285 | Microphone |
| *Madras—* | | |
| Crompton Engineering Co., First Line Beach, (P.O. Box 205.) | 2934 | Cromptonco |
| *St. Johns, St. Pierre, Newfoundland—* | | |
| H. Hutton, c/o Chas. Hutton & Sons, (D.S.E. Rep), 122, Water Street, St. Johns. | | |
| *Wellington—* | | |
| Standard Telephones & Cables (Pty.), Ltd., 125/129, Manners Street. | 55, 115 | Relay |
| *Auckland—* | | |
| E. R. Cooper & Co., Strand Arcade ... | 44, 449 | |
| *Cape Town—* | | |
| International Marine Radio Co., Ltd., c/o Messrs. W. D. Hearn & Co., Metrovick House, (P.O. Box 2926), 78–80, Buitengracht Street. Res. Engr., Mr. C. H. Kilpatrick. | 2–6148 | Metrovick |
| *Durban—* | | |
| Reg. Bird & Allais (Pty.), Ltd., (P.O. Box 2143), 430, West Street (Stores Bay Passage). | 25420 | |
| *E. London—* | | |
| Baldwins (S.A.), Ltd., (P.O. Box 262), 11, North Street. | 4536–7 | Promptitude |

*Siemens Brothers & Co., Ltd., Woolwich, S.E.18*

| *Area.* | *Branch.* |
|---|---|
| Scotland ... ... ... ... | Siemens Brothers & Co., Ltd., 144, St. Vincent Street, Glasgow, C.2.<br>Telegrams: 'Siemens, 144, St. Vincent Street, Glasgow."<br>Telephone: Central 5807. |
| From Solway Firth to Holyhead inclusive and any port in Ireland. | Siemens Brothers & Co., Ltd., 56 and 60, South John Street, Liverpool, 1.<br>Telegrams: "Siemens, Liverpool."<br>Telephone: Central 2264 and 5154.<br>In case of an emergency arising after office hours, the telephone number is Garston 1974. |
| South Wales, Bristol Channel and English Channel, West of and including Weymouth. | Siemens Brothers & Co., Ltd., Siemens House, Hill Street, The Hayes, Cardiff.<br>Telegrams: "Siemens, Cardiff."<br>Telephone: 7128/9.<br>In case of an emergency arising after office hours, the telephone number is Barry 704. |
| Flamborough Head to, and including, Berwick-on-Tweed. | Siemens Brothers & Co., Ltd., "K" Exchange Buildings, Quayside, Newcastle-upon-Tyne, 1.<br>Telegrams: "Siebromar, Newcastle Tyne."<br>Telephone: Newcastle 24922.<br>In case of an emergency arising after office hours, the telephone number is Gosforth 52334. |
| The Wash to Flamborough Head ... | Siemens Brothers & Co., Ltd., 94, West Dock Avenue, Hull.<br>Telegrams: Siemens, 94, West Dock Avenue, Hull.<br>Telephone: Hull 38124.<br>In case of an emergency arising after office hours, the telephone number is Cottingham 426. |
| English Channel East of Weymouth, Straits of Dover, Thames Estuary and East Coast up to the Wash. | Siemens Brothers & Co., Ltd., Wireless Department, Woolwich, London, S.E.18.<br>Telegrams: Siemens, Woolwich.<br>Telephone: Woolwich 2020. |

In addition to the foregoing branches, sub-branches are at :—

Siemens Brothers & Co., Ltd., 3, Bramley Avenue, Fleetwood.

Siemens Brothers & Co., Ltd., 1, Kent Street, Grimsby. Telephone: Grimsby 2485.

Messrs. Siemens Brothers & Co., Ltd., Springfield, King Edward Drive, Little Thurrock, Grays, Essex. Telephone: Tilbury 3110.

*Rediffusions, Ltd. (Late Gambrell Radio Communications)*

*Service Areas*

| | |
|---|---|
| *London*—<br>Broomhill Road, Wandsworth, S.W.18. Telephone: Putney 5691.<br>*Ramsgate and Margate*—<br>Relay House, Westwood, Margate. Telephone: Ramsgate 898/9. | Covers all ports in Norfolk, Suffolk, Essex, Kent and Sussex East of, and including, Worthing. |
| *Southampton*—<br>19, Pentire Avenue, Hill, Southampton. | Covers all ports in Sussex West of Worthing, Hampshire, Isle of Wight and Dorsetshire. |



| *Area* | *Branch* |
|---|---|
| *Plymouth (for Falmouth)*—<br>34, Mutley Plain. Telephone: Plymouth 4071. | Covers all ports in Devonshire, Cornwall, Somerset, West of, and including, Watchet. |
| *Cardiff*—<br>120, Queen Street. Telephone: Cardiff 3263.<br>*Swansea*—<br>21, St. Helen's Road. Telephone: Swansea 4670.<br>*Newport*—<br>157, Commercial Road. Telephone: Newport, Mon. 3791. | Covers all ports in South Wales and Bristol Channel. |
| *Morecambe (for Heysham)*—<br>86, Chatsworth Road. Telephone: Morecambe 708.<br>*Blackpool (for Fleetwood)*—<br>15, Gillingate, Kendal. Telephone: Kendal 703.<br>*Barrow-in-Furness*—<br>217, Dalton Road. Telephone: Barrow 172.<br>*Wallasey*—<br>21, Seaview Road. Telephone: Wallasey 4163. | Covers all ports, North Wales and Scottish border. |
| *Glasgow*—<br>74, York Street. Telephone: Glasgow 7637. | Covers Scottish ports and Northern Ireland. |
| *Newcastle-on Tyne*—<br>79, Blackett Street. Telephone: Newcastle 23385. | Covering ports in Northumberland, Durham and Yorkshire, north of, and including, Whitby. |
| *Hull*—<br>15, Anlaby Road. Telephone: Hull Central 36646/7. | Covering Yorkshire and all ports South of Whitby and Lincolnshire. |

*(A.F.Os. 1510/41 and 5554/41 are cancelled.)*

**4932.—R.N. Shore W/T Stations—Transmitters 8D—Modifications to Crystal Sockets in Pattern 53910, Crystal Control Unit**

*Shore W/T and R.N. Air Stations etc. fitted with Pattern 53899 Transmitter 8D*

(R.E. 02697/44.—14 Sep. 1944.)

Certain Pattern 53910 crystal control units have been issued with the crystal sockets of insufficient inside diameter to allow the pins of the appropriate crystal holder (Air Ministry Reference 10X) to enter.

2. In the units affected the holes of all 24 sockets are to be enlarged, in the following manner :—

(*a*) Withdraw Pattern 53910 crystal control unit from its case to allow of easy access to the rear of the chassis.

(*b*) An assistant must now hold each socket securely whilst it is being modified. This is best done with a pair of long-nosed square-sectioned pliers and a strip of medium or fine emery cloth measuring about 3 in. by ½ in. The strip of emery is wound round the outside of the socket with the emery face inwards and then gripped tightly with the pliers. This method will give a more efficient grip than with pliers alone and will obviate any possibility of damage if care is used.

(*c*) Fit a ⅛ in. (0·125 in.) or No. 30 straight shank morse drill into a small drill brace and open out each socket, the drilling to be carried out vertically with the chassis right way up. The actual drilling operation must be carried out with very light pressure and at a high turning speed to ensure the drill does not "stick" in the brass socket. The assistant

must ensure that each socket is securely prevented from turning, to avoid damage to the wiring and mounting, which will occur if this precaution is neglected.

(*d*) Test with a standard crystal holder and if all positions are now correct, return the chassis to its case.

3. *Modifications to crystal holders.*—The pins of crystal holders are *not* to be reduced in diameter as an alternative to the procedure outlined in paragraph 2 above.

### 4933.—R.N. Shore Wireless Stations—Particulars of Communication Transmitters Installed—REPORTS

*R.N. Shore Wireless Stations, R.N. Air Stations, and Shore Establishments supplied with W/T Transmitting Apparatus for Communications*

(R.E. 02696/44.—14 Sep. 1944.)

Annual reports of W/T Communication Transmitters installed, which should be rendered on Signal School, Portsmouth, Form No. 217, are not being received at the Admiralty Signal Establishment, and as a result accurate records of the description of W/T Communication Transmitters at present fitted in many stations and shore establishments are not available. This is particularly the case where sets have been taken from reserves allocated to meet unforeseen commitments, such as those provided under C.A.F.O. 1481/43, etc., or allocated in bulk to authorities, e.g. R.A.N.A.S.I.O., for distribution to meet local requirements.

2. All stations and shore establishments supplied with W/T communication transmitters are, therefore, to report the description and particulars of sets now fitted, to the Captain Superintendent, Admiralty Signal Establishments, c/o G.P.O., London.

3. Reports should be rendered in duplicate and, to avoid delay and unnecessary administrative work, should be despatched direct to the address in paragraph 2.

4. Where sets were not despatched from U.K. for installation at a particular station, the pool or authority from whom they were obtained should be indicated.

5. For sets of commercial design, the particulars in A.F.O. 3721/44, paragraph 6, A, B, and F, should be included for each communication transmitter. For sets which have Naval type numbers, e.g. type 88, 89, or 610, it is sufficient to state the type number and suffix letters appropriate and to indicate the quantity of the sets fitted. Brief particulars of extempore sets should also be included.

6. Signal School, Portsmouth, Form No. 217 is being extensively revised and until the revised form is available, stations should report particulars of any further communication transmitters installed immediately on completion, indicating the source from which they were received.

(*C.A.F.O. 1481/43 and A.F.O. 3721/44.*)

### 4934.—Radar Sets, Types 276/277/S/T/293—Soundproof Cabinet A.P. W.7556—Fitting of Baffle A.P. 54477 or A.P. 57136

(R.E. 02646/44.—14 Sep. 1944.)

The air inlet cover to the W.7556 cabinet has been redesigned to embody a baffle in order to reduce the amount of noise in the radar office.

2. Ships and shore stations with one of the above sets with a soundproof cabinet with a serial number—

A.W. 1 to 127 *or*
M.C. 1 to 174

are to fit baffle A.P. 54477. Those with a cabinet with a serial number—

M.L. 1401 to 1557

are to fit baffle A.P. 57136.

3. The necessary stores are to be demanded from S.N.S.O. (Haslemere) quoting this A.F.O. as authority.



4. *Fitting instructions.*—

(i) Remove screws from corners of existing cover.

(ii) Remove existing cover and gauze and discard.

(iii) Fit A.P. 54477 or A.P. 57136 baffle, using existing fixing holes.

5. Work to be carried out by ship's staff assisted by base staff if necessary.

### 4935.—W/T Sets, Types 57DM/DMR/CM/CMR—Modification to Pattern W.3794 Master Oscillator Unit

(R.E. 12354/44.—14 Sep. 1944.)

In order to reduce, as far as possible, the interference by harmonics of the variable oscillator with the final frequency, a modification has been carried out to the Pattern W.3794 master oscillator unit. As a result of this modification, which involves small mechanical changes and alteration to the number of turns on certain coils, the frequency of crystals to be employed will be changed from 3,000, 4,000 and 5,000 Kc/s. to 4,500, 5,500 and 6,500 Kc/s.

2. This modification, which is not to be retrospective, will be carried out by the manufacturers before issue of the master oscillator unit to service. The pattern number of the modified master oscillator unit will become Pattern W.3794A.

3. Two of each of the following crystals will be supplied with the master oscillator unit, Pattern W.3794A in place of those shown in paragraph 10 of C.A.F.O. 270/43.

| *Pattern No.* | *Description.* | *Quantity.* |
|---|---|---|
| 56973 ... ... ... | Quartz, crystal, 4,500 Kc/s. | 2 (includes 1 spare). |
| W.6562 ... ... | Quartz, crystal, 5,500 Kc/s. | 2 (includes 1 spare). |
| W.8860 ... ... | Quartz, crystal, 6,500 Kc/s. | 2 (includes 1 spare). |

4. The frequency ranges of the new unit will be :—

| Range | Crystal frequency in Mc/s. | Variable frequency in Mc/s. | Final frequency | |
|---|---|---|---|---|
| | | | Not trebled | Trebled |
| 1 | 4·5 | 1·0—2·0 | 2·5—3·5 | 7·5—10·5 |
| 2 | 5·5 | 1·0—2·0 | 3·5—4·5 | 10·5—13·5 |
| 3 | 6·5 | 1·0—2·0 | 4·5—5·5 | 13·5—16·5 |
| 4 | 4·5 | 1·0—2·0 | 5·5—6·5 | 16·5—19·5 |
| 5 | 5·5 | 1·0—2·0 | 6·5—7·5 | 19·5—22·5 |

5. Master oscillator units, Pattern W.3794 and W.3794A are interchangeable but care must be taken that the correct crystals and calibration books are used.

(*C.A.F.O. 270/43.*)

### 4936.—Aircraft Radio—Crystals—Repair

(N.S. Air/A.C.R.D. 1424/44.—14 Sep. 1944.)

Arrangements have been made for the repair of faulty crystals from aircraft radio communication sets.

2. Crystals suspected of being faulty should be returned to the nearest Aircraft Repair Yard for testing with test set, Type 330 (Stores Ref. 10S/687 or test set Type 193 (Stores Ref. 10S/630). These test sets are activity testers and will be supplied without demand to Repair Yards when supplies become available.

3. Crystals confirmed as faulty by Repair Yards are to be returned to R.N. Store Depot, Coventry or Perth, or to the nearest R.N. Store Depot abroad for return to U.K.

4. Indication of unserviceability is to be shown either by tie-on label or by pasting a slip of paper on the crystal holder. The practice of scratching U/S or similar inscription on the holders is to cease.

(*A.F.O. 3992/44 is cancelled.*)

**4937.—Seafire Aircraft—Modification to Arrester Hooks, Stores Ref. 27H/1942 and 27H/1943**

(A.E./A.D.P. 3093/44.—14 Sep. 1944.)

As a result of experience with the snap gear fitted to Seafire aircraft, modification Seafire 328 has been approved with Classification 2, and will be promulgated in due course. This modification, besides strengthening the snap gear, will give a greater "lead in" for the hook. The improvement in "lead in" will not, however, remove the possibility of damage to the snap gear catch pawls during an off-centre landing.

2. In order to relieve the component load induced when the hook is snapped up under these conditions, it has been found necessary to replace the radius on the side of the catch plates of the hook by a chamfer, as shown in A.F.O. Diagram No. 294/44.

3. This chamfering of the catch plates is applicable to hooks, Stores Ref. 27H/1942 and 27H/1943, and should be carried out as soon as possible on all hooks fitted to aircraft and those held as spares.

4. Action has already been taken to ensure that in future new hooks will be modified by the manufacturer before delivery.

5. Since the modification to hooks detailed above applies only to a standard service supply item, no airframe modification number can be allotted. Aircraft whose hooks have been modified are to have the Form 701 endorsed "arrester hook modified in accordance with A.F.O. 4937/44".

6. With reference to Seafire Modification 328, mentioned in paragraph 1 above, parts are not yet available. No action is to be taken to demand parts until a leaflet is issued in accordance with current modification procedure.

**4938.—Aircraft Radio-Transmitter-Receivers, TR.1196 Series—Controllers, Electric, Type 4, T–R Switch Modification**

(A.C.R.D. 1182/43.—14 Sep. 1944.)

This Order describes a modification to controller, electric, Type 4, so that the key switch must be held in "T" position when it is desired to transmit and will return automatically to the central ("RA") position on release.

2. This is accomplished by the fitting of a longer switch securing screw. This modification is being incorporated in the production line. Controllers not so modified are easily recognizable.

3. The following modification is to be made to all the above controllers, electric, in use and in store.

4. The undermentioned item of equipment is to be demanded as necessary from the appropriate R.N. Store Depot.

| *Item.* | *Stores Ref.* | *Nomenclature.* | *Quantity.* |
|---|---|---|---|
| 1 | 28S/2122 | Screws, metal, brass, c/s, No. 6 BA. × ⅜-in. | 1 |

5. The procedure is as follows:—

(i) Unscrew the knurled handle from the key switch.

(ii) Remove the front top cover of the controller, electric.

(iii) Remove the side plate adjacent to the "T" position.

(iv) Remove the lower right hand key switch securing screw, viewing the controller, electric, from the front.

(v) Enlarge the hole with a No. 43 drill and then tap the hole for 6 BA. taking care not to damage the switch contacts. Insert a screw, metal, brass, c/s, No. 6 BA. × ⅜-in.

(vi) Re-assemble the controller, electric, and test that the ⅜-in. screw limits the movement of the switch lever and causes it to spring back to "RA" position when released from "T" position.



**4939.—Aircraft Radio—VH/F Crystals—Guard and Homing Frequencies**

(A.C.R.D. 1855/44.—14 Sep. 1944.)

All aircraft fitted VH/F are to be crystalled permanently for naval guard and homing frequencies (124·02 and 126·72 Mc/s respectively).

2. A.F.O. S.299/44, paragraph 5 (*d*) states that one set of crystals for each of these frequencies will be supplied with each VH/F set. Sufficient stocks of crystals are not yet available to effect this procedure.

3. Until this procedure can be implemented, authorities holding I.E. or A.R. aircraft fitted SCR 522A or SCR 542A, are to demand one set of crystals for each frequency for each aircraft not already equipped with these crystals. The crystals are to be demanded from R.N. Store Depot, Stafford or Perth, whichever is nearer. Sufficient stocks are available to meet these demands.

(*A.F.O. S.299/44.*)

**4940.—Aircraft—Avenger (T.B.F.I., T.B.M.I. and T.B.M.3)—Interchangeability of Mainplanes**

(N.S. Air/A.E. 4222/44.—14 Sep. 1944.)

Mainplanes of Avenger aircraft of the same basic Mark vary as to the forward firing armament and certain other details. All mainplanes of the same basic mark are, however, interchangeable provided they are complete with flaps and ailerons.

2. There is no objection to mainplanes embodying provision for forward firing armament being fitted to an aircraft which already has forward firing armament in the fuselage. In no circumstances, however, should mainplanes not fitted with forward firing armament be installed in an aircraft which has no forward firing armament in the fuselage.

(*A.F.O. 335/44.*)

**4941.—Aircraft Carriers—Provision of Methyl Bromide for Aircraft Fire Extinguishers**

(N.S. Air. 12356/44.—14 Sep. 1944.)

Arrangements have been made for the supply of spare cylinders of Methyl Bromide (Stores Ref. 27N/12) to aircraft carriers as replacements for the fire extinguishers fitted in the aircraft.

2. The allowances to the various classes of ships are revised as follows:—

| *Class of Ship* | *Allowance* |
|---|---|
| "Implacable" ... ... ... ... ... ... | 20 |
| "Indefatigable" ... ... ... ... ... | 20 |
| "Indomitable" ... ... ... ... ... ... | 18 |
| "Illustrious" class ... ... ... ... ... | 15 |
| "Furious" ... ... ... ... ... ... | 10 |
| Light Fleet Carriers ... ... ... ... ... | 12 |
| Escort Carriers (Br.) ... ... ... ... ... | 8 |
| Escort Carriers (Am.) ... ... ... ... ... | 8 |

3. Ships in commission should forward demands to their normal source of supply of air stores, quoting this Order as authority to supply. Supply to ships of new construction should be arranged by their storing yards.

4. Owing to the highly toxic nature of methyl bromide, it should on no account be kept between decks. On receipt of the spare cylinders they should be stowed in a locker fitted on an open deck, preferably the flight deck, where dangerous concentrations of the gas could not accumulate or be drawn into the supply ventilation in the event of action damage in the vicinity.

### 4942.—Aircraft—Compasses, Landing Medium—Reference 6B/34

(N.S. Air 8279/44.—14 Sep. 1944.)

In order to swing aircraft for adjustment of compasses when a compass base is not available, the undermentioned item has been introduced and will be allowed to ships and services in accordance with the following scales :—

Reference 6B/34—Compasses landing, medium, with tripod and carrying case—

| Ships (except repair ships) ... B.R. 378 Cols. | 8 | 9 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 2 | 2 |

| | |
|---|---|
| Maintenance repair ships ... ... ... ... ... | 1 No. |
| Shore establishments— | |
| R.N. air stations, main store ... ... ... ... | 2 No. |
| Class B stations ... ... ... ... ... ... | 1 No. |
| R.N. aircraft repair yards, classes A and B ... ... | 1 No. |
| Squadron servicing units ... ... ... ... ... | 1 No. |

2. The following services should be supplied from R.N. Store Depot, Midland Area (Stafford) without demand :—

| | |
|---|---|
| R.N. Air Station, Piarco, Trinidad ... ... ... | 2 |
| R.N. Air Section, Dartmouth, Nova Scotia ... ... | 2 |

3. Other services concerned should forward demands to their normal source of supply of air stores quoting this order as authority for supply. Issues to new services will be made with their initial outfit of stores.

4. Deliveries off contract are very slow but supplies to ships and services will be made as soon as possible.

5. Arrangements have been made for the necessary quantities to be despatched to yards abroad to cover the requirements of ships and services attached to foreign stations.

6. Details of the quantities to be supplied are being forwarded direct to the (Superintending) Naval Store Officer, concerned.

### 4943.—Sea Otter and Swordfish Aircraft—Exhaust System Anti-Glow Paint

(N.S. 052326/44.—14 Sep. 1944.)

Anti-glow paint, H. T.P. No. 215 will be issued to ships and services concerned, for painting the exhaust systems of Sea Otter and Swordfish aircraft required for night flying.

2. Instructions for use of this anti-glow paint will shortly be promulgated in Naval Air Maintenance Orders.

3. This item will be allowed to ships and services in accordance with the following scales :—

Ships (except repair ships) as shown in B.R. 378 (A).

Repair ships and shore establishments as shown in B.R. 377 (A).

Repair ships and shore establishments (Sea Otter) as follows :—

| Ref. No. | Description | Denomination | R.N. Air Stations | | R.N. Aircraft Repair yards | | Repair ships |
|---|---|---|---|---|---|---|---|
| | | | Main store | | Main store | | |
| | | | Class "A" | Class "B" | Class "A" | Class "B" | Main store |
| | | | *Section 33B.* | | | | |
| — | Anti-glow Paint H.T.P. No. 215 | lbs. | 24 | 12 | 48 | 72 | 24 |



4. The undermentioned Services will be supplied from R.N. Store Depot, Stafford, without demand :—

R.N. Air Section, Dartmouth, N.S.

R.N.T.A.G. School, R.C.A.F., Yarmouth, N.S.

5. Other Services concerned should forward demands to their normal source of supply of Air Stores, quoting this Order as authority for supply. Issues to new Services will be made with their initial outfit of stores.

6. Deliveries from Contractors are expected shortly, and issues will be made as stocks become available.

7. Arrangements have been made for the necessary quantities to be despatched to yards abroad to cover requirements of Ships and Services attached to Foreign Stations. Details of the quantities being supplied are being forwarded to (S) Naval Store Officers concerned.

### 4944.—Ammunition Supply—Smoke Generators No. 26—Stowage Racks

(D.N.C./C.I.N.O. 276/44.—14 Sep. 1944.)

With reference to C.A.F.O. 1220/44 stowage racks may be demanded from Director of Contract Work (Supplies), Admiralty, Bath.

*(C.A.F.O. 1220/44.)*

### 4945.—Battery, Pattern W.2317, for Intermediate Signalling Lantern, Pattern W.2174—Charging Instructions—Pattern W.2318A, Battery Box—Instructions for Conversion to Pattern W.2318B

(N.S. 16289/44.—14 Sep. 1944.)

The following instructions are issued for the care and maintenance of batteries, Pattern W.2317, for use with intermediate signalling lantern, Pattern W.2174.

2. The charging instructions shown on the plate on battery boxes, Pattern W.2318A, apply *only* to batteries fitted with dry wooden separators (i.e., batteries having the vents sealed by a celluloid strip marked "This seal must be broken").

3. For batteries fitted with wet wooden separators (i.e., batteries having vents not sealed) the charging instructions shown on the plate are incorrect.

4. The correct charging instructions for both types of battery are given in paragraph (6) below.

5. All plates giving charging instructions are to be removed from battery boxes, Pattern W.2318A. New plates, Pattern 56265, giving the correct charging instructions for both types of battery are in course of production, and ships should demand the requisite number of these new plates to replace those removed, quoting this Order as authority. Boxes fitted with the new charging instructions plate will be known as Pattern W.2318B, and ships are to have the nameplate on the box amended accordingly when the new charging instructions plate is fitted.

6. The revised charging instructions for batteries, Pattern W.2317, are as follows :—

*First Charge*

(*a*) *Batteries Fitted with Dry Wooden Separators (Vents Sealed by a Celluloid Strip Marked "This Seal Must be Broken").*—Fill to $\frac{3}{16}$-in. above the separators with sulphuric acid 1·270 specific gravity. Stand for 12 hours. Add sufficient acid to restore to original level. Charge at 3 amps until the voltage and specific gravity remain steady for one hour. The duration of charge is approximately 16 hours. Check final specific gravity and adjust if necessary to 1·285 at 60°F.

(*b*) *Batteries Fitted with Wet Wooden Separators (Vents not Sealed).*—Fil to $\frac{3}{16}$-in. above the separators with sulphuric acid 1·350 specific gravity. Stand for 12 hours. Add sufficient acid to restore to original level. Charge at 3 amps until the voltage and specific gravity remain steady for one hour. The duration of charge is 50 hours approximately. Check final specific gravity. This should not be more than 1·295 or not less than 1·280 corrected to 60°F. If outside these limits, adjust to 1·285 at 60°F.

*Recharge*

*Applicable to Batteries with Either Dry Wooden or Wet Wooden Separators.*—Recharge at 3 amps until all the cells are gassing freely and voltage and specific gravity remain steady for one hour. In hot climates, or when the temperatures of the cells exceed 100°F., reduce the charge rate to 1·5 amps.

*Maintain level* of acid at $\frac{3}{16}$-in. above the separators by using distilled water only.

7. All stocks of battery boxes, Pattern W.2318A, should be converted to Pattern 2318B in accordance with paragraph 5 above.

8. The plates, Pattern 56265, have been ordered from the British Metal Engraving Co., Ltd., for delivery as follows:—

| | | | | |
|---|---|---|---|---|
| *Rosyth* | *Chatham* | *Sheerness* | *Portsmouth* | *Devonport* |
| 1,000 | 1,000 | 500 | 1,000 | 1,000 |
| *Stroud* | *Haslemere* | *Glasgow* | *Newcastle* | *Leeds* |
| 1,000 | 2,000 | 500 | 500 | 500 |
| *Mossley* | | | | |
| 1,500 | | | | |

This item has been added to the Authorized List of Naval Stores under Subhead F.2A.

9. The Sea Store Establishments concerned will be amended.

10. Attention is directed to the general instructions for the Care and Maintenance of Secondary Batteries given in B.R. 268(9).

(*A.F.O. 1791/42.*)

(*A.F.O. 845/43 is cancelled.*)

### 4946.—Circulating Water Sea Inlet Chests—As. and As.

*L.C.T.(3) Sterling*

(D.C.O.M. 4511/44.—14 Sep. 1944.)

It has been found that in service, quantities of air become trapped in the upper part of the sea inlet chest. Two in number, air vent holes 2-in. in diameter should be drilled in the ship's side plating in way of each sea chest. They should be arranged, one at forward and one at after end of the chest, and as high as possible, subject to the chest attachment angles not being cut.

2. An A. and A. item, Classification "A", should be forwarded to cover this work, which should be done by base staffs.

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

### 4947.—Condensers, 30 mfd. (Electrolytic)

(N.S. 14537/44.—14 Sep. 1944.)

Condensers, 30 mfd. (Electrolytic), Pattern 9773, are being superseded by a modified type with all-aluminium internal construction and fitted with tags in addition to terminals. This modified type is designated Pattern 9773A, and all future supplies will be of this pattern. Pattern 9773 will be marked obsolete in the Rate Book and Pattern 9773A added in lieu.



2. The new type of condenser has a "shelf-life" which is, at present, not greater than two years, and its safe working life after this maximum shelf life not more than another three to four years.

3. The Sea Store Establishments concerned will be amended.

### 4948.—Degaussing—D.G. Treatment of L.C.G.(M)

(S.D.G.(L) 2122/44.—14 Sep. 1944.)

L.C.G.(M) are to be given Flashing and Deperming treatment as a routine measure when the results of ranging or survey show that D.G. treatment is necessary and time and operational requirements permit.

2. Attention is called to the fact that the deviation of the compasses will change gradually as the D.G. treatment decays.

(*A.F.O. 2280/43.*)

### 4949.—Lubricating Oil Coolers and F.W. Heat Exchangers

*L.C.T.(3) Sterling*

(D.C.O.M. 3362/44.—14 Sep. 1944.)

Failure of tubes in the above coolers is partly attributable to vibration transmitted from the ship structure in way of the engine seatings.

2. In order to reduce the effect of vibration, the lubricating oil coolers should be mounted on soft rubber pads as shown in A.F.O. Diagram No. 290/44. An A. and A item, Classification "A", should be forwarded to cover this work, which should be done by base staffs.

3. As a routine measure the following should be carried out daily:—

(*a*) Lubricating oil sump tanks should be tested for water by cracking the drain cocks. The presence of water will indicate failure of the cooler or defective cylinder head, or defective exhaust manifold.

(*b*) Immediately after starting engines, or in the event of finding water in the sump tanks, the overboard circulating water discharge should be observed for signs of lubricating oil, which would also indicate failure of the cooler.

(*c*) Sample of fresh water from cooling system to be tested daily with silver nitrate.

4. Defective tubes in lubricating oil cooler or in heat exchanger may be plugged, up to a maximum of 30 per cooler. When more than 30 tubes become defective, cooler should be replaced by a new one, and the old cooler returned to:—

The Resident Engineer Overseer,
Staff of D.C.F.M.,
c/o Messrs. Lendrum & Hartman,
Old Oak Lane, Willesden, N.W.10.

### 4950.—Main Batteries—Wedging of

*H.M. Submarines*

(D. 09893/44.—14 Sep. 1944.)

Examination of the battery tanks in certain submarines has shown the wedging of the cell containers to be unsatisfactory.

2. The efficient wedging of the main batteries in submarines is of vital importance and particular attention is to be given to the workmanship and materials used, whenever batteries are first installed or changed in accordance with the provisions of C.A.F.O. 2217/43.

3. Wedges are to be of soft wood, thoroughly seasoned, as sawn, and not planed smooth, and to be of sufficient length to reach from the top

to the bottom of the cells. No "make up" pieces of wood are to be used for packing. Wedges are not to be soaked in paraffin wax. A horizontal closer, ¾ of an inch thick, is to be fitted along the tops of the wedges to prevent them moving from the vertical position, the top surface of the closer being level with the tops of the containers.

4. Wedges are to be approximately 4½-in. wide along the rows of cells, at their joints, and 2¼-in. wide at the ends of the rows.

*(A.S. Portsmouth, 18 Apr. 1944, No. 2799.)*

*(C.A.F.O. 2217/43.)*

### 4951.—Radio Interference Suppressors, A.P. 19449, 19449A—Introduction

(N.S. 31362/44.—14 Sep. 1944.)

In order to eliminate radio interference arising from various forms of electrical transmission systems, a new radio interference suppressor has been introduced and added to the Authorized List of Naval Stores under Sub-head F2B, Schedule C750, as follows:—

| *Pattern No.* | *Description* |
|---|---|
| 19449 | Radio interference suppressor for repeater circuits (24 volts, 5 amps.). |

2. It is sometimes necessary to locate suppressors of this type close to magnetic compasses, and a non-magnetic suppressor similar to A.P. 19449 is also being added to the Authorized List of Naval Stores as follows:—

| *Pattern No.* | *Description* |
|---|---|
| 19449A | Radio interference suppressor for repeater circuits (24 volts, 5 amps.), non-magnetic. |

3. The minimum safe distance of the A.P. 19449A suppressor is 18 inches.

4. Demands for these items are to be made on S.N.S.O., Stroud, quoting the authority under which the demand is made.

5. An initial purchase of 3,800 suppressors, Pattern 19449, and 200 suppressors, Pattern 19449A, has been arranged for delivery as follows:—

| *Pattern No.* | *Stroud* | *Oldham* |
|---|---|---|
| 19449 ... ... ... | 800 | 3,000 |
| 19449A ... ... ... | 200 | — |

### 4952.—Shipment of Naval Aircraft Boats and Tenders—Procedure

(N.S./A.O.D. 112/44.—14 Sep. 1944.)

The following instructions are promulgated for the guidance of all concerned when Naval Aircraft Boats and Tenders are shipped by R.N. Air Stations at home for service overseas:—

*Inventories (S. 1099) of permanent Naval Stores—procedure.*

(*a*) Details of the boat and the S.1099 inventory are to be entered on forms S.549, prepared in quintuplicate by the Accountant Officer of the R.N. Air Station transferring the boat, and the five copies, together with the *boat's copy of the S.1099 inventory*, should be forwarded to the Naval Officer-in-Charge at the port of embarkation.

(*b*) The Naval Officer-in-Charge at the port of embarkation is to endorse all five copies of the forms S.549 with the following certificate:—

Certified that Motor Safety Boat No.....with equipment was embarked in.....
on.....

Signature.....

and return them to the Accountant Officer of the R.N. Air Station transferring the boat.



(*c*) The Accountant Officer of the R.N. Air Station transferring the boat should retain one copy for accounting purposes and forward the remaining four copies of the form S.549, with the *Station's copy of the S.1099 inventory*, to the Director of Naval Air Organisation, Admiralty, for onward transmission to the new Administrative Authority.

(*d*) The Accountant Officer of the new parent R.N. Air Station is to retain one copy of the form S.549 for taking the S.1099 inventory on charge in the Station's Naval Store Account. The three remaining copies of the form S.549 are to be *receipted* and disposed of as follows:—

(i) One copy to be forwarded to the Accountant Officer of the R.N. Air Station transferring the boat, who will pair it with the copy referred to at (*c*) above, and retain it with the Station's Naval Store Accounting documents.

(ii) Two copies to be forwarded to the Director of Stores (4A) Admiralty.

(*e*) The Naval Officer-in-Charge at the port of embarkation is responsible for packing and embarking removable fittings. The boat's copy of the inventory (S.1099) is to be included in this packing.

*(F.O.N.A.S. Ref. No. 661/8A of 14 Mar. 1944.)*

### 4953.—Towing Equipment—As. and As.

*H.M. Submarines*

(D/P. 06164/44.—14 Sep. 1944.)

| | |
|---|---|
| Item No. "T" class ... ... ... ... ... ... | 540. |
| Item No. "S" class ... ... ... ... ... ... | 536. |
| Item No. "U" class ... ... ... ... ... ... | 531. |
| Item No. O.P.R. and Minelayer and "River" classes Classification "A". | 518. |

To avoid the chafing of the wire in the nip of the joining shackle, the outboard ends of the towing pendants in all submarines are to be fitted with a thimble, appropriate to the size of wire, and in all vessels except "U" class the spare anchor shackle (ordinary) normally carried in the superstructure is to be stowed in a readily accessible position on the bridge, for attaching to the pendant when necessary to "break out tow".

2. "U" class submarines are to be supplied with a ¾-in. anchor shackle (ordinary) to be stowed on the bridge.

3. In 1940 "S" class where not already fitted, and in "T" class, a boltstave is to be welded at an easy angle between the after end of the hydroplane guard and the casing to prevent the towing pendant fouling the hydroplane when "breaking out tow". This angle is to be not greater than 20 degrees to the horizontal. In "U" class the guards to the forward hydroplanes are to be led down to the superstructure at the after end, as arranged for the forward end, and the guards are to extend just above the hydroplane when housed.

In "T" class the lead of the towing wire is to be brought into line with other classes and led along the casing inside the hydroplane guard. The ledge on the outside of the hydroplane guard is to be removed and the outline of the guard cut back accordingly.

4. Wooden chocks are to be fitted round the edges of the hydroplane guards of all submarines so as to reduce the gap between hydroplane and guard to ½-in. and prevent the towing wire slipping between the hydroplanes and the hydroplane guards when the planes are housed.

5. The towing pendant, where it is led aft from the bull ring to the bridge, is to be secured to the casing in such a manner that damage is not caused to the wire when it is "broken out" for "taking in tow".

The present fittings for securing the towing pendant to the casing are to be examined and modified where necessary to allow the wire to be well secured in the stowed position (clips being omitted in way of hydroplane guard) but not in such a way that it would be liable to damage when being "broken out". A.F.O. diagram No. 296/44 shows the arrangement to be worked to.

6. The necessary work entailed in fitting thimbles and shackles, etc. is to be carried out by depot ships' staff.

7. The thimbles and anchor joining shackles are to be demanded from vessels' storing yard.

8. Special instructions will be issued by the Admiralty for vessels under construction.

(*Admiral(S), 30 May, 1944, No. 992/S.M. 522.*)

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

## 4954.—Use of Neoprene Sheathing in Lieu of Tough Rubber Sheathing for A.P. Cables

(N.S. 010137/44.—14 Sep. 1944.)

In view of the increased supplies of neoprene now becoming available, permission has been extended to the cable industry for the use of neoprene in lieu of tough rubber for the sheathing of a large number of T.R.S. cables in Admiralty Standard Electrical Specification No. 14.

2. The industry has been advised that, with the exception of those cables in Tables 10, 11, 13 (Pattern 9817A only) and 16, all T.R.S. cables in S.E.S. No. 14 may be supplied with neoprene sheathing or with T.R.S. at manufacturers' option.

3. If the option to use neoprene is exercised the existing suffix letter to the pattern number will be deleted and replaced by the letter "N" or, where no suffix letter at present exists, the letter "N" will be added.

4. In order to distinguish between neoprene sheathed cable and T.R.S. type the former will have the usual identification threads replaced by a printed tape bearing manufacturer's name, year of manufacture and the letter "N". Tapes marked with manufacturer's name and the year of manufacture are a standard product, but printing of the letter "N" may cause some initial delay, and in this case firms have been permitted to include a black thread in lieu, until arrangements for printing "N" on the tapes can be made. Degraded insulant will be indicated by the words "War Emergency" printed on the identification tape, or by the inclusion of a red thread as at present used for other types of cable.

5. The cables in Table 16 (Patterns 7143, 7147A–7151S, 7159 and 9754A) and Pattern 9817A in Table 13 will continue for the present to be supplied with tough rubber sheathing pending trials to determine the suitability of neoprene for these important types.

6. With regard to the cables in Tables 10 and 11 (single and multicore flexibles flameproof braided) it has been decided to supersede these by an equivalent range of neoprene-sheathed cables, Patterns 13108–13132 (detailed below), for all services other than trough platform lead-in systems.

7. For trough platform systems it will still be necessary to use the T.R.S. oilproof taped and flameproof braided cables, and sufficient quantities of cables, Patterns 4516D, 4517D, 4518, 2518D, 4504, 4505, 4508, 4515, 13783 and 13784, will be made available for these systems. These tough rubber-sheathed cables will not be supplied unless demands are endorsed "FOR TROUGH PLATFORM SYSTEM".

8. The foregoing does not preclude the permitted use of polyvinyl chloride (P.V.C.) sheathing for certain cables, details of which were circulated on A.F.O. 606/43. It is possible, therefore, for these cables to be supplied in any one of three finishes, viz., T.R.S., P.V.C. or neoprene.



TABLE 1

*Rubber Insulated Single Conductor Specially Flexible, Oil and Fire Resisting Sheathed Cables*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pattern No. | No. and diameter (ins.) of wires in conductor | Diameter over conductor in. | Nominal sectional area sq. in. | Current carrying capacity amps. | Radial thickness of insulant in. | Diameter over insulant in. | Radial thickness of oil and fire resisting sheath in. | Diameter over oil and fire resisting sheath in. | Minimum insulation resistance for 1,000 yds at 60° F. at 500 volts megohms | Maximum conductor resistance per 1,000 yds. at 60° F. ohms | Dielectric strength test pressure volts | Length on coil or drum yds. | Weight per 1,000 yds. lbs. | Service |
| 13124 | 2280/·012 | 0·760 | 0·25 | 214 | 0·095 | 0·950 | 0·080 | 1·110 | 400 | 0·101 | 3,500 | 250 | | Services requiring special flexibility under twist, such as in the lead-in of cables to director control towers, etc. |
| 13125 | 1380/·012 | 0·570 | 0·15 | 152 | 0·080 | 0·730 | 0·080 | 0·890 | 425 | 0·168 | 3,500 | 250 | | |
| 13126 | 416/·018 | 0·490 | 0·10 | 118 | 0·072 | 0·634 | 0·070 | 0·774 | 475 | 0·248 | 3,500 | 500 | | |
| 13127 | 248/·018 | 0·380 | 0·06 | 83 | 0·062 | 0·504 | 0·070 | 0·644 | 500 | 0·416 | 1,500 | 500 | | |
| 13128 | 490/·0076 | 0·225 | 0·0225 | 46 | 0·049 | 0·323 | 0·060 | 0·443 | 650 | 1·180 | 1,500 | 500 | | |
| 13129 | 97/·012 | 0·150 | 0·01 | 31 | 0·043 | 0·236 | 0·060 | 0·356 | 800 | 2·389 | 1,500 | 500 | | |
| 13130 | 162/·0076 | 0·120 | 0·007 | 20 | 0·039 | 0·198 | 0·060 | 0·318 | 900 | 3·570 | 1,500 | 500 | | |
| 13131 | 19/·018 | 0·090 | 0·0045 | 15 | 0·039 | 0·168 | 0·050 | 0·263 | 1,000 | 5·270 | 1,500 | 500 | | |
| 13132 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·050 | 0·248 | 1,000 | 8·260 | 1,500 | 500 | | |

TABLE 2

*Rubber Insulated Multicore Specially Flexible, Oil and Fire Resisting Sheathed Cables*

| Pattern No. | No. of cores | No. and diameter (ins.) of wires in conductor | Diameter over conductor in. | Nominal sectional area. sq. in. | *Current carrying capacity amps. | Radial thickness of insulant in. | Diameter over insulant in. | Diameter over taped core in. | Diameter over tape over laid up cores in. | Radial thickness of oil and fire-resisting sheath in. | Diameter over oil and fire resisting sheath in. | Minimum insulation resistance for 1,000 yds. at 60° F. at 500 volts megohms | Maximum conductor resistance per 1,000 yds. at 60° F. ohms | Dielectric strength test pressure volts | Length on drum or coil yds. | Weight per length lbs. | Service |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13956 | 2 | 40/·0076 | 0·057 | 0·0017 | 5 | 0·035 | 0·127† | — | 0·266 | 0·050 | 0·366 | 1,200 | 14·4 | 1,500 | 500 | | Services requiring special flexibility under twist, such as in the lead-in of cables to director control towers, etc. |
| 13108 | 2 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·332 | 0·060 | 0·452 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13109 | 3 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·356 | 0·060 | 0·476 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13110 | 4 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·398 | 0·060 | 0·518 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13111 | 5 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·443 | 0·060 | 0·563 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13112 | 8 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·592 | 0·070 | 0·734 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13113 | 10 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·652 | 0·070 | 0·792 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13114 | 15 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·764 | 0·080 | 0·924 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13115 | 22 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 0·972 | 0·080 | 1·132 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13959 | 28 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 1·034 | 0·100 | 1·234 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13116 | 30 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 1·049 | 0·100 | 1·249 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13773 | 36 | 70/·0076 | 0·076 | 0·003 | 10 | 0·036 | 0·148 | 0·160 | 1·144 | 0·100 | 1·344 | 1,000 | 8·26 | 1,500 | 500 | | |
| 13117 | 2 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 0·372 | 0·060 | 0·492 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13118 | 4 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 0·447 | 0·060 | 0·567 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13119 | 8 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 0·663 | 0·070 | 0·803 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13120 | 10 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 0·732 | 0·070 | 0·872 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13121 | 15 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 0·858 | 0·080 | 1·018 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13122 | 22 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 1·104 | 0·100 | 1·304 | 1,000 | 5·25 | 1,500 | 500 | | |
| 13123 | 30 | 110/·0077 | 0·092 | 0·0048 | 15 | 0·038 | 0·168 | 0·180 | 1·177 | 0·100 | 1·377 | 1,000 | 5·25 | 1,500 | 500 | | |

* *See* Clause 10 of the specification.

* Cores coloured red and black respectively.

(*A.F.O. 606/43.*)



## 4955.—Valve Amplifying Gear—Introduction of New Items

(N.S. 23673/44.—14 Sep. 1944.)

The following items have been added to the Rate Book of Naval Stores under Subhead F, Item 1C, Part III.

| *Pattern* | *Description* |
|---|---|
| 13316B | Amplifiers, 20 watt, 115/230 volt. |
| 13326B | Boxes, control, 9-way, with provision for " talk-back ". |
| 12565 | Boxes, control, 12-way, with provision for " talk-back ". |
| 12567 | Boxes, control, 5-way, with provision for " talk-back ". |

2. Purchase has been arranged with Vitavox, Ltd., under contract C.P. 102955/43, dated 26th November, 1943, for delivery as follows:—

| | *13316B* | *13326B* | *12565* | *12567* |
|---|---|---|---|---|
| Chatham ... ... | 10 | 5 | 3 | 5 |
| Portsmouth ... ... | 10 | 5 | 3 | 5 |
| Devonport ... ... | 10 | 5 | 3 | 5 |
| Rosyth ... ... ... | 10 | 5 | 3 | 5 |
| Glasgow ... ... | 10 | 5 | 3 | 5 |
| Newcastle ... ... | 10 | 5 | 3 | 5 |
| Leeds ... ... ... | 10 | 5 | 3 | 5 |
| Carfin ... ... ... | 10 | 5 | 3 | 5 |
| Stroud ... ... ... | 10 | 5 | 3 | 5 |
| Preston ... ... | 10 | 5 | 3 | 5 |

3. These items are required for the installation of Controlled Talk-back Broadcast Systems in accordance with approved wiring diagrams for new construction vessels and other requirements which will be communicated to overseers and dockyards concerned as they arise.

4. The introduction of the new items renders obsolete the following articles:—

Amplifiers, Patterns 13316 and 13316A.

Boxes, control, Patterns 13326, 13326A, 13327, 13327A, 13327B, 13328, 13328A and 13328B.

## 4956.—Wallets for Tools, Pattern 15—Allowances

*Flotilla Leaders and Destroyers (including " Hunt " Class)*

(N.S/G. 2288/44.—14 Sep. 1944.)

The allowances of wallets for tools, Pattern 15, to flotilla leaders and destroyers, including " Hunt " class, have been revised and are now to be as follows:—

Flotilla leaders and destroyers 1 per 4-in., 4·5-in. or 4·7-in. gun mounting (excluding " Hunt " class).

" Hunt " class destroyers ... 1 per 4-in. gun mounting

2. The number of wallets held on board is to be adjusted accordingly and any found to be surplus to the revised allowance are to be returned to the nearest dockyard or Naval Store Depot. Warrant yards are to arrange for supplies to new construction vessels to be adjusted as necessary.

3. B.R. 332A and B.R. 373—Establishments of Naval Stores for Flotilla Leaders and Destroyers and " Hunt " Class Destroyers respectively—will be amended.

## Section 4

# OTHER STORES—NAVAL STORES, VICTUALLING STORES MEDICAL STORES, CONTRACTS

### 4957.—Gas Cylinders for Engineering and Medical Purposes—Filling, Testing, Identifying, etc.

(D.13326/44.—14 Sep. 1944.)

With a view to ensuring that Admiralty cylinders of gases for engineering and medical purposes can only be used for the purposes for which provided, they are to be marked in accordance with the colour scheme laid down in the following table which arranges uniformity so far as practicable with the B.S.I. Specification No. 349/32 of identification colours for gas cylinders :—

| Gas | Ground colour of Cylinder | Colour of Band |
|---|---|---|
| *Gases for Engineering purposes* | | |
| Acetylene ... ... ... | Maroon ... ... | None. |
| Air ... ... ... ... | Grey ... ... | None. |
| Ammonia ... ... ... ... | Black ... ... | Red and yellow (*see* notes). |
| Carbon dioxide (for tropical and marine use). | Black ... ... | White or aluminium. |
| Chlorine ... ... ... ... | Yellow ... ... | None. |
| Chlorine cylinders, fitted with internal dip pipes. | Yellow ... ... | Black. |
| Coal gas ... ... ... ... | Red ... ... | None. |
| Freon ... ... ... ... | Parti-coloured, bottom end grey, neck end mauve. | None. |
| Hydrogen ... ... ... | Red ... ... | None. |
| Methyl chloride (inflammable) ... | Green ... ... | Red. |
| Oxygen ... ... ... ... | Black ... ... | None. |
| Sulphur dioxide ... ... ... | Green ... ... | Yellow. |
| Butane ... ... ... ... | Aluminium ... | Red and yellow (*see* notes). |
| Calor gas ... ... ... ... | Dark grey ... ... | None (marked calor gas). |
| *Gases for Medical Purposes* | | |
| Carbon dioxide (for inhalation)... | Green with black bottom. | None (*see* notes). |
| Carbon dioxide with internal tube (for snow making). | Green ... ... | None (*see* notes). |
| Ethyl chloride (inflammable) ... | Grey ... ... | Red (*see* notes). |
| Ethyl chloride (non-inflammable) | Grey ... ... | None (*see* notes). |
| Ethylene ... ... ... ... | Mauve ... ... | Red (*see* notes). |
| Nitrous oxide ... ... ... | Black ... ... | None (*see* notes). |
| Oxygen ... ... ... ... | Black ... ... | White (*see* notes). |
| Oxygen and carbon dioxide mixture. | Black ... ... | Green with white neck (*see* notes). |

*Notes*

(i) Some cylinders, containing Butane are at present painted red with "Butane" stencilled on the wall of the cylinder. This marking is not to be changed until repainting is necessary, when marking in accordance with the above table should be arranged.

(ii) All cylinders containing gases for medical purposes are to have the word "Medical" stencilled, and the chemical symbol of the gas marked in bold lettering near the shoulders of the cylinder.



(iii) Cylinders containing gases or gas mixture for which an exclusive identification colour has not been provided shall be coloured and marked to meet the requirements of Addendum C.E. (C.H.) 7034 to B.S.I. No. 349/1932.

(iv) The screw thread on boss of outlet valve fitting is internal for oxygen cylinders. The screw thread on boss of outlet valve fitting is external for nitrous oxide cylinders.

(v) Distinguishing colour bands are to be painted round the neck of the cylinder close to the valve fitting.

(vi) The red band on cylinder containing ammonia gas is to be placed adjacent to the valve fitting and the yellow band between that and the ground colour of the cylinder.

2. Nitrous oxide gas is filled into cylinders forwarded direct from the hospital to the contractors who test, fill, and stamp the cylinders, and when necessary paint them to conform to the specification quoted in paragraph 1 above.

3. All the work on cylinders containing carbon dioxide, oxygen, and oxygen and carbon dioxide mixture is to be carried out by the Engineering Department.

4. The following procedure for the supply, filling and testing of cylinders containing gas for medical purposes which has been adopted at Portsmouth is promulgated for information and guidance :—

(i) *Supply.*—Flasks for $CO_2$ and oxygen carbon dioxide gas to be manufactured by accredited manufacturers of gas flasks.

(ii) *Filling.*—The procedure for filling 4-lb. $CO_2$ flasks from $CO_2$ flasks of Admiralty or commercial type is as follows :—

Open valve on 4-lb. $CO_2$ flask to ensure it being empty, and then close valve.

Weigh the empty 4-lb. $CO_2$ flask by means of Salter's spring balance (30-lb. capacity).

Suspend 40-lb. flask of $CO_2$ valve downwards above the 4-lb. flask to be filled which is stood vertically on its base, and connect the valves on the flasks by $\frac{1}{4}$-in. bore copper charging pipe which includes two coils of about 8-in. diameter to give it flexibility. The union nut on this pipe adjacent to the 40-lb. $CO_2$ flask is screwed up tightly, whilst the nut on the 4-lb. flask is screwed on three or four threads of the valve, loosely.

Open valve on the 40-lb. $CO_2$ flask and blow air out of charging pipe. Then tighten union nut of charging pipe on the 4-lb. flask, and shut valve on the 40-lb. $CO_2$ flask.

Open valve on the 4-lb. $CO_2$ flask, and sharply open valve on the 40-lb. $CO_2$ flask, and leave flasks in this condition for at least a quarter of an hour for pressure to equalize in both flasks.

Shut valve on 4-lb. flask, then valve on 40-lb. flask, and disconnect charging pipe. Re-weigh 4-lb. flask. Difference between weight recorded and weight empty equals weight of $CO_2$ in flask. (*Note.*—It is only possible to get 4-lb. of $CO_2$ in 4-lb. flask (15 cu. ft. capacity) when using a full 40-lb. $CO_2$ flask for filling purposes. After filling about six 4-lb flasks from a full 40-lb. $CO_2$ flask, it is only possible to get about $2\frac{3}{4}$-lb. $CO_2$ in the sixth 4-lb. flask.)

After filling 4-lb. flask, its valve and neck joint are immersed in water to ascertain that there is no leakage.

(iii) *Testing.*—Rough history sheets have been kept of these flasks of which there are very few (about 24) in use, to ensure that they are water-pressure tested biennially.

Before testing, the valves are removed and refitted, and the interior of the flask cleaned by hand rumbling, using water and broken balls from old ball-bearing races, as a scouring agent. The flasks are water-pressure tested to 3,000 lb. per sq. in. in a water jacket, and the expansion under pressure, and permanent set, if any, noted. Flasks usually show an expansion of 0·3 to 0·4 cubic inches, and no permanent set. Any with permanent set are reported to Admiralty, and those flasks showing permanent set over 4 per cent. of the recorded expansion under test are condemned.

(iv) *Stamping.*—After satisfactory water-pressure test, flasks are stamped on neck with date of test and inspector's stamp. Valves of the 4-lb. $CO_2$ flasks in circulation have the symbol "$CO_2$" stamped on them. History sheets D.215 are raised to accompany flasks.

(v) *Colouring.*—All $CO_2$ flasks for medicinal purposes are painted to conform with the Specification referred to, and the table contained in paragraph1 above which, in the case of $CO_2$ flasks for medicinal purposes, is green with lower quarter length and bottom painted black.

(vi) As regards flasks for oxygen carbon dioxide, the procedure for filling is as follows :—

Empty flask and close valve.

Connect flask with 40-lb. $CO_2$ flask, by means of charging pipe described above, and allow $CO_2$ to flow into flask until pressure recorded in flask is 123½ lb. per sq. in., and close valve.

Disconnect charging pipe.

Place flask on charging table and connect it up with charging pipe to a group of four empty oxygen flasks (100 cu. ft. capacity each), which are in turn connected to oxygen compressor discharge pipe.

Start up oxygen compressor and raise pressure in the discharge pipe and the four empty oxygen flasks, which form a reservoir for the discharge system, until it reaches 500 lb. per sq. in. ; blow air out of charging pipe, tighten up nut on flask being charged and pump oxygen into flask until pressure of contents is 1,764 lb. per sq. in.

Shut valve, disconnect charging pipe, and test $CO_2$ content by means of Orsat apparatus. Flasks are subsequently checked for $CO_2$ content by Principal Chemist before issue.

(vii) *Testing.*—Generally, as described above for $CO_2$ flasks, except,in addition, great care is exercised to keep flasks and their fittings and pipes and gauges used for testing, etc., clear of all oil or grease.

(viii) *Stamping after Test.*—As for $CO_2$ flasks ; usually the valves of these flasks have the symbol "O and $CO_2$" stamped on.

(ix) *Colouring.*—Flasks containing oxygen carbon dioxide are painted in accordance with the Specification referred to, and the table contained in paragraph 1 above. History Sheets D.215 are raised and circulated with flasks.

(*C.A.F.O. 1536/40 and A.F.O. 6206/42 are cancelled.*)

### 4958.—Storage of Marpharside

(M.D.G. 48643/44.—14 Sep. 1944.)

The necessity for cold storage of mapharside is again emphasized.

(*A.F.O. 5834/42.*)

### 4959.—Supplies of Fresh Provisions to Small Ships

(V. 3/2565/43.—14 Sep. 1944.)

Supplies of fresh provisions required by H.M. destroyers, corvettes and smaller vessels other than landing craft when at Naval bases should not be demanded direct from Admiralty contractors, as this gives rise to difficulty in accounting. Instructions for the procuring of supplies of fresh provisions by landing craft are contained in A.F.O. 5170/43 as amplified by A.F.O. 614/44.

2. Unless otherwise provided in local orders the procedure for obtaining supplies of fresh provisions at naval bases and ports other than Liverpool is as follows :—

(*a*) *Naval Bases where there is no victualling yard or depot.*—Destroyers, corvettes and smaller vessels should demand supplies from the Base Accountant Officer, who should make the necessary arrangements for obtaining supplies from contractors, supervising distribution, etc. The Base Accountant Officer should obtain receipts from the vessels concerned, take the supplies on charge in his account, and furnish receipts on Form S.92 to the contractors. He should communicate particulars to the accounting base of the ships concerned, following the usual procedure for supplies of victualling stores.



(*b*) *Naval bases where there is a victualling yard or depot.*—Destroyers and corvettes should demand supplies from the victualling yard or depot. Smaller vessels, e.g., trawlers, should demand supplies from the Base Accountant Officer, except at certain places where special authority has been given for supplies to be demanded from the victualling yard or depot. When supplies are made by the Base Accountant Officer the procedure indicated at (*a*) above should be followed.

*Ports where there are Admiralty Contractors, but no victualling yard or depot or Base Accountant Officer.*—Supplies should be obtained direct from the Admiralty contractors, who should be requested to send a copy of the invoice for each supply to the accounting base. Receipts on Forms S.92 or D.55 as appropriate, should be forwarded to the contractor monthly *by the accounting base.*

3. At *Liverpool* where conditions are exceptional the procedure laid down in paragraph 2 (*c*) should be followed.

4. Fresh provisions drawn under Admiralty contracts should not be paid for in cash unless such a procedure has been specially ordered.

(*A.F.Os. 5170/43 and 614/44.*)

(*A.F.O. 4544/44 is cancelled.*)

### 4960.—Kits—Combined Operations Personnel

See AFO 1955/45. (V/1/6817/43.—14 Sep. 1944.)

The following *amendments* are to be made to A.F.O. 488/44 :—

(1) *Amend* "Support and Reconnaissance Units" *to read* "Naval Sections Bombardment Troops", throughout.

(2) *Add* to first sub-paragraph of paragraph 7 :—

"Supplies of intrenching tools and carriers, etc., are to be demanded from S.A.S.Os., Portsmouth, Plymouth, Chatham or Crombie".

*Add* sub-paragraph (iii) to paragraph 7 as follows :—

"(iii) For guidance in the compilation of demands, it is notified that the following items of equipment and clothing included in the appendices are of Army pattern and demands should indicate this before they are forwarded to victualling yards and depots.

Blanket
Knife
Fork
Spoon
Hold-all
Leather jerkin
Bush shirt, khaki
Trousers, drill, khaki
Shorts, drill, khaki
Hose tops, khaki
Anklets, web
Blouse, serge, khaki
Trousers, serge, khaki
Shirts, khaki (this is the shirt angola drab)
Boots (with nails)
Boots (without nails)
Socks, thick grey
Ground sheet
Cape, anti-gas
Belt, waist
Bottle, water
Bottle, water, carrier for
Braces, webbing
Field dressing
Frog
Pistol equipment
Haversack
Pack
Pack straps, supporting
Pouch
Brace attachment
Rifle-sling
Shoulder straps
Mess tin
Denim suits
Helmet camouflage net
Helmet comforter
Personal camouflage net
Braces for trousers
Sleeping bag

(3) *Add* to paragraph 12 :—

"except that officers and ratings may wear khaki tropical dress in lieu of white for *all* occasions on which tropical dress is worn".

(4) *C.O. Kit No. IIA* :—

*Amend* " (*a*) Trousers, serge, blue, Class II... ... ... ... 1 pr."
*to read* " (*a*) Trousers, serge, blue, Class I, II or III as appropriate to rating ... ... ... ... ... ... ... 1 pr."
*Insert* " (*c*) Rope soled shoes ... ... ... ... ... 1 pr."
*Add* footnote to Appendix 2 :—
" (*c*) For Engine room ratings only, not in possession of C.O. tropica kit No. IIC ".

(5) *C.O. Kit No. IIIA* :—

*Delete* " (pistol holster for officers) " after " (*b*) Frog "
*Add* " (*c*) " against " (*b*) Frog " and " (*b*) Rifle sling "
*Delete* " Bag cloth ... ... ... ... ... ... ... 1 No."
" (*b*) Light transport bag ... ... ... ... ... 1 No."
*Insert* "*(*b*) Light transport bag (or Army pattern in lieu) ... 2 No."
*Amend* " (*b*) Pouch ... ... ... ... ... ... ... 1 No."
*to read* " (*b*) Pouches ... ... ... ... ... ... 2 No."
*Add* " (*a*) Cap, knitted, woollen, blue ... ... ... ... 1 No."
*Add* " (*b*) Pack straps, supporting ... ... ... ... 2 No."
*Add* " (*b*) Intrenching implements, heads ... ... ... 1 No.
(*b*) Intrenching implements, helves ... ... ... 1 No.
(*b*) Carriers, intrenching tool, head ... ... ... 1 No.
(*b*) Carriers, intrenching tool, helve ... ... ... 1 No."

*Add* footnote to Appendix 3 :—
" (*c*) Officers and ratings armed with revolvers to be issued in lieu with :—
Brace attachments ... ... ... ... ... ... 2 No.
Pistol holster ... ... ... ... ... ... 1 No.
Pouch for pistol ammunition ... ... ... ... 1 No."

(6) *C.O. Kit No. IVA* :—

*Delete* " (Pistol holster for officers) " after " (*b*) Frog "
*Add* " (*g*) " against " (*b*) Frog " and " (*b*) Rifle sling "
*Delete* " Bag, cloth ... ... ... ... ... ... ... 1 No."
" (*b*) Light transport bag ... ... ... ... ... 1 No."
*Insert* " *(*b*) Light transport bag (or Army pattern in lieu) ... 2 No."
*Amend* " Shoulder straps ... ... ... ... ... ... 2 prs."
*to read* " Shoulder straps ... ... ... ... ... ... 1 pr."
*Amend* " (*b*) Pouch ... ... ... ... ... ... ... 1 No.
*to read* " (*b*) Pouches ... ... ... ... ... ... 2 No."
*Add* " (*a*) Cap, knitted, woollen, blue ... ... ... ... 1 No."
*Add* " (*f*) (*b*) Seaboots ... ... ... ... ... ... 1 pr."
*Add* " (*b*) Pack, straps, supporting ... ... ... ... 2 No."
*Add* " (*b*) Intrenching implements, heads ... ... ... 1 No.
(*b*) Intrenching implements, helves ... ... ... 1 No.
(*b*) Carriers, intrenching tool, head ... ... ... 1 No.
(*b*) Carriers, intrenching tool, helve ... ... ... 1 No."

*Add* footnotes to Appendix 4 :—
" (*f*) To be issued to personnel of landing craft recovery units only. If gum boots have already been issued gratuitously to officers under A.F.O. 3487/43, sea boots are not to be issued."
" (*g*) Officers and ratings armed with revolvers to be issued in lieu with :—
Brace attachments ... ... ... ... ... ... 2 No.
Pistol holster ... ... ... ... ... ... 1 No.
Pouch for pistol ammunition ... ... ... ... 1 No."

(7) *C.O. Kit No. VA* :—

*Amend* " *(*a*) Blouse, serge ... ... ... ... ... ... 2 No.
* (*a*) Trousers, serge ... ... ... ... ... 2 prs."
*to read* " * (*a*) Blouse, serge, khaki ... ... ... ... 2 No.
* (*a*) Trousers, serge, khaki ... ... ... ... 2 prs."

(*A.F.Os. 488/44, 1722/44, 2677/44 and 3206/44.*)



## 4961.—W.R.N.S.—Kit for Ratings Drafted to British Assault Area—REPORTS

(V/1/01133/44.—14 Sep. 1944.)

W.R.N.S. ratings drafted for duty to the British Assault Area are to receive the following additional articles of clothing :—

*Gratuitous Issue*—
2 pairs knickers, navy, woollen.
2 pairs stockings, black, woollen.
†2 cotton flannels.

*Personal Loan Issue*—
†2 pairs trousers, serge.
†1 jersey.
†1 oilskin suit and sou'wester.
†1 pair sea boots
†2 pairs sea boot stockings.
† Naval pattern.

2. Transport kit bags are to be supplied on loan in accordance with A.F.O. 5909/43.

3. Each rating will be responsible for keeping clean and in good order the articles of clothing issued to her on personal loan. Losses or damage due to misconduct or negligence are to be charged for in accordance with K.R. & A.I., Article **1883**, and A.F.O. 137/43. On termination of service in the British Assault Area the loan clothing is to be withdrawn and cleaned ready for re-issue.

4. If a rating already possesses as part of her regulation kit any of the articles mentioned in paragraph 1 above, she is not to be given a further issue.

5. Ratings are to receive the additional kit before leaving the United Kingdom and a suitable entry is to be made in their pay and identity books.

6. The issue of additional kit has been approved as a temporary measure only and the Flag Officer, British Assault Area, should report on 1st November next as to the suitability of the arrangements and whether the issue of the additional items is still necessary.

(*K.R. & A.I., Article 1883.*)

(*A.F.Os. 137/43, 5909/43 and 1048/44.*)

## 4962.—Royal Marines Borne on Ships' Books—Repairs, Alterations and Dry-Cleaning of Uniform

See AFO 2561/45.

(V./1/5305/44.—14 Sep. 1944.)

With reference to A.F.O. 2944/39 (procedure for gratuitous replacement of R.M. clothing and necessaries during hostilities), the cost of repairs, alterations and dry-cleaning of R.M. uniform of ranks borne on ships' books may be met from public funds, provided there has been no default or negligent use by the wearer.

2. Articles which require dry-cleaning, repairs or alterations are to be withdrawn from the owners and returned on completion. If this is impracticable for any reason (e.g. delay in return from contractors—particularly when only one of the articles is included in the man's kit) replacement issues may be made, the articles withdrawn being returned to stock on completion of cleaning, etc.

3. Accountant officers are to make arrangements for the cleaning, repairs or alterations to be carried out locally, the cost being charged to Vote 2N. Wherever possible, tenders from two or more local firms should be obtained by accountant officers. Repairs and alterations may be executed on board, if suitable facilities exist. It should be certified on the account that :—

(*a*) Dry-cleaning (and/or repairs or alterations) was necessary and satisfactorily carried out;

(*b*) Prices are considered fair and reasonable.

(*A.F.O. 2944/39.*)

(*A.F.O. 4409/44 is cancelled.*)

***4963.—Navigator's Yeoman—Badges**

(V. 8/2648/44.—14 Sep. 1944.)

A non-substantive badge has been approved for wear by ratings qualified as Navigator's Yeomen, as follows :—

| *Pattern No.* | *Description.* | *Issuing Price.* |
|---|---|---|
| 249A | Pair of dividers, red | 3*d.* each |
| 249B | Pair of dividers, blue | 2*d.* each |

(*A.F.O. 4167/43.*)

**4964.—Waste—Salvage and Disposal of Oily Rags and Cotton Waste**

*Home Dockyards and Shore Establishments*

(W.P.O./N.S. 24565/43.—14 Sep. 1944.)

All future arisings of oily rags should be sent for cleaning to:—

The Allied Industrial Services Ltd.,
Lidget Green,
Bradford,
Yorks.

2. The firm of Messrs. Shahinian Ltd. is not at present in a position to process further quantities of oily rags.

(*A.F.O. 2011/44.*)

**4965.—Naval Maintenance Shuttle Service from Portsmouth—Limitation of Weight of Packages**

(N.S. 976/44.—14 Sep. 1944.)

Owing to the lack of lifting facilities and stowage difficulties, packages containing stores and equipment despatched to Superintending Naval Store Officer, Portsmouth, for shipment to Northern France by the Naval Maintenance Shuttle Service have to be manhandled. The weight of individual packages should not, therefore, exceed 2 cwts.

2. Heavier packages may be despatched in the Stores Coaster service operating from *Devonport* but sailings are not so frequent.

3. Should particular urgency warrant, the S.N.S.O., Portsmouth, may be consulted about the possibility of despatch of heavier packages in the N.M.S.S. as special arrangements for loading and unloading will be involved.

(*S.N.S.O. Portsmouth's Postal Message No. 691 of 28 Aug. 1944.*)

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## Section 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE

**4966.—A.M.S.Is.**

(E.F.O.—14 Sep. 1944.)

There are no Admiralty Merchant Shipping Instructions for distribution with this issue of A.F.Os.

(*A.F.O. 4820/44.*)

**4967.—Amendments to Books**

(E.F.O.—14 Sep. 1944.)

The undermentioned amendments (A.F.Os. P.602–625/44) 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.



*Demands from shore establishments in the Portsmouth Command should be sent to the Portsmouth Book Office, 54, Bedford Street, Leamington Spa, Warwickshire, and from those in the Plymouth Command to the Devonport Book Office, R.N. Port Library, Devonport. Demands from other shore establishments at home should be sent to R.N. Store Depot, Park Royal, London, N.W.10.*

*Amendments required for personal copies of the main books should be obtained from Distributing Authorities abroad, and from Park Royal when the officer or rating is serving at home.*

**A.F.O. *P.602/44.**—B.R. 378(E)—Albacore—A.S.E.—Amendment No. 27
***P.603/44.**—B.R. 377(C)—Firefly—A.S.E.—Amendment No. 2.
***P.604/44.**—B.R. 378(C)—Firefly—A.S.E.—Amendment No. 10.
***P.605/44.**—B.R. 380/J—Seafire Aircraft S.C.L.—Amendment No. 7.
***P.606/44.**—B.R. 380/C—Firefly (F), Mark I—S.C.L.—Amendment No. 6.
**P.607/44.**—B.R. 267/41—Handbook for the Holman Projector, Mark II—1941—Amendment No. 3.
**P.608/44.**—B.R. 978 (Formerly O.U. 5439)—Instructions for guidance of Ordnance Artificers in Upkeep and Maintenance of 8-in., Mark I and I* Mountings (" Kent " and " London " Classes) 1932—Amendment No. 9.
**P.609/44.**—B.R. 1009—Handbook and Drill for the Holman Projector, Mark III—1943—Amendment No. 1.
**P.610/44.**—O.U. 5225A—Supplementary Instructions for H.M. Naval Yards abroad—Amendment No. 2.
***P.611/44.**—B.R. 378 (General)—A.S.E.—Amendment No. 48.
***P.612/44.**—B.R. 378 (General)—A.S.E.—Amendment No. 49.
**P.613/44.**—B.R. 274/43—Handbook and Drill for 20 mm. Oerlikon Machine Gun, Marks II, II U.S.N. and IV U.S.N. on Marks I, IIA, IIIA, IV U.S., V U.S., VIIA and VIIIA Mountings—1943—Amendment No. 9.
**P.614/44.**—B.R. 275—Care and Maintenance of above-water Tubes, Cordite Impulse—D.R. VI (A–E), etc.—Amendment No. 15.
**P.615/44.**—B.R. 281/41—Regulations for Maintenance of D.R.VI (F. and G), D.R. VII (F and I), etc.—Torpedo Tubes—Amendment No. 14.
**P.616/44.**—B.R. 293—Handbook for the Apparatus A.D., Type J, Mark II. 1944—Amendment No. 1.
**P.617/44.**—B.R. 677—Instructions for R.N. Hospitals, etc., 1927—Amendment.
**P.618/44.**—B.R. 819 (3)—R.N.A.S.—Pt. III—Torpedoes—Amendment No. 3.
**P.619/44.**—B.R. 862—Naval Magazine and Explosive Regulations, 1941—Amendment No. 17.
**P.620/44.**—B.R. 1005—Regulations for Maintenance of 21-in., Mark IX*–IX** and IX** N.A.B. Torpedoes—Amendment No. 3.
**P.621/44.**—O.D. 750—(U.S. Publication)—American 22·4-in., Mark 13, Type Torpedoes—Description and Instructions for use of Torpedo Workshop Testing Equipment and Tools—R.N. Amendment No. 2.
**P.622/44.**—O.P. 627A (U.S. Publication)—U.S. Navy Torpedo Gyroscopes—Non-Tumble Type—R.N. Amendment No. 1.
**P.623/44.**—O.P. 629A (U.S. Publication)—Description, Adjustment, Care and Operation of U.S. 22·4-in., Mark 13, Type Torpedoes—R.N. Amendment No. 7.
**P.624/44.**—O.U. 5454—Regulations for Maintenance of above Water Torpedo Tubes, Powder and Air Impulse—Amendment.
**P.625/44.**—O.U. 6304—Pamphlet on Regulations for Maintenance of Q.R., Marks IX, IX*, IX** and X Torpedo Tubes—Amendment No. 18.

* *Exceptionally A.F.Os. P.602–606, 611 and 612 will be distributed without demand by the Superintending Naval Store Officer, R.N. Store Depot, 191a, Askew Road, Shepherd's Bush, W., who holds the stock of the parent book.*

(*A.F.O. 4819/44.*)

### 4968.—Ammunition Labels—Form O.6—Additions

(A.S./Sta. 17018/44.—14 Sep. 1944.)

| Serial No. | Description | Where used | Page in Form O.6 | Sta. No. |
|---|---|---|---|---|
| | CTGS., Q.F., 12-pr., 12-cwt. | | | |
| N.925 | 10–13 oz. 12 dr. Cordite HSCT/K (Primer No. 26) | On end of box C.33 | 11 | 17018/44 |
| N.926 | 10–13 oz. 12 dr. Cordite HSCT/K (Tube Group) | On end of box C.33 | 11 | 17018/44 |

2. Labels should be demanded as necessary from S.A.S.O., Finchfield House, Compton, Wolverhampton.

### 4969.—Ammunition Labels—Form O.6—Additions

(A.S./Sta. 17343/44.—14 Sep. 1944.)

| Serial No. | Description | Where used | Page in Form O.6 | Sta. No. |
|---|---|---|---|---|
| N.924 | 5 Bombs, B.L., H.E., 4 in., mortar, 10 lb., Mark I. | On front of box B.180. | 1 | 17343/44 |

2. Labels should be demanded as necessary from Senior Armament Supply Officer, Finchfield House, Compton, Wolverhampton.

### 4970.—B.R. 207—Drill for 12-pdr. Q.F. Guns on Low Angle Mountings, 1928—Obsolete

(G. 4270/44.—14 Sep. 1944.)

B.R. 207 is now obsolete and all copies should be disposed of in accordance with the instructions laid down in B.R. 1—Books of Reference Catalogue.

### 4971.—B.R.912(20)—Director Handbook—Elevation and Training Receivers of the C, CM, E, EM and F Types—Issue

(G. 434/44.—14 Sep. 1944.)

The above-mentioned book is now in the press and copies will be issued, without demand, by the Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, N.W.10, when supplies become available in accordance with the following establishment, viz.:—

| | Copies |
|---|---|
| Flag Officers | 1 |
| Battleships | 1* |
| Cruisers | 1* |
| Fleet Carriers | 1* |
| Destroyer Depot Ships | 1 |
| Submarine Depot Ships | 1* |
| Aircraft Repair Ships | 1 |
| Fleet Repair Ships | 1 |
| Repair Ships | 1 |
| A.A. Ships | 1* |
| Fighter Direction Ships | 1* |
| Base Ships | 1* |
| Escort Base Ships | 1* |
| Destroyers | 1* |
| Monitors | 1* |



| | Copies |
|---|---|
| Fast Minelayers | 1* |
| Sloops | 1 |
| Captain, H.M.S. "Excellent" | 180 |
| Captain (G), R.N. Gunnery School, Chatham | 6 |
| Captain (G), H.M. Gunnery School, Devonport | 6 |
| H.M.S. "Vernon" | 10 |
| H.M.S. "Defiance" | 2 |
| *Dockyards:—* | |
| Portsmouth | 5 |
| Devonport | 5 |
| Chatham | 5 |
| Sheerness | 5 |
| Rosyth | 3 |
| Orkneys | 1 |
| Pembroke | 2 |
| Malta | 4 |
| Gibraltar | 3 |
| Alexandria | 2 |
| Bermuda | 3 |
| Simonstown | 3 |
| Durban | 2 |
| Ceylon | 1 |
| Kilindini | 2 |
| Trincomalee | 2 |
| *Gun Mounting Overseers:—* | |
| Barrow, Crayford, Woolwich, North Eastern Area, West Midlands, East Midlands, Parkhead | 1 each |
| G.M.E.O., R.N. Base, Lyness | 1 |
| *Admiralty Regional Electrical Engineers:—* | |
| Northern Area, North Eastern Area, North Midland Area, Eastern Area, London and South Eastern Area, South Western Area, Wales and Midland Area, North Western Area, Scottish Area | 1 each |
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| Secretary, Ordnance Board | 1 |
| B.A.M.S.R. | 1 |
| Secretary, Navy Office, Melbourne (2 for Flinders Gunnery School) | 10 |
| B.A.T.M. | 1 |
| D.N.O., Washington | 1 |
| N.S.H.Q., Ottawa | 10 |
| G.O.C.R.M. | 3 |
| Loan Libraries | 1 |
| Naval Staff Library, Admiralty | 1 |

* Ships fitted and to be fitted with elevation and training receivers of the C, CM, E, EM and F Types. (Corrected instruments.)

### 4972.—B.R. 1057—Handbook for 40-mm. Bofors Gun—Naval Water Cooled Type of British and American Manufacture—Issue

(G. 5461/43.—14 Sep. 1944.)

The above-mentioned book is now in the press and copies will be issued, without demand (except as detailed at † below), by the Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, N.W.10, in accordance with the following establishment, viz.:—

| | Copies |
|---|---|
| Flag Officers | 1 |
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| Escort Carriers | 3* |
| Fleet Carriers | 3* |
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D.E.M.S. Base Staffs and Training Centres as follows :—

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| Port Talbot ... ... | 1 | — | Port Talbot ... ... | — |
| Swansea ... ... | 1 | — | Swansea ... ... ... | 1 |
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| LIVERPOOL ... ... | 5 | 150 | H.M.S. "Eaglet I" ... | 2 |
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| Londonderry ... ... | 1 | — | — | — |
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| Ayr (including Troon and Irvine). | 1 | — | — | — |



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| Norwegian Training Centre | — | — | Norwegian Training Centre | 2 |
| Oban ... ... | 1 | — | — | — |
| Aultbea (Loch Ewe) ... | 1 | — | — | — |
| LYNESS ... ... | 1 | — | Lyness ... ... ... | 1 |
| ABERDEEN ... ... | 1 | 10 | Aberdeen ... ... ... | 1 |
| Inverness ... ... | — | — | — | — |
| LEITH ... ... ... | 2 | 50 | H.M.S. "Claverhouse" ... | 2 |
| Dundee ... ... | 1 | — | Dundee ... ... ... | 1 |
| Methil ... ... ... | 1 | — | — | — |
| Grangemouth ... | 1 | — | — | — |
| NEWCASTLE (Tyne area) | 4 | 100 | Newcastle ... ... ... | 2 |
| | | | H.M.S. "Satellite" ... | 2 |
| South Shields ... | 1 | — | — | — |
| Blyth ... ... ... | 1 | — | Blyth ... ... ... | 1 |
| Sunderland ... ... | 1 | — | Sunderland ... ... | 1 |
| Middlesbrough ... | 1 | 10 | Middlesbrough ... ... | 1 |
| Hartlepool ... ... | 1 | — | — | — |
| Hull ... ... ... | 2 | 25 | Hull ... ... ... | 2 |
| Grimsby ... ... | 1 | — | Grimsby ... ... ... | 1 |

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|---|---|---|---|---|
| FREETOWN ... ... | 2 | 25 | Freetown ... ... ... | 1 |
| Lagos ... ... ... | 1 | — | — | — |
| Takoradi ... ... | 1 | — | — | — |
| SIMONSTOWN ... ... | 4 | 50 | Simonstown ... ... | 2 |
| Capetown ... ... | 1 | — | — | — |
| Port Elizabeth ... | 1 | — | — | — |
| Durban ... ... | 1 | 25 | Durban ... ... ... | 1 |
| East London ... ... | 1 | — | — | — |
| KILINDINI ... ... | 1 | — | — | — |
| ABADAN ... ... | 2 | 10 | — | — |
| Basra ... ... ... | 1 | — | — | — |
| Khoramshahr ... ... | 1 | — | Khoramshahr ... ... | 1 |
| PORT SAID ... ... | 5 | 200 | Port Said ... ... ... | 3 |
| Alexandria ... ... | 1 | — | Alexandria ... ... | 1 |
| Aden ... ... ... | 1 | — | — | — |
| Massawa ... ... | 1 | — | — | — |
| Port Sudan ... ... | 1 | — | — | — |
| Benghazi ... ... | 1 | — | — | — |
| Port Tewfik ... ... | 1 | — | Port Tewfik ... ... | 1 |
| Haifa and Beirut ... | 1 | — | — | — |
| ALGIERS ... ... | 5 | 25 | Algiers ... ... ... | 4 |
| Gibraltar ... ... | 2 | 25 | Gibraltar ... ... ... | 2 |
| Tripoli ... ... | 1 | — | — | — |
| Naples ... ... | 1 | — | — | — |
| Bari ... ... ... | 1 | — | — | — |

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| Bone ... ... ... | 1 | — | — | — |
| Brindisi ... ... | 1 | — | — | — |
| Syracuse ... ... | 1 | — | — | — |
| Malta ... ... ... | 1 | — | Malta ... ... ... | 2 |
| BOMBAY ... ... | 6 | 140 | Bombay ... ... ... | 2 |
| Karachi ... ... | 1 | — | — | — |
| Madras ... ... | 1 | — | Madras ... ... ... | 1 |
| Calcutta ... ... | 1 | — | Calcutta ... ... ... | 1 |
| COLOMBO ... ... | 2 | 50 | Colombo ... ... ... | 2 |
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| Adelaide ... ... | 1 | — | — | — |
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| WELLINGTON ... ... | 2 | 10 | Wellington ... ... ... | 2 |
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| Lyttelton ... ... | 1 | — | — | — |
| Dunedin ... ... | 1 | — | | |
| OTTAWA ... ... | 5 | 50 | — | — |
| Esquimalt ... ... | 1 | — | Esquimalt ... ... ... | 2 |
| St. Johns, N.F. ... | 1 | — | St. Johns, N.F. ... ... | 2 |
| Quebec ... ... | 1 | — | — | — |
| Montreal ... ... | 1 | — | Montreal ... ... ... | 2 |
| St. John, N.B. ... | 1 | — | St. John, N.B. ... ... | 2 |
| Halifax, N.S. ... ... | 1 | — | Halifax, N.S. ... ... | 2 |
| Sydney, C.B. ... ... | 1 | — | Sydney, C.B. ... ... | 2 |
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| Baltimore ... ... | 1 | — | — | — |
| Galveston ... ... | 1 | — | — | — |
| Norfolk (Va.) ... ... | 1 | — | — | — |
| Savannah ... ... | 1 | — | — | — |
| Portland (Oregon) ... | 1 | — | — | — |
| Philadelphia ... ... | 1 | — | — | — |
| San Francisco ... | 1 | — | — | — |
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| KINGSTON (Jamaica)... | 1 | — | — | — |
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| BUENOS AIRES ... | 1 | — | — | — |
| REYKJAVIK ... ... | 1 | — | — | — |
| MURMANSK ... ... | 1 | — | — | — |
| Archangel ... ... | 1 | — | — | — |

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| Secretary, Navy Office, Wellington ... ... ... ... ... | 10 |
| *Dockyards* | |
| Portsmouth ... ... ... ... ... ... ... ... | 5 |
| Devonport ... ... ... ... ... ... ... ... | 5 |
| Chatham ... ... ... ... ... ... ... ... ... | 5 |
| Sheerness ... ... ... ... ... ... ... ... ... | 5 |
| Rosyth ... ... ... ... ... ... ... ... ... | 3 |
| Orkneys ... ... ... ... ... ... ... ... ... | 1 |
| Pembroke ... ... ... ... ... ... ... ... | 2 |
| Malta ... ... ... ... ... ... ... ... ... | 4 |
| Gibraltar ... ... ... ... ... ... ... ... ... | 3 |
| Alexandria ... ... ... ... ... ... ... ... | 3 |
| Bermuda ... ... ... ... ... ... ... ... ... | 3 |
| Simonstown ... ... ... ... ... ... ... ... | 3 |
| Durban ... ... ... ... ... ... ... ... ... | 2 |
| Ceylon ... ... ... ... ... ... ... ... ... | 1 |
| Kilindini ... ... ... ... ... ... ... ... ... | 2 |
| Bombay ... ... ... ... ... ... ... ... ... | 2 |
| R.N. College, Greenwich ... ... ... ... ... ... ... | 1 |
| Commandant, Military College of Science, Queen's Road, Penkhull, Stoke-on-Trent, Staffs. | 1 |
| G.E.O., R.N. Base, Lyness ... ... ... ... ... ... | 1 |
| Ministry of Supply, S.S.2.B (for C.I.A., C.E.A.D., C.S.A.R., A.I., C.S.O.F., S.O.B., and S. of E., Shoeburyness). | 7 |
| E.O. Gun Mountings, Alexandria ... ... ... ... ... | 1 |
| *Fitting Out Gunnery Officers* | |
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* Ships fitted with the 40-mm. Bofors, gun, naval, water cooled type, of British and American manufacture.

† Distributing authorities of classes fitted should demand supplies through Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, London, N.W.10, in accordance with Table B1 of A.F.O. 3758/44.

(*A.F.O. 3758/44.*)

**4973.**—*Cancelled*

### 4974.—Naval Air Maintenance Orders

(A.M.R./A. 097/43.—14 Sep. 1944.)

A new series of instructions to be known as Naval Air Maintenance Orders (short title " N.A.M.O.") is being instituted in which will be issued orders and instructions on the maintenance and repair of aircraft in the Naval service.

N.A.M.Os. are complementary to Air Publications and are intended primarily to simplify the work of the user, especially first line squadrons, by reducing the number of sources of information and presenting instructions in a convenient form for easy reference.

Urgent instructions will continue to be issued in the first place by " R " message or normal signal as appropriate, and when of a more permanent nature will be followed up by a N.A.M.O. Disposal instructions for " R " messages will continue to be issued periodically in Fleet Orders.

2. *Arrangement.*—N.A.M.O.s will be issued in two series, " Type " and " General " :—

(i) Type series N.A.M.Os. are at present being issued for the following types of aircraft :—Avenger, Barracuda, Corsair, Firefly, Hellcat, Seafire, Spitfire, Swordfish, Wildcat, and Miscellaneous Aircraft, which will include all types in Naval use not specifically named here.

New Type series will be started for additional types of aircraft and existing Type series may be transferred to " Miscellaneous Aircraft " as and when found necessary.

(ii) General series N.A.M.Os. will include all instructions of general application.

3. *Sections.*—Both General and Type Series N.A.M.Os. are sub-divided into sections as follows :—

| *Section* | *Instructions on* | *Indicating Letter* |
|---|---|---|
| Airframes ... ... | Airframes, components and fittings, hydraulic and pneumatic systems and components, fuel tanks, pipelines and cocks. | A |
| Publications, Forms and Returns. | Air publications generally ; inspection schedules, forms, returns and reports. | C |
| Engines and Accessories | Power plants, engines and components, starters, carburettors and fuel pumps, oil and coolant systems and components, ignition systems and magnetos. | E |
| Flying and Handling ... | Maintenance aspect of flying ; aircraft handling, loading, taxying, towing, picketting, etc. | F |
| General ... ... | General maintenance instructions, regulations and procedure. | G |
| Instruments ... ... | Flying and engine instruments and gauges, etc. | I |
| Electrical ... ... | Accumulators, bomb circuits and distributors, generators, electrical circuits, cables and equipment generally ; bonding. | L |
| Armament ... ... | Guns, sights, fire control systems, bomb carriers, R.P. installations and ordnance equipment on aircraft generally. | O |
| Propellers ... ... | All types of propellers and accessories, constant speed units, and governor units. | P |
| Airborne Equipment ... | Compasses, cameras, oxygen equipment, target towing gear, fire extinguishers and vacuum pumps, parachutes, dinghies and airborne safety equipment generally. | Q |
| Radio ... ... ... | Radio and radar apparatus generally excluding secret orders. | R |
| Stores and Spares ... | Maintenance of air stores and spares and of components and fittings generally in stored condition. Approved types of fuel and oil. hydraulic fluids, ethylene glycol, starter cartridges, and sparking plugs. | S |
| Torpedoes, Mines, Depth Charges, Smoke Installations. | Maintenance aspect of aircraft equipment in these categories. | T |
| Ground Equipment and Workshop Appliances. | Aircraft securing gear, jacks, covers, starter trolleys, engine stands, test benches, hand and machine tools, salt baths and workshop appliances generally. | W |
| Special Technical Instructions. | As required ... ... ... ... ... | STI |
| Servicing Instructions... | As required ... ... ... ... ... | SI |

*Note.*—New sections may be provided and existing sections discontinued or combined as may be found necessary from experience.



Each section is to be separated by a dividing page to facilitate reference.

A list of N.A.M.Os. in each section will be issued for filing at the front of the section concerned, when sufficient orders in a particular section have been distributed to justify printing ; manuscript content lists should be provided by individual holders until printed lists are received.

4. *Identification.*—Each N.A.M.O. will be identified at the top right-hand corner by :—

(i) The short title " N.A.M.O.".

(ii) The name of the series, either " General " or the type of aircraft, followed by—

(iii) The section identification letter, followed by—

(iv) The Serial Number in that section.

(v) Date of issue.

A N.A.M.O. on any subject will always retain its original section identification letter and serial number. When it is necessary to revise an order, a new issue will be made bearing the same section serial number as its predecessor, but with a new date of issue and will cancel and supersede the previous issue.

*Example*— N.A.M.O.
Osprey/P.2.
1 January 38.
(Cancels P.2 of
2 April 37).

5. *Form.*—N.A.M.Os. will be produced in loose-leaf form for filing in covers which will be provided for each of the " Type " series and the " General " series.

6. *Issue.*—N.A.M.Os. will be numbered and issued by the Director of Aircraft Maintenance and Repair, Admiralty, who will act as General Editor.

N.A.M.Os. will be issued as required ; they will not be periodical orders.

The monthly A.F.O. at present issued showing details of the various publications issued to the Service will in future include the N.A.M.Os. and amendments which have been issued during the period covered.

7. *Distribution.*—Distribution of N.A.M.Os. will be made by the Director of Stores without demand, to the scale below, which covers only the main Services concerned, through the same channels as Air Publications. Full distribution of N.A.M.Os. will be added to A.P.(N)1 in due course.

| | *General* | *Type* |
|---|---|---|
| Squadrons ... ... ... ... ... | 3 | 3 (for type with which armed). |
| Fleet and light fleet carriers ... ... ... | 4 | 4 |
| Escort carriers ... ... ... ... | 3 | 3 |
| Repair ships ... ... ... ... ... | 6 | 6 |
| Air stations ... ... ... ... ... | 8 | 8 |
| Air repair yards and maintenance yards ... | 6 | 6 |
| Receipt and despatch units ... ... ... | 8 | 8 |

8. *Additional Requirements.*—If it is found that the allowance is inadequate, application should be made by letter to the Administrative Authority for the allowance to be increased, stating the reason for the additional requirement.

When additional copies of individual orders are required for notice boards, etc., application may be made by signal to Superintending Naval Store Officer, Shepherds Bush.

9. *S.T.Is. and S.Is.*—The procedure for issuing S.T.Is. and S.Is. detailed in A.F.O. 2639/44 is not affected ; but printed copies of all S.T.Is. issued will be distributed to the same scale as N.A.M.Os. These copies should be filed as a separate section at the back of the appropriate N.A.M.O. holder, as indicated on the S.T.I., where they will be available for reference purposes.

S.Is. will not normally be reproduced in this way, as they will usually be included in the appropriate Inspection Schedule by Amendment List, but when it is anticipated that this will not take place for some time, or the S.I. is too long to be included in the Inspection Schedule, printed copies will be distributed in a similar manner to that for S.T.Is.

*(A.F.O. 2639/44.)*

**4975.—Publications for Flying Personnel—"Survival on Land and Sea" and "How to Survive on Land and Sea"—Distribution**

(A.E/A.W.D. 1218/44.—14 Sep. 1944.)

Publications entitled "Survival on Land and Sea" and "How to Survive on Land and Sea" will shortly be distributed on the following scale :—

| | |
|---|---|
| Fleet, light fleet and escort carriers ... ... ... | 2 copies |
| Naval air stations, Class A and B ... ... ... ... | 2 copies |
| M.A.C. ships ... ... ... ... ... ... ... | 1 copy |
| Safety Equipment School, Eastleigh ... ... ... | 2 copies |
| Air Medical School, Eastleigh ... ... ... ... | 18 copies |

2. It is intended that Carriers and Naval Air Stations should retain 1 copy of each of these publications in the Intelligence Room.

**4976.—U.S.N. Air Operations Memoranda—Issue**

(A. 44.—14 Sep. 1944.)

Air Operations Memoranda, a confidential publication issued monthly by the U.S. Navy Department, will in future be distributed through the appropriate Distributing Authorities as follows:—

C.-in-C., E.F.
R.A. (A), E.F.
Commodore, E.C.
F.O.C.T.
F.O.N.A.S. (2 copies)
R.A.N.A.S. I.O.
Fleet, Light Fleet and Escort Carriers (for Air Intelligence Rooms)
Naval Air Stations (for Air Intelligence Rooms)
Carrier Borne Army Liaison Sections
Naval Air Operational Training Units

2. In addition, copies will be issued to certain Air Training Schools, etc., including the following:—

No. 1 Naval Air Fighting School
No. 2 Naval Air Fighting School
School of Air Combat
No. 1 Observers' School.
No. 2 Observers' School.
No. 1 Air Gunners' School
No. 2 Air Gunners' School
Instrument Flying School
Torpedo School
Fighter Direction School
No. 784 Squadron
No. 746 Squadron
Naval Air Intelligence School

**4977.—H.M.S. "Whitehall"—Confusion with Whitehall, London**

(M. 400/44.—14 Sep. 1944.)

Correspondence is frequently received in H.M.S. "Whitehall" which is intended for various establishments in Whitehall, London, *i.e.*, Admiralty, Whitehall, C.O.H.Q., Whitehall and Whitehall W/T Station. In order to avoid unnecessary delay, special care is to be taken when addressing correspondence to such establishments.



## Section 6.—SHORE ESTABLISHMENTS

**4978.—R.N. Medical Depot, Huthwaite—Installation of Trunk Subscriber's Circuit**

(M.D.G. 52303/43.—14 Sep. 1944.)

The Royal Naval Medical Depot, Huthwaite, near Mansfield, Notts, is now telephonically connected on a trunk subscriber's circuit. The number is Nottingham Trunks, 43.

2. This line should be used for long distance calls.

3. The normal G.P.O. numbers of the depot are Sutton-in-Ashfield 380 and 355. These numbers are given to cover the contingency of the trunk subscriber's line being engaged.

**4979.—Industrial Employees serving in H.M. Forces—Rate of Pay**

(L. 5332/44.—14 Sep. 1944.)

The following instructions are issued in order to clarify the position in respect of the rate of pay of industrial employees serving with H.M. Forces:—

(*a*) Mechanics and Skilled Labourers are not to be regarded as eligible for increases in their civil basic pay while serving with the Forces, but the rates of pay of such men should be reviewed on their return to civil employment in the light of comparison with other workpeople of comparable service and worth.

(*b*) Mechanics on special rates should be regarded as continuing to fill positions at those rates.

(*A.F.O. 633/40 is cancelled.*)

**4980.—Allotments of Workmen Recruited from Outside Industry for Service at Establishments Abroad**

(D.N.A. 29715/44.—14 Sep. 1944.)

Allotment declarations of workmen recruited from outside industry for service in Admiralty establishments abroad should be forwarded to :—

The Director of Navy Accounts, Branch 5,
Northwick Park Hutments,
Watford Road,
Harrow, Middlesex.

2. In order to differentiate between such allotments and those of ordinary Admiralty employees it is essential that the declarations of these workpeople be clearly marked with the words "OUTSIDE INDUSTRY" in red ink.

3. Allotment stop forms should be dealt with in a similar manner.

**4981.—Payment for Extra Attendance—Non-Industrial Overtime Classes—Fractions of an Hour**

(C.E. 15305/44.—14 Sep. 1944.)

The daily attendance of non-industrial overtime classes on weekdays may be reckoned in terms of quarters of an hour but no less. Odd quarters of an hour occurring in the total weekday attendance or on Sunday duty may also be reckoned for payment. Fractions of less than a quarter of an hour should be eliminated from overtime claims, but in suitable cases may be compensated by adjustment of subsequent attendance.

2. Claims for payment for overtime are, however, to be made only in respect of extra attendance authorized by responsible officers and except where the conditions of payment for extra attendance involve specified periods of "free time," claims for less than two hours a week should not be certified for payment unless this proviso is clearly satisfied.

## 4982.—Female Industrial Telephone Operators—Revised Rates of Pay

(L. 9353/44.—14 Sep. 1944.)

Female industrial telephone operators at outport establishments should, as from the beginning of the pay period containing 6th September, 1944, be paid at the following revised inclusive rates :—

| Age | *Rates for Admiralty establishments outside London* | *Rates for Admiralty establishments in London area (within radius of 12 miles of Charing Cross)* |
|---|---|---|
| | *s. d.* | *s. d.* |
| 16 | 45 0 | 48 0 |
| 17 | 50 0 | 53 0 |
| 18 | 56 0 | 59 0 |
| 19 | 59 0 | 62 0 |
| 20 | 62 0 | 65 0 |
| 21 | 66 0 | 69 0 |

2. These rates of pay will cover a *gross* working week of 48 hours, and meal times will be included as attendance. Where, however, the normal working week of an establishment is 47 hours and where telephone operators are not required to work for hours in excess of this number, no deductions should be made for the 47 hours (instead of 48) attendance.

3. Overtime payments should be made for hours worked in excess of 48 per week, but otherwise in accordance with A.F.O. 1450/44 ; and double time will be payable for hours worked between midnight Saturday and midnight Sunday.

(*A.F.Os. 1450/44, and 4048/44.*)

(*A.F.O. 1451/44 is cancelled.*)

## 4983.—Women Industrial Employees in Establishments at Home—Increase in Basic Rates and Revised Bonus

(L. 8877/44.—14 Sep. 1944.)

The rate of women's engineering bonus (at present 22*s*., + "time-workers bonus" of 1*s* 6*d*. to 3*s*. according to age), payable to women on women's work, aged 18 years and upwards, who are engaged on plain time work, should, as from the beginning of first pay period following 1st August, 1944, be 14*s*., + 5*s*. "time-workers' bonus", = 19*s*. The bonus for women aged 18 years and over, in receipt of any special "compensatory", incentive, etc. bonus, e.g., Women Examiners in the Naval Ordnance Inspection Department in receipt of Examination Bonus will be 14*s*. per week. (For women on piecework and systems of payment by results, *see* paragraph 8.)

2. As from the beginning of first pay period following 1st August, 1944, the basic rate of all women of 18 years and over who are in receipt of women's engineering bonus, should be increased by an addition of 12*s*.

3. For example, a Colourmaker in the dockyards on *time work*, formerly paid 26*s*. basic + 22*s*. + 3*s*. bonus, will now be paid 38*s*. basic + 14*s*. + 5*s*. bonus.

4. Juveniles of 14–17 years at all Admiralty establishments, and women of 18 years and over at establishments other than the dockyards and certain pre-war establishments, should be paid at the following revised rates :—

| | *Basic Rates* | *Revised Bonus* | *Timeworkers Bonus* | *Total* |
|---|---|---|---|---|
| | *s. d.* | *s. d.* | *s. d.* | *s. d.* |
| 14 ... ... ... | 14 0 | 4 6 | 1 6 | 20 0 |
| 15 ... ... ... | 15 8 | 5 6 | 2 6 | 23 8 |
| 16 ... ... ... | 20 4 | 7 0 | 3 0 | 30 4 |
| 17 ... ... ... | 22 8 | 10 0 | 3 0 | 35 8 |
| 18 ... ... ... | 31 0 | 14 0 | 5 0 | 50 0 |
| 19 ... ... ... | 33 0 | 14 0 | 5 0 | 52 0 |
| 20 ... ... ... | 35 0 | 14 0 | 5 0 | 54 0 |
| 21 ... ... ... | 37 0 | 14 0 | 5 0 | 56 0 |



5 The rates for Stages I and II for women training for men's work should be amended by the substitution of 38*s* basic for 26*s*. basic and by the substitution of the bonus of 14*s*. + 5*s*. for the bonus of 22*s*. + 3*s*., in paragraphs 3a (i and ii), of A.F.O. 1448/44.

6. The revised arrangements do not apply to :—

(i) Women who, in accordance with A.F.O. 1448/44, are paid a percentage of men's rates (except as in paragraph 5 above).

(ii) Women Process Workers at R.N. Propellant Factory, Caerwent, and R.N. Cordite Factory, Holton Heath.

(iii) Domestics in R.N. Hospitals and auxiliary hospitals.

(iv) Any women whose current rate is not expressed as women's engineering basic rate + bonus. (Instructions regarding revised rates for female Canteen Workers will be promulgated at an early date.)

7. The consolidated hourly rates of pay of part-time cleaners at H.M. Dockyards, and at R.N. Torpedo Factory, Greenock, should be increased as from the beginning of first pay period following 1st August, 1944 by 1½*d*. (one penny and one half-penny). (No change should be made in the rates of pay of part-time cleaners who are paid at "local" hourly rates.)

8. Further instructions will be issued regarding women engaged on piecework, or on systems of payment by results etc., and no change should be made in their remuneration pending issue of instructions.

(*A.F.Os. 1448/44 and 1452/44.*)

(*A.F.O. 4682/44 is cancelled.*)

(68465) Wt. 8092/2356 18,000 9/44 Hw. G.338/10.