

RESTRICTED

(FOR OFFICIAL USE ONLY)

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

# ADMIRALTY FLEET ORDERS

ADMIRALTY, S.W.1,  
29th June, 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,

*H.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. 494/44) 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.

HEAD OF "P" BRANCH  
*lab 89*  
 P1 *lab 89*  
 P2 *lab 89*  
 P3 *lab 89*  
 Ref (6/44)

*Dean*  
*pass*  
*EARLY*

## ADMIRALTY FLEET ORDERS

No. Subject.

29th June, 1944.

## SECTION 1.—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.)*

- 3368.—Defence Regulation, 17E.—Extension of Time for Institution of Proceedings under Separation and Maintenance Acts.  
 3369.—Abandoning of Aircraft by Air Crews.  
 3370. Air Firing Practices—Assessment of Scores.  
 3371. German Hospital Ships.

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

3372. Commodores of Convoys and Their Staffs—Messing and Allowances.  
 3373. Air Gunnery Officers—Duties, etc.  
 3374. Visits of Training Officers to Instructional Technique Courses.  
 3375. Sick Leave for Retired, Reserve and Emergency List Officers—Revised Conditions—REPORT.  
 3376. B.N.L.Os. Serving in Dutch Vessels—Special Allowance.  
 3377. Royal Australian Navy—Navigation Allowance.  
 3378. South African Naval Forces—Revised Rates of Pay and Allowances.  
 3379. Admiralty Surgeon and Agent.  
 3380. Fleet Air Arm—Recommendations of Airmen for Employment as Instructors in the Royal Air Force.  
 3381. Royal Marine Tradesmen.  
 3382. R.N. Patrol Service—Introduction of Rating of Leading Stoker.  
 3383. Uniform for Acting Regulating Petty Officers.  
 3384. Losses of Stores in H.M. Ships—REPORTS.  
 3385. Telegraphist Detectors—Abolition.  
 3386. W.R.N.S.—Immobiles—Liability to Mobile Service.  
 3387. Provisions—Extra Issues to men on duty at night.  
 3388. Travel between the United Kingdom and the Continent—Individuals and Small Parties.

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

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

3389. Guns—B.L. 15-in. Mark I, Frames, Breech Mechanisms and Pressure Supply Pipes—Modification to suit Mark III Cylinders, Hydraulic.  
 3390. Guns—Q.F. 4-in. Mark XIX—Shafts firing—Modification.  
 3391. Guns—Hispano 20-mm.—Lock-springs, R.A.F. Ref. 7G/536.  
 3392. Guns—20-mm. Oerlikon—Box for Gauge Plug Bore.  
 3393. Gun Mountings—4.7-in. C.P., Mark XXII, Mountings, 4.5-in. C.P. Mark V Mountings—Modification to Fuze Setting Trays.  
 3394. Gun Mountings—4-in. H.A. Twin R.P. 50 Series, Mark XIX—Modification to Shield for access to Gun Driving Motors.  
 3395. Gun Mountings—20-mm. Marks VII A and VII A S/M Mountings. Locking Plate for Lubricating Tube in Balance Weight.  
 3396. Ammunition—General—E.F.C. Values of Cordite Charges.  
 3397. Ammunition—20 mm. Oerlikon—Periodical firing and landing of ready use Ammunition.  
 3398. Ammunition—20-mm. Oerlikon H.E.—Lot T.P.C. 746—Withdrawal.  
 3399. Ammunition—20-mm. Oerlikon—Clearing Charges.  
 3400. Ammunition—20-mm. Hispano—Recovery of Internal Packing Material.  
 3401. Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition—REPORT.  
 3402. Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition—REPORT.  
 3403. Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition. Restriction of N.C. Propellant, Index S.P.D. 1969.  
 3404. 14-in. and 15-in. Battleships fitted with Weir's Centrifugal Hydraulic Pumps—Routine for working Turret Machinery.  
 3405. Aircraft—Guns, Browning 0.50-in. and 0.30-in.—Wire Brushes for use with Cleaning Rods.  
 3406. Cancelled.  
 3407. Target Indicating Systems—Searchlight Control—Mark V, etc., Sights—Height Adjustments.  
 3408. Training—Instructional Appliances—Automatic Air Rifles, Supply of Ammunition.

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

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

3409. Torpedoes, 18-in., Marks XII—XV\* and 21-in., Marks VIII—IX\*\*—Introduction of Soft Seated, Small, Non-Return Valve, St. No. 2524B. for Pipe Systems.  
 3410. 18-in. and 21-in. Torpedoes—Danger of Using Excessive Force When Tightening H.P. Air Joints.  
 3411. Torpedo Stores—Blocks St. No. T.47—Allowance.  
 3412. Torpedo Stores—Gags St. No. 8675A—Modification to Head of Screw.  
 3413. Change-over Switches for Oerlikon Gun Circuits—Introduction of Modified Types.  
 3414. Hook Ends for Emergency Electric Cables—Introduction.  
 3415. Radio Interference in Coastal Force Craft.  
 3416. Main Motors and Main Generators—Shunt Field Circuits.  
 3417. Main Supply Switchgear—Increased Emergency Supplies—As. and As.

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

3418. Calculator Disc—Strategical/Tactical/Operational/and Navigational Speed/Time/Distance.  
 3419. Gyro-compass Transmitters—Spark Suppression.

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

3420. Boiler Tubes—Circumferential Cracking.  
 3421. Boiler Tubes to Schedule 160.

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

3422. Radar—Types 282M(3)/M(4)/P/P(1)/P(2), 283, 284M (3)/M(4)/P(3)/P(4), 285M (3)/M(4)/P(3)/P(4) Switch Unit, Common Aerial, Pattern W.3432—Tool, Spark Gap Extractor, Pattern 54097.  
 3423. W/T Set Type 52 ERT—Replacement of H.T. Battery by Vibrator Unit.  
 3424. W/T Sets Types 89/M/P—Security of Valves.

*(Anti-Submarine.—(Asdics, Hydrophones and Echo Sounding and Stores.)*

3425. Asdic and Echo—Sounding Stores for Ships Refitting in U.S.A.  
 3426. Asdic Installation—Type 150—Establishment List.

*(Aircraft.—(Technical.)*

3427. Compressibility Effects in High Speed Diving.  
 3428. Helmets, Flying, Type C wired (Stores Ref. 22C/449—542 and 887/880)—Modification.  
 3429. Merlin Engines—Revised Oil Pressures.

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

3430. Rudders—Modification—As. and As.  
 3431. Additional Natural Ventilation in Galleys—Fitting of—As. and As.  
 3432. Alterations and Additions. (Rescue Tugs).  
 3433. Admiralty Shallow Water Diving Dress.  
 3434. Detel Paints—Stocks.  
 3435. Deck Coverings—Use of non-Latex Material—Discontinuance of.  
 3436. Cable Electric, Pattern 13446—Introduction.  
 3437. Firefighting Appliances—Foam Compound—Care in use of.  
 3438. Portable Petrol Vapour Detectors—Provision of for Trials—REPORTS.  
 3439. Signalling Projectors, 24-in., Oxy-Acetylene—Disposal.  
 3440. Shipwrights' Tools—Allowance.  
 3441. Station Pointer, Pattern 70, and Star Globes, Pattern 604—Allowance.  
 3442. Drinking Water Coolers—Supply of—REPORTS.  
 3443. Handlamps, Pattern 17008—Issue in lieu of Pattern 8130.  
 3444. Aircraft—Scales for Weighing Carbon Dioxide Cylinders.  
 3445. Experimental Works—Use of Batteries, Pattern 3773.  
 3446. R.N. Store Depot, Whitechurch, Cardiff—Return of Stores to.

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

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

- 3447. Purchase Tax—Purchases by Local Officers of Chargeable Goods.
- 3448. Talcum Powder in Rubber Gloves.
- 3449. Cameras, Aircraft, G.45B—Introduction.
- 3450. W.R.N.S.—Uniform.
- 3451. Landing Craft Recovery Units—Arrangements for Supply of and Accounting for Naval Stores and Special Equipment.
- 3452. Victualling Accounts—Inventory System of Accounting for Loan Clothing, Mess Gear and Reserve Provisions in Certain Small Vessels.
- 3453.—Bread—Additions to List of Local Contracts 1944-5.
- 3454.—Dehydrated Meat—Use.
- 3455. Attaché Cases.

SECTION 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE

- 3456. A.M.S.Is.
- 3457. Amendments to Books.
- 3458. A.P.1574—Aircraft Maintenance Regulations.
- 3459. B.R. 85.—Abolition.
- 3460. B.R. 109—Abolition.
- 3461. B.R. 368—Establishment of Naval Stores for Sloops, Corvettes (Kittiwake, etc., Types), etc. and Form D.129—List of Particulars—Lists of Errata No. 12.
- 3462. B.R. 812/44—Drill for 40-mm., Mark IV Guns on Twin Marks IV and IV\* Mountings—Issue.
- 3463. B.R. 1032 (Restricted)—Gun Sighting Manual for Fixed and Free Guns of Naval Aircraft.
- 3464. Form 0-6 Ammunition Labels—Additions.
- 3465. Forms S.1043 and S.1044—Clearance of Advances of Pay.
- 3466. Aircraft Recognition Multilith Photographs—S.1700 Series.
- 3467. Pilots Notes for Naval Aircraft (Increased Allowances) A.P.(N) 1.
- 3468. Correspondence from British Admiralty Delegation, Washington.
- 3469. Accommodation Ship "Thames"—Confusion with H.M.S. "Thames".
- 3470. H.M.S. "St. Angelo" and V.S.I.S. "Angelo"—Addressing of Correspondence.
- 3471. R.N. Store Depot, Whitechurch, Cardiff—Return of Stores to.
- 3472. Aircraft Stores Establishment for Spares and Tools for Aero-Engines, Power Plants, Aero-Engine Accessories and Propellers.
- 3473. Prisoners of War and Civilian Internees in the Far East—Addressing of Correspondence.

SECTION 6.—SHORE ESTABLISHMENTS

- 3474. Civil Servants Employed in Operational Areas—Compensation for Injury.
- 3475. Pharmacists—Payment for extra attendance.
- 3476. Foreman and Inspectors of Dockyard Branches and Trades and Comparable Grades—Grant of War Allowances.
- 3477. Furniture, etc.—Taken Over in Requisitioned Premises.
- 3478. Merchant Shipbuilding and Repairs Regional Organization.
- 3479. Scottish Supplementary Medical Service—Co-operation with Admiralty Industrial Establishments in Scotland.
- 3480. Travel Between the United Kingdom and the Continent—Individuals and Small Parties.

(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.

3368.—Defence Regulation 17E—Extension of Time for Institution of Proceedings under Separation and Maintenance Acts

(N.L. 1699/44.—29 Jun. 1944.)

Paragraph 2 of A.F.O. 2425/44 should be amplified to include the Commodore, R.N. Barracks, Lee-on-Solent, as an officer designated for the purpose of signing the certificates to be given under paragraph 2 (a) of the Regulation.

(A.F.O. 2425/44.)

3369.—Abandoning of Aircraft by Air Crews

(A./A.O.D./N.L. 3665/44.—29 Jun. 1944.)

Misunderstandings have occurred amongst air crews which have resulted in the abandoning of aircraft when it was neither necessary for them to do so nor was it intended by the pilot of the aircraft.

2. In order to avoid confusion the following procedure is to be used :—

(i) When the pilot of the aircraft considers that the situation is such that it appears probable that the aircraft will have to be abandoned, he is to give the precautionary warnings : " Put on parachutes " followed by " Prepare to abandon aircraft ".

(ii) When it is certain that the aircrew must abandon the aircraft, the pilot of the aircraft is to give the executive order " Jump, jump ".

3. Attention is drawn to A.F.O. 917/44, Section IX, paragraph 1, with regard to wearing of parachutes and parachute harness by aircrews and passengers other than Naval flying personnel.

(A.F.O. 917/44.)

(A.F.O. 2295/44 is cancelled.)

3370.—Air Firing Practices—Assessment of Scores

(A.W.D. 815/44.—29 Jun. 1944.)

In order to standardize the system of scoring in air firing practices and to provide a means of comparing the results of different units the following method of scoring is to be adopted :—

*Assessment of Hits.*—Flags : Every bullet hole made in the fabric of a flag target is to count as one hit. Marks on the net or towing lines do not count.

Sleeves :—In free gun beam and beam relative speed firings, all holes are to count half a hit.

In all other exercises holes in the front of the sleeve are to count one hit, and holes in the after part half a hit. The front of the sleeve for this purpose is that part of the sleeve whose distance from the leading edge is one and a half times the diameter of the opening (for a 20-foot low drag sleeve whose opening is 2 feet in diameter the " front " is the first 3 feet, in a P.P.T.T. sleeve the front is the first 1½ feet).

Broken shroud lines, etc., do not count as hits or parts of hits.

**Assessment of Score.**—The score is to be expressed as the percentage hits to rounds fired that would be scored on a 4 ft. × 2 ft. × 20 ft. low drag sleeve. The actual percentage of hits obtained are therefore to be multiplied by the target factor which is based on the area of the target, if any other type is used.

Target factors are as follows:—

Type of target	Area	Target factor
4 ft. × 2 ft. × 20 ft. Low drag sleeve ...	60 sq. ft.	1
3 ft. × 2 ft. × 15 ft. Low drag sleeve ...	37.5 sq. ft.	1.6
2 ft. × 1 ft. × 10 ft. P.P.T.T. sleeve ...	15 sq. ft.	4
5 ft. × 20 ft. Flag ...	100 sq. ft.	0.6
4 ft. × 20 ft. Flag ...	80 sq. ft.	0.75
3 ft. × 3 ft. Astern cone ...	7.1 sq. ft.	8.5

**Example.**—In a P.P.T.T. sleeve there are 10 holes in the first 18 ins., and 18 holes in the remainder. Number of rounds fired, 400.

The number of hits is therefore ...  $10 + \frac{18}{2} = 19$

The percentage of hits equals ...  $\frac{19 \times 100}{400} = 4.75$  per cent.

The target factor is 4.

Score = 4.75 per cent. × 4 = 19 per cent.

### 3371.—German Hospital Ships

(M. 06544/44.—29 Jun. 1944.)

The German Government have notified the undernoted vessels as hospital ships. H.M. Government have accepted these vessels as hospital ships in addition to those promulgated in A.F.Os. 1764/44 and 2969/44. Particulars of the vessels are as follows:—

Ss. "Gottingen" (ex "Gouverneur-General Grevy")—

G.R.T. ...	4565
Length ...	110 metres.
Breadth ...	15 metres.
No. of funnels ...	2
No. of masts ...	2
Speed ...	10½ knots (approx.).

Ss. "Giessen" (ex "Gouverneur-General Chancy")—

G.R.T. ...	4397.
Length ...	110 metres.
Breadth ...	16.2 metres.
No. of funnels ...	2
No. of masts ...	2
Speed ...	10½ knots (approx.).

Both vessels will bear normal hospital ship markings and illumination.

(A.F.O. 1764/44 and 2969/44.)

(A.G.M.228A is cancelled.)

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

### 3372.—Commodores of Convoys and their Staffs—Messing and Allowances

(C.W. 18438/44.—29 Jun. 1944.)

A.F.O. 844/40 is to be amended as follows:—

Delete paragraph 2 (i) and (ii) and substitute—

"2. Lodging and Subsistence.—The following allowances are payable:—

(i) At the Home Base Port—If the Officer's home is not at the Port, allowances for periods of duty are payable in accordance with K.R. and A.I., Article 1666. If the Officer's home is at the Port, Provision Allowance only is payable. If the Officer maintains a home outside the United Kingdom, Lodging and Provision Allowances (together with Servants' Allowance) are payable with no allowance for retention of Lodgings during absence.

(ii) Lodging Allowance paid under this clause should be indicated in Ship's Ledger by quoting the number of this later Fleet Order, but Form S.1297 need not be rendered."

#### 4. Travelling Expenses.

Delete all words after "issuable" and insert "under A.F.O. 3843/42".

(A.F.Os. 844/40, 3843/42, 4401/43 and 4666/43.)

*See AFO 2671/40.* **3373.—Air Gunnery Officers—Duties, etc.**

(C.W. 18414/44.—29 Jun. 1944.)

The following amendment is to be made to A.F.O. 3849/42:—

Paragraph 5, sub-paragraph (i). Add at end—

"Two copies of such recommendations are to be forwarded to the Administrative Authority, one to be forwarded to the Admiralty and the other to the Captain, H.M.S. "Excellent", Portsmouth."

(A.F.O. 3849/42.)

*AFO. 5880/44*

### 3374.—Visits of Training Officers to Instructional Technique Courses

(C.W./N.T. 43/44.—29 Jun. 1944.)

Instructional Technique Courses are now in progress at R.N. Barracks, Portsmouth, Devonport and Chatham. These are courses of one-week's duration, normally starting each Monday, designed principally to help Chief and Petty Officers and Leading Rates in the art of instructing.

2. The courses emphasize the basic principles of sound training, the qualities and standard of performance of good instructors, the essential principles of visual training (A.F.O. 792/44 and A.F.O. 2975/44), and give practice in the art of instructing. Every attempt is made to develop in the instructor the capacity for critical self-analysis.

3. In view of the proved success of these short I.T. Courses, it is considered desirable that Commanding Officers of training establishments should arrange for Training Commanders and principal Training Officers to visit, as convenient, one of these three depots in order to observe an I.T. Course in progress. With reference to C.A.F.O. 1089/44, paragraph 4, it is considered that such a visit might be a useful help in the assessment of instructors, and a guide generally on training methods.

4. There are often vacancies for about six officers to be attached as observers to these courses.

5. Applications to attend a course are to be made direct to the Commodores of the depots.

(A.F.Os. 792/44, 2975/44 and C.A.F.O. 1089/44.)

3375.—Sick Leave for Retired, Reserve and Emergency List Officers—Revised Conditions—REPORT

(C.W. 52869/43.—29 Jun. 1944.)

The following revised regulations apply to re-employed Retired Officers and Temporary Officers of the Royal Navy and Royal Marines; Officers of the Reserve Lists (including those serving under Agreements T.124X and T.124T; Skippers R.N.R. and Officers promoted therefrom), Officers of the Emergency List and Officers of the W.R.N.S. The provisions do not apply to Officers serving under Agreement T.124 whose sick leave conditions remain as promulgated in A.F.O. 3452/40.

2. Officers as defined above who whilst borne for full pay on the books of H.M. Ships or Royal Marine Divisions become medically unfit for duty may continue to receive full pay during the period of their disablement subject to the conditions and within the limits prescribed hereunder.

3. Provided that a reasonable probability of fitness for further service is certified by the Naval Medical Authorities to continue to exist, an Officer who sustains an injury on duty not due to his own default, or is shown to the satisfaction of the Admiralty to be suffering from sickness attributable to the conditions of his service may receive, at Admiralty discretion, full pay during disablement up to a maximum period of 18 months reckoned from the date he was first checked or absent sick whether at home or abroad.

4. Subject to the proviso referred to in paragraph 3 above an Officer suffering from an injury or sickness which is not considered to be attributable to the conditions of his service may receive, at Admiralty discretion, full pay up to 6 months reckoned from the date he was first checked or absent sick whether at home or abroad. Sick leave with full pay in excess of 6 months (and exceptionally up to a possible maximum of 12 months) may be granted in suitable cases where the medical prognosis is satisfactory and the Officer is likely to be fit for duty within a reasonable period, and in any event within the maximum limit of 12 months, and his record, experience and qualifications are considered to be such as to warrant further retention on full pay with a view to immediate employment when found fit. In cases where the foregoing conditions are not satisfied, and the Officer is not considered to be a proper subject for invaliding, his temporary commission will be terminated, or he will be reverted to the retired list, as appropriate, but an extension of 28 days full pay may be granted from the date the decision is taken. Officers who contract disabilities whilst on unpaid leave are not eligible for full pay sick leave. (See paragraph 6 below as regards Officers checked sick whilst serving abroad.)

5. If at any time during an Officer's illness the Naval Medical Authorities consider that a reasonable probability of fitness for any form of naval service no longer exists, or if he is considered fit only for restricted service and no suitable employment is available, he will be invalided irrespective of whether the disability is considered to be attributable or not attributable to his service. An extension of full pay sick leave reckoned from the date on which a reasonable probability of fitness for further service ceased to exist (or in a case of fitness only for restricted service from the date of the decision that no suitable employment is available) may, however, be granted at Admiralty discretion, and actual invaliding will take effect from the date of ceasing full pay. Officers whose sick leave on the date of survey for invaliding amounts to less than 91 days will be eligible for such an extension of full pay sick leave up to 42 days provided that their sick leave, including the extension, does not exceed 91 days reckoned from the date they were first checked sick. All Officers will, however, receive on invaliding not less than 28 days' extension of full pay reckoned from the date of notification by the Admiralty of invaliding subject to the maximum of 12 months' sick leave (or 18 months in attributable cases) not being exceeded.

6. Unless the Admiralty shall direct otherwise in any particular case, an Officer checked sick whilst serving abroad shall not be surveyed with a view to determining whether a reasonable probability of fitness for further service has ceased to exist until after his arrival in the United Kingdom, and full pay shall not cease before the date of such survey, notwithstanding that the limits of full pay sick leave prescribed in these regulations may be exceeded, provided always that he returns to the United Kingdom as soon as practicable after he is found fit to travel. In addition, an extension of not less than 28 days' full pay sick leave may be granted before the Officer is invalided (or his disposal otherwise determined)

subject to the condition that if he has already exhausted his normal sick leave entitlement full pay will not be extended beyond three months from the date of arrival in the United Kingdom. Similar rules will apply as regards Officers who joined the naval service while domiciled abroad and who desire to return to their home country instead of to the United Kingdom. In connection with the foregoing provisions attention is drawn to Article 1336, K.R. & A.I., concerning the necessity for sick Officers to report for medical survey as soon as possible after arrival in United Kingdom. Owing to non-compliance with this regulation cases have arisen of Officers continuing sick at their homes after arrival, without the knowledge of the Naval Medical Authorities.

7. Officers when checked sick should be borne for pay in accordance with the provisions of clause 1 of Article 1554, K.R. & A.I., and the attention of Accountant Officers is drawn to the necessity of strict compliance with this regulation and also where applicable with the provisions of Article 1739. An Officer appointed additional to a ship or establishment at home who remains sick in his appointment for over 42 days should be borne for full pay on the books of his ship for 42 days only as in the case of a supernumerary Officer. Formal grants of full pay sick leave, (a) from date of arrival in United Kingdom or (b) after 42 days' sickness, or date of supersession if later (clause 2 of Article 1554, K.R. & A.I.), will be authorized by the Admiralty, and in order that grants may be authorized expeditiously it is important that the date the Officer was first checked sick and, where applicable, the date of supersession, should be inserted under "Reason for Discharge" on Form S.48. If a sick Officer continues to be borne in his appointment for more than 42 days because he has not been superseded, or in other exceptional circumstances, a special report should be forwarded to the Admiralty (C.W. Branch) as soon as the period of sickness extends to three months, in order that a check may be maintained on the duration of his sick leave. The report should include the date he was first checked sick and the name of the hospital or other address to which he has been discharged.

8. Officers of the following categories who have reached the limit of full pay sick leave allowed will be eligible to receive pay as provided hereunder.

9. Officers suffering from injury or sickness not attributable to the conditions of service who were in receipt of retired pay which has been suspended during re-employment will revert to retired pay.

10. Officers suffering from sickness or disability attributable to the conditions of service will receive pay as follows provided that a reasonable probability of fitness for further service continues to exist:—

(a) Officers who have retired with retired pay (other than disability retired pay or disability addition to service retired pay) may receive either half pay increased by 25 per cent., or may revert to their retired pay, without such increase, whichever be more to their advantage.

(b) Officers receiving disability retired pay under paragraph 2, Section III, Clause (e), of the Re-employment Regulations, Officers who retired without retired pay, Officers on the Emergency List, Officers of the Royal Naval Reserves, and other Officers not holding permanent regular commissions on the active list of the Royal Navy or Royal Marines, may receive half pay.

(c) Officers in receipt of disability retired pay or pension authorized by the Ministry of Pensions on account of disablement arising out of naval service during the period 4th August, 1914, to 30th September, 1921, may receive half pay increased by the amount, if any, by which 25 per cent. of such half pay exceeds that portion of the disability retired pay which the Admiralty have decided to have been awarded in respect of service.

(d) Officers in receipt of disability additions to service retired pay or portions of their disability retired pay under paragraph 2, Section III, clauses (c) and (d) of the Re-employment Regulations, may receive either half pay increased by 25 per cent. or may revert to retired pay at the full rate, without such increase, whichever be more to their advantage.

(e) Except as regards half pay issued under (b) and (c) of this paragraph a deduction to be made from the half pay as increased under these regulations equal to that portion of the retired pay or service element of retired pay which has been commuted.

11. Officers in receipt of service retired pay or the service element of disability retired pay or pension increased by 25 per cent., because it is more to their advantage than full pay increased by 25 per cent., will revert to their service retired pay or the service element of disability retired pay or pension but without such increase, as from the expiration of the period of full pay sick leave allowable under the foregoing regulations.

12. For the purpose of these regulations, the rate of half pay shall be that appropriate to the rank in respect of which the Officer received full pay sick leave, time on full or half pay (or retired pay in lieu) counting for increase of half pay on the scale in force for corresponding Officers on the active or permanent lists. The period of half pay will be limited to six months, making two years' sick leave in all.

(K.R. & A.I., Articles 1336, 1554 and 1739.)

(A.F.Os. 2104/40, 3452/40 and 1894/41.)

(A.F.Os. 2220/40, 1475/41, 4473/41, 5492/41, 108/42 and 3602/42, are cancelled.)

### 3376.—B.N.L.Os. Serving in Dutch Vessels—Special Allowance

(C.W. 19769/43.—29 Jun. 1944.)

With reference to paragraph 4 of A.F.O. 927/44, the special tax-free "liaison allowance" of 2s. a day may be paid, with effect from 1st February, 1943, to B.N.L.Os. serving in vessels of the Dutch Navy.

2. Victualling allowance, however, is not to be paid in addition, as B.N.L.Os. in Dutch ships have no individual mess bills to meet, but receive all their victualling in kind.

(A.F.O. 927/44.)

### 3377.—Royal Australian Navy—Navigating Allowance

(C.W. 30993/44.—29 Jun. 1944.)

With reference to A.F.O. 6307/43, Appendix II, the Australian Government have decided that the provisions of A.F.O. 3660/43 are to apply to officers of the Royal Australian Navy, including the Reserves.

2. In the case of R.A.N.V.R. officers serving with the Royal Navy, payment of the appropriate allowance may be made from the date of qualifying, but not earlier than 30th October, 1942.

(A.F.Os. 3660/43, 6307/43.)

### 3378.—South African Naval Forces—Revised Rates of Pay and Allowances

(N. 13471/44.—29 Jun. 1944.)

The following amendment is to be made to A.F.O. 1073/44:—

Paragraph 2—

						s.	d.
Delete	"Wireman Riggers	...	...	...	...	13	0 a day.
Add	"Petty Officer Rigger	...	...	...	...	13	0 a day
	Leading Rigger	...	...	...	...	11	0 a day
	Rigger	...	...	...	...	10	0 a day."

(A.F.O. 1073/44.)

### 3379.—Admiralty Surgeon and Agent

(C.E. 8366/44.—29 Jun. 1944.)

Mr. D. Ferguson, M.B., Ch.B., of "Carnlia", Salen, Acharacle, Argyll, has been appointed Admiralty Surgeon and Agent for Salen.

### 3380.—Fleet Air Arm—Recommendations of Airmen for Employment as Instructors in the Royal Air Force

(N. 13120/44.—29 Jun. 1944.)

As the requirement which gave rise to A.F.O. 1902/40 no longer exists this A.F.O. is now cancelled.

(A.F.O. 1902/40 is cancelled.)

### 3381.—Royal Marine Tradesmen

(N. 14190/44.—29 Jun. 1944.)

The following is a consolidation of all previous operative A.F.Os. relating to Royal Marine Tradesmen:—

2. A Tradesmen's Unit with Tradesmen's rates of pay was introduced in the Royal Marines in 1940. The rates of pay, conditions of payment and trade tests are as laid down in the Royal Warrant for the Pay, etc., of the Army and "Regulations for Tradesmen's rates of Pay", but good conduct badges, marriage and other allowances will continue to be awarded under naval conditions.

3. The following categories only receive pay as tradesmen, but the categories are liable to alteration in accordance with requirements:—

#### Group "A"

Ammunition Examiner.	Electrical Fitter (R.A.).
Armament Artificer (A.A.).	Electrician (Signals).
Armament Artificer (Electrical).	Engine Artificer (R.E.).
Armament Artificer (Field).	Fitter.
Armament Artificer (Inst. A.A.).	Fitter (Gun).
Armament Artificer (Inst. Field).	Instrument Mechanic.
Armament Artificer (Radio).	Instrument Mechanic (Signals).
Armament Artificer (Vehicle Mechanic).	Lithographic (Draughtsman).
Armourer.	Lithographic (Prover).
Artificer.	Machine Minder (Lithographic).
Draughtsman (Architectural).	Photographer (Cartographic).
Draughtsman (Mechanical).	Surveyor (R.A.).
Draughtsman (Topographical).	Telecommunication Mechanic.
Driver (Transportation Plant).	Turner.
Electrician.	Vehicle Mechanic.

#### Group "B"

Blacksmith.	Plasterer (Camouflage).
Bricklayer.	Plumber and Pipefitter.
Carpenter and Joiner.	Postal Worker (Classes II and III)
Coppersmith.	Projectionist (Cinema).
Mason.	Sheet Metal Worker.
Miner.	Welder.
Modeller (Camouflage).	

#### Group "C"

Clerk (Technical M/T).	Shoemaker.
Coach Trimmer.	Stevedore (Class I).
Draughtsman (Signals).	Storeman (Technical).
Equipment Repairer.	Tailor.
Painter and Decorator.	Textile Refitter.
Platelayer.	Tinsmith and Whitesmith.

#### Group "D"

Concreter.	Sawyer.
Driver (Crane).	Steel Bender (Ferro-Concrete).
Driver Mechanic.	Stevedore (Classes II and III).
Engine Hand (Internal Combustion).	Stoker (Stationary Engine).

4. Extra Duty Pay is not payable to Marines in receipt of tradesmen's rates of pay, but N.C.Os. and men who were employed as tradesmen before the introduction of the R.M. Tradesmen's Unit had the option of continuing their existing rates of pay with Extra Duty Pay until they completed their current appointments.

5. Men entered subsequent to 25th June, 1940, are ineligible for Extra Duty Pay when employed as M.T. Drivers.

6. Tradesmen will be employed as such throughout their service provided they maintain the required standard of efficiency. They will be eligible for promotion to higher rank within the numbers authorized.

7. The current (1925) rates of pay, *excluding war bonus*, are as follows:—

	Group			
	A	B	C	D
	s. d.	s. d.	s. d.	s. d.
Armament Quartermaster-Sergeant ...	12 0	12 0	12 0	12 0
Quartermaster-Sergeant ...	10 9	10 9	10 9	10 9
Colour Sergeant ...	9 9	9 9	9 9	9 9
Sergeant ...	8 3	8 3	8 3	8 3
Lance Sergeant ...	7 9	7 6	6 9	6 0
Corporal ...	6 9	6 6	5 9	5 0
After three years ...	—	—	—	5 3
Lance Corporal ...	6 0	5 9	5 0	4 3
After three years' man's service ...	—	—	—	4 6
Marine:				
Class I ...	5 0	4 6	3 9	—
After three years' man's service ...	5 9	5 3	4 9	—
Class II ...	3 9	3 6	3 3	3 0
After one year's man's service ...	4 0	3 9	3 6	3 3
After two years' man's service ...	4 3	4 0	3 9	3 6
After three years' man's service ...	5 0	4 9	4 6	4 3
Class III ...	3 3	3 0	2 9	2 6
After one year's man's service ...	3 6	3 3	3 0	2 9
After two years' man's service ...	3 9	3 6	3 3	3 0
After three years' man's service ...	4 6	4 3	4 0	3 9

8. A central roster of tradesmen is established at the R.M. Technical Training Depot, Southsea, from which tradesmen are drafted.

9. The distinguishing letter "T" should be added to the register number of tradesmen in the R.M. Tradesmen Unit, e.g., Po.9999 (T), and the register numbers are to be shown accordingly on service documents, ships' books, etc.

(A.F.Os. 3548/40, 1915/41 and 3128/41—not in annual volume—are cancelled.)

(A.F.Os. 3485/42, 5258/42, 1795/43, 2357/43, 5197/43, 1485/44 and 2317/44 are cancelled.)

### 3382.—R.N. Patrol Service—Introduction of Rating of Leading Stoker

(N. 12720/44.—29 Jun. 1944.)

It has been decided as a war-time measure to introduce, as from 27th April, 1944, the intermediate rating of Leading Stoker in the R.N. and R.N.R. Patrol Service, and accordingly the following detailed arrangements are approved:—

- The complements of Patrol Service manned vessels are to be considered amended by this Order to read "Engineman or Leading Stoker" in the case of billets which are at present filled by junior Enginemen. Stokers hitherto in receipt of difference of pay as Engineman in billets for which the alternative of Leading Stoker is now provided are to be paid difference of pay as Leading Stoker from 27th April, 1944.
- Stokers recommended and selected for advancement are to undergo the technical and disciplinary course as at present in force for Enginemen, and on successful completion of this course they will be advanced to the rate of Wartime Leading Stoker (Patrol Service) on the authority of Form B.13 issued by the Lowestoft Depot.
- The number of Stokers to be put on course is to be governed by the number of Enginemen required in the Patrol Service.
- Leading Stokers are to serve as such for six months at sea. Advancement to Engineman will be authorized on Form B.13 issued from the Lowestoft Depot in accordance with requirements.

(e) All Stokers who have already passed for Engineman and are awaiting advancement when the rate of Leading Stoker is introduced will be rated Leading Stoker, on the authority of Form B.13 issued from Lowestoft Depot, on reaching the top of their advancement roster, and they will be rated Wartime Engineman in accordance with paragraph (d).

(f) The period of V.G. conduct required prior to advancement is to be six months in each grade for advancement to Leading Stoker and Engineman. The period of V.G. time for re-advancement to Leading Stoker and Engineman will be six months in each grade, and A.F.O. 339/42 is to be amended in this respect. (See paragraph (j).)

(g) All Chief Enginemen and Enginemen now serving are to be liable to disrating to Leading Stoker, even though they have not previously held this rate. This, however, does not apply to those Enginemen who entered the service direct as such. (Vide A.F.O. 3973/42.)

(h) On foreign stations the examination for Leading Stoker may be conducted by suitable examining officers as directed by the Commander-in-Chief. Forms S.442 are to be forwarded to the Commodore, Patrol Service Central Depot, Lowestoft, who will authorize advancements as in paragraph (b). These ratings will undergo the disciplinary courses on return to depot, and a note is to be made on their conduct sheets that they are rated, but that they have not undergone the disciplinary courses.

(i) Any Stoker who was disrated from Engineman before 27th April, 1944, may, if recommended, and if he had on that date completed six months or more V.G. conduct (time) since being disrated, be advanced to the new rate of Leading Stoker as from that date (but not earlier) and he will be eligible for re-advancement to the rate of Engineman on completion of 12 months V.G. time from the date of being disrated to Stoker.

(j) A.F.O. 339/42 is to be amended as follows:—  
Paragraph (i).

Delete Stoker to Engineman ... .. 1 year  
Substitute Stoker to Leading Stoker ... .. 6 months  
Leading Stoker to Engineman ... .. 6 months

Paragraph (3). Delete from "Re-advancement to Engineman," down to "Leading rate".

(A.F.Os. 339/42, 340/42 and 3973/42.)

(A.F.O. 2169/44 is cancelled.)

### 3383.—Uniform for Acting Regulating Petty Officers

(V/1/4674/44.—29 Jun. 1944.)

The correct uniform for Acting Regulating Petty Officers is Class III, with black horn buttons and Pattern 52 cap badge.

2. Class III uniform with gilt buttons and Pattern 49 cap badge is only to be worn by ratings of the Regulating Branch who hold or have held the rank of a confirmed Petty Officer.

(A.F.Os. 5323/43 and 674/44.)

(C.-in-C., Mediterranean, 28 Apr. 1944, No. 3298/156/9/6.)

### 3384.—Losses of Stores in H.M. Ships—REPORTS

(N.L. 3895/44.—29 Jun. 1944.)

For the period of the war, in order to reduce clerical labour, reports to the Admiralty under K.R. & A.I., Article 1130, in respect of losses of stores, may be confined to:—

- All losses affecting sea-going efficiency, or otherwise of major importance
- All losses where theft, fraud, arson or gross carelessness is proved or suspected (see K.R. & A.I., Article 1938).

A.F.O. 5396/44

2. Also for the period of the war, particulars of charges made under K.R. & A.I., Article 1528, clause 1 (c) and (e) against officers in respect of losses of stores, which Commanding Officers are empowered by K.R. & A.I., Articles 1881, 1883 and 1936, to assess and impose, need not be reported to the Commander-in-Chief for approval as required by clause 2 of Article 1528, except where the losses are due to the causes stated above.

3. The values of lost chronometers and watches issued as hydrographic stores should be ascertained from the Hydrographer, as the approximate values given in the 1938 edition of the Admiralty Manual of Navigation are not appropriate for this purpose, and the estimated values of lost instruments have to be assessed individually.

4. *Accidents* are to continue to be reported as directed in Article 1130.

(K.R. & A.I., Articles 1130, 1194 (4), 1528, 1881, 1883 and 1936.)

(A.F.Os. 137/43 and 2371/44.)

(A.F.O. 1872/43 is cancelled.)

### 3385.—Telegraphist Detectors—Abolition

(N. 4315/44.—29 Jun. 1944.)

A.F.O. 3904/43 is cancelled.

### 3386.—W.R.N.S.—Immobiles—Liability to Mobile Service

(N. 11574/44.—29 Jun. 1944.)

Individual immobile W.R.N.S. ratings who come within the age groups regarded as mobile under the Registration for Employment Order or the National Service Acts may be called upon to undertake mobile service when this is considered to be in the interests of the Service for any reason, unless they can show good cause for remaining immobile.

2. An appeal against compulsory transfer to mobile conditions on the part of any such immobile rating is to be considered by the responsible Command Superintendent, W.R.N.S., who is to satisfy herself, before allowing the appeal, that the rating concerned is genuinely immobile. Cases of doubt are to be referred to the Admiralty for decision.

3. Recruits under the age of 19 are at present permitted by the Ministry of Labour and National Service to enter the W.R.N.S. as immobile, if they so wish, without regard to their domestic circumstances. In order that such entrants shall automatically become liable to mobile service at the same age as women in civilian life, the NOTE to Question 13 on the Enrolment Form (S.1521) is to be amended as follows :—

“NOTE.—If immobile and under the age of 19, do you understand that you will become liable to mobile service when your age group is regarded as mobile under the Registration for Employment Order?”

4. Pending reprint of Form S.1521, the necessary amendment is to be made in ink, the alteration being initialled in ink by the recruit when the word “Yes” is written.

(A.F.O. 5647/42.)

(A.F.O. 3037/43 is cancelled.)

### 3387.—Provisions—Extra Issues to Men on Duty at Night

(V. 3691/44.—29 Jun. 1944.)

A second extra issue of chocolate, tea or coffee with milk and sugar may be made, when considered necessary, to men on duty doing two watches in a night. Such issues need not be specially reported.

2. K.R. & A.I., Article 1825, clause 5, will be amended.

(K.R. and A.I. Article 1825.)

### 3388.—Travel Between the United Kingdom and the Continent—Individuals and Small Parties

(N.L. 9542/44.—29 Jun. 1944.)

To ensure that movement between the United Kingdom and the Continent is limited to essential personnel, the Supreme Commander, Allied Expeditionary Force, has issued instructions which are summarized below in so far as they affect Naval and Royal Marine personnel, civilian personnel both non-industrial and industrial serving under the Admiralty, representatives of Admiralty contractors and personnel of the Allied Navies. No person will be allowed to travel without obtaining authority as outlined in this A.F.O.

2. The arrangements detailed herein are intended to apply to individuals or parties of visitors under five in number without vehicles. Larger numbers will be dealt with by the normal method of despatching reinforcements and drafts to the Continent.

3. All visits of individuals and small parties must be *sponsored and authorized*. The table given below shows the authorities who are competent to sponsor and authorize applications for travel from the United Kingdom to the Continent.

(a) *Allied Expeditionary Force—Naval Personnel.*

	Sponsoring Authority	Authorizing Authority
R.N. and R.M. ... ..	A.N.C.X.F.	A.N.C.X.F.
U.S. Navy ... ..	A.N.C.X.F.	A.N.C.X.F.
Other Allied Navies ... ..	A.N.C.X.F.	A.N.C.X.F.

(b) *Persons other than Allied Expeditionary Force.*

R.N. and R.M.	Sponsoring Authority	Authorizing Authority
Service personnel ... ..	Admiralty, C.W. Branch I	A.N.C.X.F.
All Admiralty civilians and representatives of Admiralty contractors.	Admiralty, C.E. Branch I	A.N.C.X.F.
U.S. Navy ... ..	COMNAVEU ... ..	A.N.C.X.F.
Other Allied Navies ... ..	Admiralty D.N.I. ... ..	A.N.C.X.F.

4. To conform with the Supreme Commander's instructions, and to avoid possible inconvenience, intending travellers must be in possession of the following travel documents :—

(a) *Allied Expeditionary Force—Naval Personnel*—A special route Order to be obtained from the office of A.N.C.X.F.

(b) *Persons other than Allied Expeditionary Force.*—(i) A photographic identity document which, in the case of civilians must be a Passport, a green National Registration card with photograph or a D.R. Form 12. Travellers not in possession of any of these documents should obtain either a green National Registration Identity Card or a D.R. Form 12 in accordance with the procedure outlined in A.F.Os. 847/42, paragraph 8 (b) and 1454/44 respectively.

(ii) An Allied Expeditionary Force Permit, application for which should be forwarded through normal Service channels to the sponsoring authority shown in the table above who will arrange for an application to be lodged with the office of A.N.C.X.F. for the necessary authorization which is a pre-requisite to the grant of a permit. As applications have to be made by letter, advance notice of the intending visit should be given in good time. The following information must be furnished to the sponsoring authority :—

- Full name and rank of any intending traveller ;
- Occupation (when appropriate) ;
- National Registration Identity Number (if a civilian) ;
- Type and serial number of photographic identity document ;
- Destination (“France” is not sufficient : the exact place or area to be visited should be stated) ;
- Date of departure ;
- Length of visit ;
- Full details of the necessity and reasons for the proposed visit ;
- Address and telephone number where the traveller can be contacted.



(iii) Arrangements to obtain the Allied Expeditionary Force Permit will be made by Admiralty and this document will be issued to the intending traveller together with movement instructions through the sponsoring authority.

5. On arrival on the Continent the traveller is required to report to the nearest Naval Provost Marshal or Assistant Provost Marshal in order that his permit may be endorsed both on arrival in and departure from the area actually visited. If visiting more than one area this procedure is required in each area visited.

If an extension of the visit is required over and above the time shown on the permit a further endorsement by the Provost Marshal will be required, application for which must be supported in writing by F.O.B.A.A. or F.O.W.E.S.T. In the absence of a Naval Provost Marshal permits should be endorsed by a Military or Air Force Provost Marshal.

6. *Travel from the Continent to the United Kingdom.*—Application for Naval personnel, Admiralty civilian personnel and representatives of Admiralty contractors to proceed from the Continent to the United Kingdom will be forwarded through the usual Service channels to one of the following authorizing agencies:—

Flag Officer, British Assault Area (F.O.B.A.A.), or  
Flag Officer, West (F.O.W.E.S.T.).

(A.F.Os. 847/42 and 1454/44.)

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

3389.—Guns—B.L., 15-in., Mark I.—Frames, Breech Mechanisms and Pressure Supply Pipes—Modification to Suit Mark III Cylinders, Hydraulic

(A.S. 6635/43.—29 Jun. 1944.)

A.F.O. 2482/44 should be amended as follows:—

For "use", in the last line (first word) read "reset".

(A.F.O. 2482/44.)

3390.—Guns—Q.F., 4 in., Mark XIX—Shafts, Firing Modification

(A.S. 2584/44.—29 Jun. 1944.)

The following modification is approved:—

<i>Gun</i>	...	...	Q.F., 4 in., Mark XIX.
<i>Parts affected</i>	...	...	{ Shafts, firing, Mark II. Levers, rear, Marks II* and III. Levers, front.
<i>Purpose</i>	...	...	To eliminate idle movement caused by wear in the square hole of the firing shaft rear lever, and to ensure correct adjustment between the boss of the firing shaft rear lever and top of firing bar.
<i>Nature of Modification</i>	...	...	Rear lever to be welded to firing shaft and face of front lever to be adjusted (welded if necessary). On modification a star (*) is to be added to the mark of the firing shaft.
<i>Drawing</i>	...	...	A.F.O. Diagram 193/44.
<i>By whom to be done</i>	...	...	R.N.A. depots.
<i>Degree of Urgency</i>	...	...	At first opportunity.

3391.—Guns—Hispano 20-mm.—Lock-springs, R.A.F. Ref. 7G/536

(A.S./G. 017414/43.—29 Jun. 1944.)

A.F.O. 4289/43 introducing lock-spring, Ref. 7G/536, for locking the gas plug and screw to the gas block of 20 mm. Hispano guns (aircraft and deck) is cancelled.

2. It has been found that stoppages occur owing to loosening of gas plugs, attributable to the ineffective locking action of the spring. Springs have also been found to break during firing.

3. It has therefore been decided that the lock-spring is to be considered obsolete, and the original method of securing by means of a locking wire re-introduced.

4. Ships and R.N. Air Establishments should return unused lock-springs to the nearest R.N. Armament Depot. Depots will be given disposal instructions at a later date.

(A.F.O. 4289/43 is cancelled.)

3392.—Guns—20-mm. Oerlikon—Box for Gauge Plug Bore

(A.S./C.I.N.O. 9104/43.—29 Jun. 1944.)

Boxes to contain the gauges plug bore for 20-mm. Oerlikon guns referred to in A.F.O. 2078/44 are being manufactured.

2. When boxes are available gauges plug bore are to be issued in them.

3. Ships, etc., to which gauges have been issued unboxed should demand boxes from the nearest Naval Armament Depot, to whom supplies are being sent.

4. The Naval Proportion Book will be amended.

(A.F.O. 2078/44.)

3393.—Gun Mountings—4.7-in. C.P., Mark XXII, Mountings—4.5-in. C.P., Mark V, Mountings—Modification to Fuze-Setting Trays

*Ships concerned and Home Dockyards*

(G. 017671/43.—29 Jun. 1944.)

The purpose of the modifications to the fuze-setting trays authorized by this Order is as follows:—

(a) To enable the existing arrangements to fuze a round fitted with fuze No. 211.

(b) To provide individual adjustment of the fuze-setting tray shell grips.

2. To accomplish (a), it is necessary, for both types of mounting, to ease away a little metal from the lubricator boss on the sliding bracket and from the rear support bracket. This is illustrated in red on A.F.O. Diagram 194/44 (G.R. 6510). In addition to the above, the 4.7-in. C.P., Mark XXII, mountings require the head of the spring plunger reducing to 0.2 in. thick and the collar for the spring plunger reducing to 0.3 in. thick. These modifications are also shown on the A.F.O. Diagram No. 194/44.

3. An improved type of shell grip was found necessary in the case of the 4.7-in. C.P., Mark XXII, mountings, to hold the shell more effectively. These should be demanded from G.M.O., Coventry.

4. To accomplish (b), it is necessary to replace one of the connecting rods by the new items shown on A.F.O. Diagram 194/44. This should be carried out in both types of mountings.

5. Commanding Officers of ships where these modifications have not been incorporated before delivery should arrange for the work to be carried out by ship's staff, if necessary with depot ship assistance.

6. The register number of mountings modified should be reported to the Admiralty.

**3394.—Gun Mountings—4-in. H.A. Twin, R.P.50 Series, Mark XIX—Modification to Shield for Access to Gun Driving Motors**

*C.Os. Ships Concerned, Dockyards and Repair Establishments*  
(G.08271/44.—29 Jun. 1944.)

Difficulty has been experienced in obtaining access to the gun driving motors of the 4-in. H.A. Twin, R.P. 50 series, Mark XIX mountings.

2. In order to provide easier means of access to these motors and to facilitate examination and removal of the brakes, an access hole should be cut in the shield as indicated on A.F.O. Diagram 198/44 (G.R. 6771).

3. It should be noted that this hole is only required on the layer's side for R.P.51 and 52 mountings as a cover is already provided on the trainer's side for these mountings.

4. For R.P.50 mountings the hole is to be cut on *both* sides of the shield.

5. The work should be carried out by ships' staff at the earliest available opportunity.

6. Authorities holding copies of Drawing No. N.10815 should modify their drawings accordingly.

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

*(A.F.O. 2867/44 is cancelled.)*

**3395.—Gun Mountings—20-mm., Marks VIIA and VIIA S/M Mountings, Locking Plate for Lubricating Tube in Balance Weight**

*Ships, Dockyards and Bases concerned*  
(G. 2261/44.—29 Jun. 1944.)

It has been reported that there is a liability of the lubricating tubes for rollers in the balance weights of 20-mm., Marks VIIA and VIIA S/M mountings unscrewing and projecting through the balance weight, causing a foul between the grease nipple and the inner cylinder, as the gun is elevated.

2. In order to prevent this occurring, a locking plate is to be fitted as shown in A.F.O. Diagram No. 201/44 (Drawing No. G.R.6714).

3. The work involved is to be carried out by ships' or base staffs.

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

**3396.—Ammunition—General—E.F.C. Values of Cordite Charges**

*See AFO 2033/46.* (Pt. G. 02550/42.—29 Jun. 1944.)

A.F.O. 4522/43 is to be amended as follows:—  
Table III, page 4.

*Amend heading of third column to read "Cordite S.C."*

*"3-in., 20-cwt., 16-lb. shell ... Full ... 048". Insert "1" in fourth column headed "E.F.C. Value".*

*"3-in., 20-cwt., 12½-lb. shell ... Full." Delete "029" and "1/8" from fifth and sixth columns respectively.*

*"3-in., 20-cwt., 12½-lb. shell ... Star." Insert "029" and "1/8" in fifth and sixth columns respectively.*

*(A.F.Os. 4522/43, 5597/43 and 2343/44.)*

**3397.—Ammunition—20-mm. Oerlikon—Periodical Firing and Landing of Ready-Use Ammunition**

(G. 03657/44.—29 Jun. 1944.)

Experience has shown that missfires, stoppages and hangfires may occur if Oerlikon ammunition is left too long exposed.

2. The instructions set out below, which supersede those laid down in A.F.O. 1024/43 and B.R. 274/43, are to be brought into force.

3. (a) Every four weeks, or more frequently if the condition of the ammunition warrants it, 30 rounds should be fired from the magazine on the gun and 30 rounds from the ready-use magazine longest loaded. The purpose of this firing is to test the functioning of the cartridge and of the gun. These firings are to be regarded as for practice and the ammunition expended as part of the annual practice allowance.

(b) If the firings are satisfactory the half-empty magazines should be unloaded, the ammunition should be re-greased and re-loaded into one magazine which should be put on the gun. The empty magazine should be re-loaded.

(c) If the firings are unsatisfactory, the balance of the ammunition from the magazine or magazines which failed should be removed from the magazine and returned to a Naval Armament Depot at the first convenient opportunity. The ammunition should be packed and returned separately, particular attention being paid to marking, *vide* paragraph 6.

Further test firings of R.U. magazines should be carried out if necessary so as to leave the magazine on the gun and the magazines in the R.U. stowages loaded with ammunition known to be serviceable.

(d) When muzzle covers are in place they should be removed before firing.

The last rounds to be loaded into the magazine to be left on the gun should be practice or practice tracer.

4. All greased ammunition should be landed after six months. This period should be shortened to three months in ships where the temperature of the Oerlikon magazines in the R.U. positions has exceeded 100° F. Ammunition landed in accordance with this paragraph should be packed and returned to store separately—*see* paragraph 6 in regard to marking. Naval Armament Depots are to bring to produce ammunition landed under paragraph 4.

5. To facilitate complying with this order it may be found convenient to mark in chalk on all magazines their date of filling.

6. Ammunition landed under the terms of this order should be clearly so marked differentiating between that landed under paragraph 3 (c), for which form S.1148 (i) or (j) is normally required, and that landed under paragraph 4.

7. This order will apply in general to D.E.M.S., but further details as regards practice allowance will be issued in A.M.S.I.

8. Handbooks will be amended.

*(A.F.O. 1024/43.)*

*(B.R. 274/43.)*

*(A.F.O. 1527/44 is cancelled.)*

**3398.—Ammunition—20-mm. Oerlikon H.E.—Lot T.P.C.746 Withdrawal**

(A.S./G. 2749/44.—29 Jun. 1944.)

20-mm Oerlikon H.E. ammunition of lot T.P.C.746 has caused stoppages owing to the caps of the cartridges blowing out when using Mark II breech face pieces and is to be withdrawn from service.

2. All Oerlikon H.E. ammunition of this lot on board ships is to be returned to the nearest Naval Armament Depot or Officer in Charge of Armament Supply at the first opportunity and ammunition of other lots drawn in lieu.

3. D.E.M.S. Staff Officers are to arrange for similar action to be taken in merchant ships.

4. H.E. ammunition of this lot in store at Naval Armament Depots or subsequently received should be brought to produce.

**3399.—Ammunition—20-mm. Oerlikon—Clearing Charges**

(G. 0186/43, Part I.—29 Jun. 1944.)

A Mark II clearing charge for 20-mm. Oerlikon guns is about to be introduced. The Mark II is suitable for use in all barrels and supersedes the Mark I, which is suitable only for British Marks II, III and III\* barrels. It consists of a standard Oerlikon cartridge case of a slightly reduced length. The case contains a service charge retained by a glazeboard cup and first issues will be marked on the base thus:—

(a) Trade Mark, e.g. R.G.

(b) Oe. Z.

(c) Year of manufacture, e.g. 44.

Cases of later manufacture will also be marked on the body just above the base groove thus:—

- (a) Trade mark of factory converting case, e.g. R.G.
- (b) Mark II.
- (c) Nature of ammunition, i.e. e.c.

Mark II clearing charges will be packed in Box No. 417 (20 charges) contained in an outer box H.48, Mark I, or box A.S.A. $\frac{1}{2}$ N.H.3 (70 charges).

2. Should a shell at any time be left in the bore of the barrel after a stoppage, the gun is to be cleared by using a clearing charge.

3. To use a clearing charge:—

- (a) If the gun has not been heated by firing, cock the gun. If the gun has been heated by firing more than 240 rounds (A.F.O. P.51/43 refers) before cocking first release the recoiling parts so that the breech of the gun is masked as much as possible in the event of the shell cooking off, secondly, thoroughly cool the rear end of the barrel with water, and then cock the gun.
- (b) Remove any propellant or foreign matter in the chamber or body of the gun.
- (c) Lead a greased clearing charge into the mouthpiece of an otherwise empty magazine and work the ratchet three or four times to apply some tension. If an empty magazine is not available, the clearing charge is to be inserted into the loaded magazine as follows:—
  - (i) By means of the ratchet lever take the weight of the magazine spring.
  - (ii) If the magazine is not full, insert the clearing charge; if the magazine is full remove one round and insert the clearing charge.
  - (iii) Remove the ratchet lever.
- (d) Place the magazine on the gun and fire a single shot on a safe bearing.
- (e) Remove the magazine. The clearing charge should be sufficient to recock the gun. If not, recock.
- (f) Examine the bore and, if clear, ship a fresh magazine and continue firing.

*Note.*—A one round magazine for use with clearing charges is under development but until supplies become available the above drill is to be adhered to. The introduction of one round magazines will be promulgated by A.F.O.

4. A number of clearing charges greased with anti-freezing grease D.T.D.143C should be kept available at the gun.

5. Clearing charges are not watertight or airtight and they are therefore to be carefully handled and stowed in a dry place.

6. The allowance of clearing charges will be as follows:—

H.M. Vessels and D.E.M.S.—

Mounting 1-4 guns	...	...	...	...	...	20
Mounting 5-16 guns	...	...	...	...	...	70
Mounting over 16 guns	...	...	...	...	...	140

7. In order that the stocks of Mark I design may be used up, demands on the basis laid down in paragraph 6 should specify whether or not requirements are for British II, III or III\* barrels, and be forwarded to the nearest Naval Armament Depot, quoting this Order.

(A.F.Os. 4076/43, 5354/43 and 581/44 are cancelled.)

#### 3400.—Ammunition—20-mm. Hispano—Recovery of Internal Packing Material

(A.S. 7305/44.—29 Jun. 1944.)

Reports received from Naval Armament Depots indicate that a high percentage of the empty Hispano ammunition packages returned to store are deficient of cartons A.S.A., No. 12.

2. The provision of these cartons is costly both in material and labour, and arrangements should, therefore, be made for them to be replaced in the package from which they are taken immediately after removal of the ammunition, in order to prevent unnecessary expenditure in replacing them when the packages are refilled.

#### 3401.—Ammunition Supply—Naval Armament Depots, Supply, Tests and Returns of Ammunition—REPORT

(A.S. 6667/44.—29 Jun. 1944.)

All ammunition containing N.C. propellant of Index S.P.D.W.1744 for use in Q.F., 3-in., 50-calibre guns is to be landed at the nearest Naval Armament Depot as early as practicable.

2. On receipt of the ammunition at Naval Armament Depots, the following action is to be taken:—

- (a) All cartridges are to be opened up and a 100 per cent. examination carried out of the charges, an 8-oz. sample from the serviceable propellant of the index forwarded to D.I.N.O., Holton Heath, any of the charges containing corroded grains being destroyed.
- (b) Cartridges with propellant in a serviceable condition are to have shells replaced and the rounds held for issue as required.
- (c) Guidance in regard to visual examination is given in Appendix IV—Naval Cordite Regulations.

3. Similar action is to be taken in regard to any ammunition of the above index held in store.

4. On completion of the examination a report is to be forwarded to D.A.S. (Branch B), Bath, giving the quantities of cartridges found serviceable and unserviceable.

#### 3402.—Ammunition Supply—Naval Armament Depots, Supply, Tests and Returns of Ammunition—REPORTS

(A.S. 7513/44.—29 Jun. 1944.)

All ammunition containing N.C. propellant of the following indexes is to be landed at the nearest Naval Armament Depot as early as practicable, viz. :—

Index	Cartridges into which filled
S.P.D.1258	Q.F., 4-in., 50 Calibre
S.P.D.1549	Q.F., 3-in., 50 Calibre
S.P.D.X.1621	Q.F., 4-in., 50 Calibre
S.P.D.X.1629	Q.F., 4-in., 50 Calibre
S.P.D.1889	B.L., 5-in., 51 Calibre
S.P.D.1892	B.L., 5-in., 51 Calibre
S.P.D.W.2198	Q.F., 3-in., 50 Calibre
S.P.D.W.2470	Q.F., 4-in., 50 Calibre
S.P.D.N.2481	Q.F., 4-in., 50 Calibre

2. On receipt of the ammunition at Naval Armament Depots the following action is to be taken:—

- (a) All cartridges are to be opened up and a 100 per cent. examination carried out of the charges, an 8-oz. sample from the serviceable propellant of each index being forwarded to Deputy Inspector of Naval Ordnance, Holton Heath, any of the charges containing corroded grains being destroyed.
- (b) Cartridges with propellant in a serviceable condition are to have shells replaced and the rounds held for issue as required.
- (c) Guidance in regard to visual examination is given in Appendix IV—Naval Cordite Regulations.

3. Similar action is to be taken in regard to any ammunition of the above indexes held in store.

4. On completion of the examination a report is to be forwarded to D.A.S. (Branch B), Bath, giving the quantities of cartridges found serviceable and unserviceable.

**3403.—Ammunition Supply—Naval Armament Depots—Supply, Tests and Returns of Ammunition—Restriction of N.C. Propellant Index S.P.D.1969**

(A.S. 7427/44.—29 Jun. 1944.)

In consequence of low heat test results given by N.C. Propellant Index S.P.D.1969 assembled into Q.F., 4-in., 50 calibre ammunition, no further issues of cartridges of this index are to be made to Naval Armament Depots abroad or to ships proceeding abroad. All cartridges of this Index may, however, be issued to ships on home stations without restriction.

**3404.—14-in. and 15-in. Battleships fitted with Weirs Centrifugal Hydraulic Pumps—Routine for Working Turret Machinery**

(G. 0225/44.—29 Jun. 1944.)

Trials have been carried out in ships fitted with centrifugal hydraulic pumps to establish the best routine for working the turret machinery to prevent excessive rise in temperature in the hydraulic fluid when in tropical climates.

2. When pressure must be maintained on the turret for long periods, it is advisable, subject to operational and other requirements, that the turret machinery should be moved comparatively infrequently. The pressure is thus maintained by the maintenance pump, and the heating effect of the main pump running at full "out-in" speed at low output is obviated.

3. The turret machinery should, however, be moved occasionally for short periods at high speed.

4. The frequency with which the turret machinery should be moved, thus causing the main pump to cut in, and also the speed and duration of working, can, however, only be determined by trial in individual ships.

**3405.—Aircraft—Guns, Browning 0·50-in. and 0·30-in.—Wire Brushes for Use with Cleaning Rods**

(A.S. 04711/43.—29 Jun. 1944.)

Wire brushes for use with 0·50-in. and 0·30-in. Browning cleaning rods have been introduced into the Naval Service.

2. Details are as follows:—

Brushes, cleaning, cal. 0·50 M4  
R.A.F. Reference 108D/47  
U.S. Part No. C.4037  
U.S. Stock No. 1-B-6329

Brushes, cleaning, cal. 0·30 M2  
R.A.F. Reference 108D/46  
U.S. Part No. C.4035  
U.S. Stock No. 1-B-6328

3. Brushes will be allowed in the proportion of two per cleaning rod held by aircraft carriers and R.N. air stations (including repair yards and receipt and despatch units).

4. Demands to this scale should be forwarded to the appropriate R.N. armament depot. R.A.F. reference number should be quoted.

5. Brushes will *not* be allowed to squadrons as squadron mobile equipment. Ships and stations should not demand in respect of cleaning rods held by squadrons.

**3406.—Cancelled.**

**3407.—Target Indicating Systems—Searchlight Control—Mark V, etc., Sights—Height Adjustment**

(G. 010917/44.—29 Jun. 1944.)

All sights delivered up to late 1942 had three height index marks on them—maximum and minimum working positions and housing position.

2. A.F.O. 2513/42 gave instructions that an external stop was to be fitted to prevent the sight bar being lowered below the "minimum working".

3. In late 1942, sights began to be delivered in which the "housing position" was no longer marked, and internal stops at each end of the worm quadrant prevented the maximum and minimum working positions being exceeded.

4. These sights, of course, do not need the addition of the external stop.

(A.F.O. 2513/42 is cancelled.)

**3408.—Training—Instructional Appliances—Automatic Air Rifles—Supply of Ammunition**

*Establishments concerned*

(G. 1935/44.—29 Jun. 1944.)

Automatic air rifles are supplied for use with Miniature Tracer Firing Range equipments and "Poole" RYPA Attack Teachers.

2. The ammunition used in automatic air rifles consists of  $\frac{3}{8}$ -in. diameter steel balls. A stock of this ammunition is now held at the Admiralty Gunmounting Store, Coventry, and demands for quantities additional to the first supply should be sent direct to the G.M.O., Coventry.

3. Demands should be kept to the bare minimum to meet requirements, and all possible care taken to retrieve expended ammunition for continued use.

**3409.—Torpedoes, 18-in., Marks XII-XV\*, and 21-in., Marks VIII-IX\*\*—Introduction of Soft Seated, Small Non-return Valve, St. No. 2524B, for Pipe Systems**

(A.S. 2731/43.—29 Jun. 1944.)

The small non-return valve, St. No. 2524A, in the pipe systems of 18-in., Marks XII-XV\* and 21-in., Marks VIII-IX\*\* torpedoes has presented difficulties in the maintenance of a tightly seating valve; the metal to metal seat is, therefore, being replaced by a synthetic rubber flat seating type of valve.

2. The new valve, St. No. 2524B, is shown in A.F.O. Diagram 197/44. It will be fitted in the pipe systems of new manufacture 18-in. and 21-in. torpedoes as soon as production permits.

3. The existing valve, St. No. 2524A, will be modified to give the flat seating valve, but this modification will be carried out in torpedo depots only. Torpedoes fitted with valves, St. No. 2524A, will be modified under Classification D (i) of A.F.O. 3169/43, except as detailed in paragraphs 4 to 6 below.

4. In the special case of the non-return valve in the servomotor air lead in 21-in., Mark VIII\*\* torpedoes in submarines and submarine depot ships and bases, it is desirable to introduce the new flat seating valve at the earliest possible moment. For these torpedoes it has, therefore, been approved to issue a replacement pipe incorporating the new valve, St. No. 2524B, for fitting between the T-piece in the outlet pipe from the second disc reducer and the servomotor inlet.

5. This replacement pipe will have a 0·55-in. diameter, 18 thds./in. nut at the T-piece end, and a 0·437-in. diameter 20thds./in. nut at the servomotor inlet end to prevent assembly the wrong way round, and can, therefore, only be fitted in torpedoes which have already been modified in accordance with A.F.O. 2751/44 (T.D.L.1880).

6. Submarine depot ships and bases concerned are to demand the necessary quantity of replacement pipes from the nearest torpedo depot.

7. The synthetic rubber valve washer fitted to the valves, St. No. 2524B, will be accounted for as follows:—

*Section IV*

Washers, I.R. (synthetic), for valve (St. No. 2524B) St. No. 11872, and will be added to the contents of the undermentioned cylinders in the proportion of 12 No. per cylinder, viz.:—

Cylinders, I.R., gear, 18-in., Marks XII-XII\*\*\* and XV.

Cylinders, I.R., gear, 21-in., Marks VIII-VIII\*\*.

Cylinders, I.R., gear, 21-in., Marks IX-IX\*\*.

8. Ships and vessels concerned are to demand from the nearest torpedo depot the quantities of washers, St. No. 11872, required to complete cylinders on board.

9. Labels of cylinders and torpedo store accounts are to be amended as necessary.

10. The Naval Proportion Book, Part IV, and the Vocabulary of N.A. Stores, Part III, will be amended.

11. A corresponding T.D.I. has been issued.

(A.F.Os. 3169/43 and 2751/44.)

**3410.—18-in. and 21-in. Torpedoes—Danger of Using Excessive Force when Tightening H.P. Air Joints**

(A.S. 14479/43.—29 Jun. 1944.)

The use of excessive force in tightening the union nuts of H.P. air pipe joints may cause the pipe collars to expand to such an extent that the collars become embedded in the threads of the nuts; in addition there is a danger of the nut fracturing owing to the increased material stress.

2. The attention of all concerned should be drawn to the necessity for avoiding excessive force, especially on the smaller pipe joints, as tests have shown that quite a reasonable force will enable a perfect H.P. air joint to be made.

3. In future manufacture pipes the diameter of the collars will be slightly reduced to give an increased clearance between the collar and the union nut.

**3411.—Torpedo Stores—Blocks, St. No. T.47—Allowance**

*C.F. Bases and Depot Ships for C.F. Craft*

(A.S. 4217/44.—29 Jun. 1944.)

The following item, viz.:—

*Section II*

Blocks, safety, air lever, St. No. T.47

will be allowed to depot ships for C.F. craft and C.F. bases in the proportion of one for each 18-in., Mark XII and XV, M.T.B.T., type torpedo carried.

2. Services concerned are to demand to complete to the new allowance from the nearest Torpedo Depot.

**3412.—Torpedo Stores—Gags St. No. 8675A—Modification to Head of Screw**

(A.S. 3093/44.—29 Jun. 1944.)

Gags, relief valve, E.R. bulkhead, St. No. 8675A, are not suitable in their present form for use with 21-in., Mark VIII\*\* S.D.I. torpedoes.

2. To make these gags suitable for use with this type torpedo it is necessary for the head of the knurled screw to be reduced in thickness, so that the overall length of the screw, including the head, is 0.68 in. With a view to standardization, it has been decided to apply this modification to all gags, St. No. 8675A. The stamp number of the modified gag will remain unchanged.

3. Gags, St. No. 8675A, carried on board ships, etc., should be modified by ships', etc., staffs under category "D.I." of A.F.O. 3169/43, but for services out-fitted with 21-in., Mark VIII\*\* S.D.I. torpedoes, the modification should be carried out under classification "B" of A.F.O. 3169/43.

4. Gags, St. No. 8675A, issued in future from torpedo depots will be of the modified type.

(A.F.O. 3169/43.)

**3413.—Change-over Switches for Oerlikon Gun Circuits—Introduction of Modified Types**

(D.P. 5156/44.—29 Jun. 1944.)

Double pole change-over switches, Patterns 2700 and 1177A, modified to withstand the 6 lbs. watertight pressure test have been introduced, primarily for Oerlikon circuits, but they may be used in any exposed positions where the existing switches are not satisfactory.

2. The modified switches have been assigned pattern numbers as follows:—

Pattern 2700A, D.P.C.O.S., 30 ampere.

Pattern 1177B, D.P.C.O.S., 18 ampere.

Pattern 2700A is for use in the twin Oerlikon circuits and Pattern 1177B in the single Oerlikon circuits.

3. Patterns 2700A and 1177B are to be fitted in lieu of Patterns 2700 and 1177A respectively on ships in commission if any trouble is being experienced with the latter, due to lack of watertightness, the work being carried out by ship's staff with dockyard assistance if necessary. The new switches will not be available before October, 1944, and no demands should be made prior to this date.

4. Separate action has been taken with shipbuilders regarding the installation of the new switches in new construction.

**3414.—Hook Ends for Emergency Electric Cables—Introduction**

*All H.M. Ships, Shipbuilders and W.E.S.*

(N.S./T.2651/43.—29 Jun. 1944.)

In order to facilitate rapid connection of emergency cables for supply to individual services, the following hook ends have been introduced and added to the Authorized List of Naval Stores under Subhead B, Item 9:—

Pattern	Description	Service
5636	Hook end ... 400 amp. for use with cables, Patterns 1890 and 13870.	
5637	Hook end ... 250 amp. for use with cables, Patterns 1887, 1889, 13867, 13869 and 4593D (supplied drilled to suit Pattern 4593D).	
5638	Hook end ... 30 amp. for use with cables, Patterns 1888 and 13868.	

2. The appropriate hook end is to be fitted to each end of the cable for connecting the service to nearest supply unless entry into the enclosure of the service end is too small in which case the service end of the cable is to be left bare.

3. Arrangements have been made for purchase of the following quantities for distribution as shown:—

Pattern	Chatham	Sheerness	Portsmouth	Devonport	Rosyth	Mersey Area	Severn Area	West Riding	Carfin
5636	80	40	80	80	80	480	1080	40	40
5637	150	60	150	80	140	750	1550	60	60
5638	200	90	200	130	200	800	2200	90	90

4. Superintending Naval Store Officers Mersey Area and Severn Area are to arrange shipment of the following quantities to yards abroad :—

Pattern	Mersey Area			Severn Area						
	Gibraltar	Malta	Alexandria	Colombo	Durban	Bombay	Sydney	Kilindini	Calcutta	Trincomalee
5636	100	200	100	100	200	100	200	200	100	100
5637	100	400	100	100	400	100	300	300	100	100
5638	100	400	100	200	400	200	400	400	200	200

5. It is anticipated that supplies will become available by the end of June, 1944. After that date H.M. ships should demand requirements from the nearest yard or Naval store depot.

(A.F.O. 1413/41 is cancelled.)

*Cancelled by* 3415.—Radio Interference in Coastal Force Craft  
AFO 3493/46.

(D.E.E./C.F.M. 1856/44.—29 Jun. 1944.)

The following is a list of amendments and additions to be made to A.F.O. 1396/44 :—

Section 2.—W/T and Radar Conversion equipment.

(c) M.381 Motor Generator. *Add* as follows :—

“Certain machines may still give excessive interference when the condenser arrangements given in A.F.O. Diagram 71/44 (3) is fitted. In such cases the additional suppressor shown in the revised A.F.O. Diagram 195/44 (1) (Drawing D.E.E.11067) should be fitted.”

(j) W.4943 (MG8) (220V) W.5805 (MG8A) (110V), Motor Alternators, Outfit DUN for QH and Type 286 :—

*External Suppression.*—Connect one A.P. 19441A suppressor in series with the supply leads as shown in A.F.O. Diagram 195/44 (2) (Drawing D.E.E. 11688).

*Internal Suppression.*—Where not already fitted at the maker's works, internal suppression is required as follows :—

Replace existing cables by screened cables and fit one A.P. 19436A condenser inside the soundproof box as shown in A.F.O. Diagram 195/44(3) (Drawing D.E.E. 11687).

(k) W.5804 (MG8B) Motor Alternator (24V), Outfit DUN for QH. and Type 286 :—

*External Suppression.*—Connect one A.P. 19443 suppressor in series with the supply and motor field leads as shown in A.F.O. Diagram 195/44 (4) (Drawing D.E.E. 12215).

*Internal Suppression.*—Where not already fitted at the maker's works, following internal suppression is required :—

Replace existing cables as shown in A.F.O. Diagram 195/44 (5) (Drawing D.E.E. 12437).”

(l) W.7079 Motor Alternator (24V), Outfit DUN for QH. :—

Connect one A.P. 19443 suppressor in series with the supply and motor field leads as shown in A.F.O. Diagram 195/44 (4) (Drawing D.E.E. 12215).

Section 3.—Asdic Equipment.

(a) A/S installation, Types 134A/C/D. *Delete* existing entry and *substitute* :—

“Full instructions for the suppression of all interfering items in these installations are given in C.A.F.O. 990/44. Suppressors A.P. 19433A are now only to be used for the suppression of the 24-volt power supply of Asdic equipment where A.P. A.1668 has not already been fitted.”

(b) A/S installation, Type 134E :—

“A further C.A.F.O. will be issued, giving details of the interference suppression necessary for Asdic items in this type of installation.”

Section 5.—Ignition Systems.

(a) Hall Scott Engines. *Add* as follows :—

“When the L.T. circuits of Hall Scott engines are modified in accordance with A.F.O. Diagrams 330/43 (4) and 330/43 (5) the existing suppressors are always to be removed before installing the new A.P. 19443A suppressors.”

(b) Packard engines. *Delete* and *substitute* :—

“The L.T. circuits of Packard engines fitted with automatic cut-outs are to be modified in accordance with A.F.O. Diagram 195/44 (6) (Drawing D.E.E. 11681). Detailed fitting instructions with photographs will be issued without demand by the Director of Coastal Forces Material.

Instructions in regard to engines without automatic cut-outs will be promulgated later.

The existing suppressors are to be removed, but the bonding across the four or five pin plugs and socket is to remain.”

(A.F.Os. 955/43, 1396/44 and C.A.F.O. 990/44.)

#### 3416.—Main Motors and Main Generators—Shunt Field Circuits

H.M. Submarines

(D.8790/44.—29 Jun. 1944.)

An instance has arisen recently where, after severe shock, main motor shunt field cables in a submarine were broken at a position where they were cramped between the main switchboard framework and a heavy back connection.

2. Main motor shunt field cables in all submarines and main generator shunt field cables in “Unity” class submarines are to be examined at the earliest opportunity to ensure that (a) the cables are not being chafed or damaged by the switchboard frames, back connections or adjacent fittings, and (b) the cables are not liable to damage due to shock displacement of switchboard frames or fittings in the vicinity.

3. Where the cable runs are such that there is a liability of damage to the cables due to vibration or shock, the runs are to be re-sited and the circuits re-wired as a defect.

4. Special instructions will be issued regarding new construction submarines.

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

#### 3417.—Main Supply Switchgear—Increased Emergency Supplies—As. and As.

(T. 1059/44.—29 Jun. 1944.)

The following sentence is to be *added* to paragraph 3 of A.F.O. 5742/43

This second run of cable should not follow the existing permanent vertical run of cable, but should be well separated from it longitudinally, and should terminate in a separate watertight compartment on the same side of the ship.

(A.F.O. 5742/43.)

#### 3418.—Calculator Disc—Strategical, Tactical, Operational and Navigational Speed, Time and Distance

(H. 3824/41.—29 Jun. 1944.)

A calculator disc showing various speed, time and distance relations over a speed range of 7 to 32 knots, by direct reading instead of slide rule settings, has been produced in the Hydrographic Department.

Stocks are available in the chart depots and issue will be made only in accordance with the following scale of distribution :—

Capital ships	... ..	} One each (one extra in the case of flagships).
Aircraft carriers	... ..	
Cruisers	... ..	
Captains (D)	... ..	} One each.
Senior officers of escort groups	... ..	

2. A diagram of the disc, approximately one-third full size (A.F.O. Diagram 192/44) is issued in conjunction with this order.

**3419.—Gyro-compass Transmitters—Spark Suppression**

(C.D. 5/44.—29 Jun. 1944.)

In order to reduce the sparking and wear at gyro-compass transmitters, particularly those of Brown and Sperry Commercial gyro-compasses special spark suppression circuits are now fitted.

2. These suppression circuits comprise three electrolytic condensers of high capacity connected in "star", with three resistances one in series with each condenser, usually connected between the condensers and the starpoint.

3. The object of the condensers is to absorb the inductive kick of the repeater motor windings, and to prevent a large rise of voltage at the contacts on "break", while the resistances may be regarded as limiting the charging current to the condensers at "make". At the same time however these resistances also limit the degree to which the condensers absorb the inductive kick. The optimum value of the resistances, i.e., that giving least sparking at the contacts, depends materially on the number of repeaters in operation. The capacity of the condensers is less critical.

4. When spark quenching circuits are fitted, the resistances are chosen to suit the normal repeater load expected.

It is important to appreciate that when the circuit is adjusted for normal load, both increase and decrease of the load will cause greater wear of the contacts, and consequently it is best to maintain this normal load whenever possible, and not to switch off instruments which are not actually in use where this will reduce the load materially below normal.

Similarly when starting the compass transmission it is most desirable to connect the whole normal load and not only one or two repeaters.

5. In the case of transmitters, Patterns 1515 and 1504, of the Admiralty gyro-compass, condensers alone are fitted, with no resistances, and this has been found the most satisfactory arrangement with the normal loading of these transmitters, but again it will be found that greater sparking and wear occur if only one or two repeaters are connected.

6. The transmitters of Brown and Sperry Commercial gyro-compasses operating at 50 and 70 volts respectively are particularly sensitive to variations in the smaller load which these will accept.

7. Condensers, Pattern 3435, 500 mfd. and starpoint resistances, Pattern 985, 10-10-10 ohms, are provided for bottle transmitters, Pattern 4356, and 144-step transmitters, Patterns 4351, 3561 and 3562.

8. It is to be noted that the connection to repeater circuits of condenser units for interference suppression in respect of repeater instruments fitted in conjunction with D/F or Radar outfits, may often seriously affect the sparking at the gyro-compass transmitter. In such instances it may be necessary to fit a resistance in series with each condenser of the condenser unit, or to discard the condenser unit where this can be done without introducing interference.

9. The following is a list of the values found suitable for spark quenching circuits of Brown and Sperry Commercial gyro-compasses at different repeater loads:—

Sperry 70 volts ...	1 or 2 repeaters, 80 mfd. condensers	400 ohm resistances
	2 to 4 repeaters, 80 mfd. condensers	200 ohm resistances
	5 to 9 repeaters, 80 mfd. condensers	90 ohm resistances
Brown 50 volts ...	1 or 2 repeaters, 80 mfd. condensers	25 ohm resistances
	2 to 4 repeaters, 80 mfd. condensers	20 ohm resistances
	4 to 6 repeaters, 80 mfd. condensers	15 ohm resistances
	6 to 9 repeaters, 80 mfd. condensers	10 ohm resistances

10. The fitting of suitable spark suppression circuits will allow the number of repeaters which can be operated from Sperry 70 volt and Brown 50 volt transmitters to be increased from the values given in A.F.O. 1928/42 to a maximum of 9 repeaters in each case.

No increase can be accepted in respect of the other transmitters referred to in A.F.O. 1928/42.

(A.F.O. 1928/42.)

**3420.—Boiler Tubes—Circumferential Cracking**

(D. 9467/44.—29 Jun. 1944.)

The prevalence of circumferential cracking in the fire row tubes of the water-tube boilers fitted in sloops and other small ships renders it most desirable that this defect should be detected in its incipient stages, so that tubes may be renewed before failure occurs in service.

2. The attention of all administrative and repair authorities is drawn to the need for the careful examination of all A and B row tubes removed from water-tube boilers and cut up for gauging.

3. The defect shows itself on the inside surface of the tube sometimes as circumferential lines, sometimes as a crazy paving pattern and less frequently as lines in the direction of the axis of the tubes. These lines develop into cracks through the tube.

4. If the fire row tubes are found to contain such lines, the rows should be renewed at the earliest opportunity.

**3421.—Boiler Tubes to Schedule 160**

(D. 12044/43.—29 Jun. 1944.)

Supplies of boiler tubes to Schedule 160 may be accepted of either lap-welded steel or seamless hot-finish manufacture.

2. All tubes should be pickled before use whenever facilities exist.

3. When forwarding charts of the renewals of boiler tubes, the position of the old tubes, and whether the new tubes are lap-welded or seamless hot-rolled finish, should be indicated thereon.

(A.F.O. 4977/43 is cancelled.)

**3422.—Radar—Types 282M(3)/M(4)/P/P(1)/P(2), 283, 284M(3)/M(4)/P(3)/P(4), 285M(3)/M(4)/P(3)/P(4)/Q—Switch Unit, Common Aerial, Pattern W.3432—Tool, Spark Gap extractor, Pattern 54097**

(R.E. 54/44.—29 Jun. 1944.)

A tool, spark-gap extractor, Pattern 54097, has been designed for extracting the inner conductor of switch unit, common aerial, Pattern W.3432, in order to facilitate the cleaning of the upper contact of the spark gap.

2. The method of using the tool is shown in A.F.O. Diagram 200/44 (A.S.E. Drawing No. 35712).

3. Supply will be made without demand to ships and authorities concerned on a basis of one spark-gap extractor per Radar set fitted.

4. The relevant Establishment List will be amended.

**3423.—W/T Set, Type 52 ERT—Replacement of H.T. Battery by Vibrator Unit**

(R.E. 11336/44.—29 Jun. 1944.)

A vibrator unit has been designed to replace the 99-volt dry battery which at present supplies H.T. current to the receiver B.19, which is part of the transportable W/T and R/T set, Type 52 ERT.

2. The new vibrator unit, Pattern W.8334, takes its supply at 6 volts at approximately 0.6 amps., from a section of the 12-volt battery and supplies current at 100 volts and 72 volts at approximately 8 milliamps to the receiver B.19. The supply and R/T unit 4Q, Pattern W.698, becomes Pattern W.698A when fitted with the vibrator unit.

3. A box of parts, Pattern 53407, will be supplied with each vibrator unit. This box contains an on/off plate and three 6BA screws to be fitted to the panel 4Q and a brass handle to be fitted to the spindle of the vibrator unit.

4. The method of fitting the vibrator unit, which can be carried out by ships' staffs, is as follows:—

Referring to figures 20 and 21 of the book of instructions SS.57—

- (a) Remove the H.T. battery (165) and its container.
- (b) Remove screws securing the steel cover of the vibrator unit.
- (c) Remove the two captive screws which protrude through the bottom of the vibrator unit.
- (d) Drill a  $\frac{3}{8}$ -in. diameter hole in the top left hand corner (viewed from the front) of the panel of the R/T unit 4Q in the position shown in A.F.O. Diagram 199/44, figure 1 (A.S.E. Drawing No. 37394).
- (e) Insert the vibrator in the position previously occupied by the H.T. battery with the spindle protruding through the hole in the front, which was drilled according to (d).
- (f) After first ensuring that the spindle is approximately in the centre of the  $\frac{3}{8}$ -in. hole, mark off the position of the fixing holes for the vibrator unit on to the battery case supports through the two holes of the two captive screws removed from the vibrator unit.
- (g) Drill two fixing holes 4 B.A. and use the holes to line up and assemble the two mild steel plates shown in A.F.O. Diagram 199/44, figure 2 (A.S.E. Drawing No. 37394).
- (h) After securing these steel plates tap through the aluminium supports and steel plates (4 B.A.).
- (i) Secure the vibrator unit into position by the two captive screws.
- (j) Fit the on/off switch plate to the front panel as shown in figure 1 and fit the knob to the spindle.
- (k) Remove the battery plugs from the H.T. battery leads and fit 2 B.A. cable tags, which will be found on the vibrator unit terminals.
- (l) Fit a new lead from the negative terminal of the magnetic key socket (159) to the nearest convenient screw on the chassis.
- (m) Fit a new lead from the side of the 6-volt positive fuze holder (181) remote from plug No. 160 to the L.T. positive 6-volt terminal of the vibrator unit.
- (n) Replace metal cover of the vibrator unit.
- (o) Remove the H/T negative flexible lead from the terminal box of 4Q or 5Q transmitter and tape up the end of this lead. (Terminal not used.)

5. Ships concerned are to demand the following stores from S.N.S.O.(H), quoting this Order as authority:—

Pattern No.	Description	Quantity
W.8334	Vibrator-unit, 6-volt D.C. input, 72 volts, 0.8 milliamps and 100 volts, 8 milliamps D.C. output.	1
W.6946	Vibrator, non-synchronous, plug-in, 6 volts, D.C. or supply, Design B.	3 (includes 2 spares)
—	Vibrator, Mallery, Type 650	
53407	Box of parts for modifying Pattern W.698 panel 4Q to Pattern W.698A.	1

Note.—† One spare to be stowed in Load No. 2, Pattern W.696.

6. Book of instructions SS.77 will be amended in due course.

7. Establishment List No. T.54, dated 30 Jun. 1943, has been amended.

#### 3424.—W/T Sets, Types 89/M/P—Security of Valves

(R.E.11386/44.—29 Jun. 1944.)

A case has occurred where the amplifier valves in a type 89 set have jumped from their sockets due to shock from an explosion.

2. Retaining clips are fitted to all valves in type 89/M, with the exception of the rectifier valves, which are provided with bayonet clips. Retaining clamps are fitted at the base of valves in type 89P.

3. In order to ensure that valves do not jump from their sockets, steps must be taken to see that the retaining clips in the case of types 89/M are in place and that the retaining clamps in the case of type 89P are screwed up tight.

#### 3425.—Asdic and Echo-Sounding Stores for Ships refitting in U.S.A.

(N.S. 014820/44.—29 Jun. 1944.)

The above-mentioned stores, when supplied from the United Kingdom or from H.M. Dockyards and bases abroad, are to be issued and charged to the British Admiralty Delegation and not to the ships concerned.

2. Stores are to be consigned to:—

The British Admiralty Delegation, for R.N.,  
c/o Supply Officer in Command,  
U.S.N. Supply Depot,  
Mechanicsburg,  
Pennsylvania.

3. Cases are to be marked—

◇ A/S or ◇ E/S as appropriate.

(A.F.Os. 5699/42 and 1409/44.)

#### 3426.—Asdic Installation—Type 150—Establishment List

(N.S. 015208/44.—29 Jun. 1944.)

Establishment List No. A/S 121, dated 19th May, 1944, of Naval stores comprising Asdic Installation Type 150 has been prepared and copies will be distributed to the services concerned by the Superintending Naval Store Officer, R.N. Store Depot, Copenaere, Hawthorn, Wiltshire.

#### 3427.—Compressibility Effects in High Speed Diving

(A.W.D. 1348/44.—29 Jun. 1944.)

The following is a report of a Technical Note issued by the Bureau of Aeronautics, Navy Department, Washington:—

It describes control effects that are associated with compressibility phenomena and suggests certain cautions that may aid in avoiding or reducing the hazard therefrom. This information is to be brought to the attention of all pilots, including those under training at Naval air stations.

2. In recent years the attainable airspeeds of many service types have increased to a point where unusual or unexpected flight characteristics sometimes develop. These effects may take the form of a sudden change in trim, a change in stability about any of the airplane's axes, buffeting or vibration, and the formation of vapour sheets. They may be expected at high speeds, particularly at altitude and under accelerated conditions.

3. These effects are attributed to compressibility. Aerodynamic theory, based on the assumption that air is an incompressible fluid, has been commonly and successfully applied in the determination of magnitudes and distributions of air loads during the era in which possible dive speeds were comparatively low and the actual effects of compressibility were negligible from a practical standpoint. As airspeeds increase, however, certain predictable effects of the compressible nature of air rapidly become of considerable importance. With further increase of air speeds, approaching the speed of sound in air, certain phenomena occur which are difficult of prediction or evaluation. The term "compressibility" has become associated with these latter phenomena which are not completely understood and for which no practicable or thoroughly accurate corrections are yet available.

4. Some of these effects may be visualised as resulting from discontinuities in the air flow about an airplane, or "shock waves". Shock waves do not form on slowly moving bodies because the air flow adjusts itself to pass over the object as smoothly as possible with only small changes in the pressure and density of the air. Shock waves do, however, form on high speed bodies because the air cannot adjust itself to pass the body without radical changes in pressure and density and the introduction of what have been termed "compressibility effects". The shock wave phenomenon is comparable to the water wave that forms at the bow of a ship. If the ship is moving rapidly, the water cannot follow the smooth contours of the ship and, instead, piles up as a bow wave.



5. The appearance of shock waves and other compressibility effects in air depend on the ratio of the speed of the object to the speed of sound. This ratio, which is called the Mach Number, is based on true air speed. The speed of sound decreases with altitude, and if the indicated speed remains constant, the true air speed increases with altitude. Hence, the Mach Number increases rapidly with altitude for constant indicated air speed. An indicated speed of 250 knots corresponds to a Mach Number of 0.38 at sea level, but at 35,000 feet this same indicated speed gives a Mach Number of 0.74. This difference is considerable and results in compressibility effects being much more easily encountered at high altitudes than at sea level.

6. As a result of the rearrangement of the airflow when speeds are reached at which shock waves occur, control surfaces may be expected to have varying degrees of effectiveness and the airplane may be expected to change its stability characteristics. These changes are not predictable with accuracy either from analysis or from conventional wind tunnel tests. Flight test is the only means of reliable exploration of these effects and this method may involve undue hazard to the test pilot unless a systematic programme with careful instrumentation is undertaken.

7. Although service types have normal characteristics and no unusual handling qualities may be expected in accomplishing the missions to which they have been assigned, some of them may easily be dived through inadvertence or combat necessity to speeds well above those for which their handling characteristics are thoroughly known. If such a condition should arise, changes in behaviour may occur. Those most likely to occur are listed and described below in order that pilots may recognize them more quickly and thus be able to take more effective steps to counteract or to avoid them:—

(a) *Buffeting*.—This is one of the most common disturbances associated with high speed flying. It is aggravated by partially open cowl flaps or intercooler doors, damaged or bent fairings, by movements of control surfaces, especially when the leading edges of these control surfaces are sharp, and by other factors that would cause turbulence or irregular air flow. Although buffeting may occur at low speed, it will be more pronounced at high speed. If a severe buffet develops, immediate action to decrease the applied acceleration will probably be more effective in reducing the buffet intensity than a reduction in speed. However, both should be reduced as soon as practicable.

(b) *Aileron Snatch*.—Ailerons, particularly those with sharp leading edges, may snatch at high speeds. Aileron snatch is a movement, with or without oscillation, of the control stick, caused by air striking or flowing around the leading edge as the aileron is being deflected. In high speed dives the pilot should keep a firm hold on the stick and keep the stick neutral so far as practicable.

(c) *High Stick Force*.—In high altitude dives with the true speed greater than about three-quarters of the speed of sound, the pilot may find that he cannot hold the airplane in the dive. On the other hand, the opposite effect may occur with the pilot unable to exert sufficient force on the stick to pull the airplane out of the dive. Inability to pull the airplane out of the dive may be due either to a very large diving moment attended by a loss of lift on the wing, which requires a much greater elevator load at high altitudes for a pull-out than the pilot can apply, or it may result from a redistribution of tail loads which increases elevator hinge moments. At lower altitudes, where the true speed becomes less than about three-quarters of the speed of sound, the pilot will probably be able to pull out with normal stick forces.

(d) *Loss in Effectiveness of Elevator Trim Tab*.—The elevator tab keeps its normal effectiveness up to a true air speed of approximately three-quarters of the speed of sound. Beyond this point the elevator tab often becomes ineffective so far as pull-outs are concerned. If this condition is found to exist, the elevator trim tab should always be restored to its initial position, because the tab will regain its original effectiveness and cause a very abrupt pull-out when the airplane reaches lower altitudes where the true speed is less than about three-quarters of the speed of sound.

(e) *Formation of Vapor Sheets*.—Although of no particular significance as regards control effectiveness, the formation of vapor sheets is an interesting phenomenon which evidences high speed. It is a visible indication, in humid weather, of local high velocity of the air over the wing. With increase of speed or "g" the thickness or height of the sheet can be seen to vary. The formation of a thin vapor sheet may or may not be accompanied by other compressibility effects.

8. Certain cautions have been suggested by test pilots and others to avoid compressibility effects. They may not, however, apply in all cases. Each airplane may be expected to have its own peculiarities at high speed at altitude. *Pilots who experience any of these effects should make reports of their experiences, including as much thoroughly factual information as possible.* The cautions commonly recommended to avoid or to minimize compressibility effects are the following:—

(a) Return the elevator trim tab to its initial position if it is found to be ineffective in reducing control forces. As explained in paragraph 7 (d), failure to do so may result in a sharp pull-out when the tab regains its effectiveness.

(b) Attempts have been made to slow down an airplane in a high-speed dive by yawing it. Such attempts have not only failed but have proved dangerous because the dive angle was greatly steepened when the airplane was yawed. Excessive yawing has also resulted in failures in the tail surfaces and in buckled fuselages. Therefore, efforts should be made to prevent a diving airplane from yawing when at high speed and high altitude.

(c) Some pilots of single-engine airplanes have experienced a considerable increase in diving angle when the power was cut in high-speed dives. Since an increase in diving angle greatly increases the difficulty of pull-out from a dive, the throttle should not be cut or the r.p.m. control changed during a high-speed dive except with great care.

(d) Avoid over-controlling by being alert to detect a change or reversal of control force. Unnecessary control surface displacement may provide the disturbance necessary to produce a compressibility effect. For example, at high speeds, rocking the wings may stall first one wing and then the other.

(e) When practicable, dives to high speed should be made as shallow as possible, so that if compressibility effects do present themselves, speed and acceleration will be under better control.

(f) Avoid high-speed accelerated stalls at altitude.

9. As planes become capable of attaining higher and higher speeds, pilots will become more and more familiar with compressibility effects and the peculiarities associated with the high-speed performance of individual airplanes. Good piloting technique requires avoidance of these effects much the same as it requires the avoidance of stalls. The approach of a stall is associated with certain sensations which a pilot normally recognizes and avoids. In the same way, pilots should learn to recognize the approach of compressibility effects by certain of the characteristics described in this technical note, or others which experience will indicate to be present.

3428.—Helmets, Flying—Type C\*.—Wired (Stores Ref. 22C/449-542 and 887/880)—Modification

Cancelled by  
AFO 5112/46

(A.E. 4988/44.—29 Jun. 1944.)

The buckle prongs on the goggle retaining strap of helmets, flying, type C\* wired, have a tendency to cause damage to the neck portion of waistcoats, life saving.

2. Ships and stations are to examine all buckles, and any prongs which project, or are sufficiently sharp to cause such damage, are to be filed until a smooth and rounded finish is obtained.

**3429.—Merlin Engines—Revised Oil Pressures**

(A.M.R. 20671/44.—29 Jun. 1944.)

As a result of progressive improvements in the design of Merlin engine bearings and lubrication system it has been proved that these engines will operate satisfactorily with an oil pressure as low as 30-lb./sq. in. *provided the pressure has dropped to this figure slowly and progressively during the engine's life.*

2. Should a sudden drop in oil pressure occur the engine should immediately be rejected even though the oil pressure may not have dropped as low as 30-lb./sq. in.

3. Consequent on the satisfactory operation at reduced oil pressures, advantage has been taken to increase the clearance in certain bearings which hitherto have been held to an undesirably low figure in order to ensure obtaining the oil pressure previously considered necessary.

4. The following revised oil pressures are now in force :—

(a) Normal oil pressure—45 to 80 lb./sq. in., *i.e.*, a new or overhauled engine when first installed should show an oil pressure within the above range.

(b) Minimum oil pressure—30 lb./sq. in. (provided the conditions in paragraph 1 above are met).

5. Pilots Notes and operational limitations in relevant Vol. II, "M" leaflets are to be amended accordingly, quoting Special Flying Instruction TF/335 as authority. Official amendments will be issued in due course.

6. When checking the oil pressure on the ground the engine speed should be 2,000-r.p.m. and the oil temperature between 90° and 95° C., the oil cooler being temporarily bye-passed or blanked as necessary.

**3430.—Rudders—Modification—As. and As.***L.C.T. (4)*

(D/D.C.O.M. 1935/44.—29 Jun. 1944.)

Experience in service in L.C.T. (4) has indicated that difficulties in steering, particularly in bringing the rudder back from hard-over, are due to the rudders being slightly overbalanced. To remedy this, it has been approved to cut 3 in. off the fore edge of the rudder, thus removing the portion of plate forward of the forward end of the upper and lower stiffening arms. A small portion of the centre stiffening arm will also require to be cut away.

2. Instructions regarding the modification to rudders in new construction have been issued, and Commanding Officers of craft in commission should insert an item classification "A" in their next lists of As. and As. to have this modification carried out at the first convenient opportunity.

*(Capt. M.L.C., 5 Apr., 1944, No. M.681/12.)**(This Order is to be retained until complied with.)***3431.—Additional Natural Ventilation in Galleys—Fitting of—As. and As.***Converted Trawlers*

(D.9368/44.—29 Jun. 1944.)

A number of cases have been observed recently where the natural ventilation arrangements to the galley in the above-mentioned vessels are inadequate due to the blanking over of existing mushroom top or cowl vents or skylights upon the fitting of A.A. armament over the galley aft.

2. The Commanding Officers of vessels concerned should insert an item in their next lists of As. and As., classification "A", for a torpedo vent to be fitted on the side of the galley in close proximity to the range. Fitting-out Officers should also examine, where practicable, the possibility of cutting louvred slots at the top of the bulkhead separating the galley from the entrance lobby to the engine room, or of fitting additional water excluding mushroom type or cowl vents at the corners of the galley not covered by the gun platform as shown on Drawing D.N.C. 24A/A470.

*(This Order is to be retained until complied with.)***3432.—Alterations and Additions***H.M. Rescue Tugs, B.A.T., Class 1-14, and Steel A.T.R., Class 41, 42, 48, 49, and 91-96*

(R.E. 11402/44.—29 Jun. 1944.)

The following is to be *added* to item 62 of A.F.O. 2658/44 :—

"10-in. signalling projectors are *only* to be fitted if 12-in. signalling projectors, U.S. type, have not been supplied."

*(A.F.O. 2658/44.)***3433.—Admiralty Shallow Water Diving Dress**

(N.S./G. 07062/44.—29 Jun. 1944.)

A.F.O. 1977/44 is to be *amended* as follows :—

Paragraph 7. *Delete and substitute* :—

7. The allowance of outfits for the various classes of ships and services and priority of issue are as follows :—

- |  |        |
|--|--------|
| (i) Diving schools (including D.S.E.A. training establishments at Gosport, Malta and Gibraltar) ... ..   | 3 each |
| (ii) Landing craft bases and L.C.T. Hards in United Kingdom ... ..   | 2 each |
| (iii) L.C.I.(L) loading points in United Kingdom ... ..  | 1 each |
| (iv) Ships other than (v) and (vii) below including submarines which are normally supplied with Salvus or D.S.E.A., excluding landing craft ... .. | 1 each |
| (v) Cruisers and above ... ..  | 2 each |
| (vi) Coastal force bases, home and abroad, and landing craft bases abroad ... ..   | 2 each |
| (vii) Submarine depot ships and establishments (other than (i) above) destroyer depot ships, and repair ships ... ..                               | 2 each |

*(A.F.O. 1977/44.)***3434.—Detel Paints—Stocks***Home and Foreign Yards*

(N.S./D.13971/43.—29 Jun. 1944.)

The distribution of the detel paints to yards abroad as set out in A.F.O. 2782/44 is to be arranged by Severn Area.

2. The date of A.F.O. should read 25 May 1944 (not 1943 as shown).

*(A.F.Os. 4034/42, 5186/42 and 2782/44.)***3435.—Deck Coverings—Use of Non-Latex Material—Discontinuance of**

(P. 5847/44.—29 Jun. 1944.)

Non-latex covering materials authorized by A.F.O. 4105/43 and referred to in A.F.O. 1251/44 have proved unsatisfactory in service and it has been decided to discontinue their use in H.M. ships.

2. For weather decks, Semtex and Paratex materials containing reclaim or Niger rubber are approved to be used.

3. For interior work it has been decided to return, pending further investigation and development of more suitable materials, to the use of linoleum in positions where such deck covering is considered essential.

Generally, linoleum should not be laid in passage ways, lobbies, store rooms and flats unless these decks are used for sleeping on.

In officers' messes, enclosed messes, and mess decks, cabins, offices and issue rooms, linoleum should be laid in rectangles clear of bulkheads and fixtures and the deck is to be left bare wherever this can be accepted. Edge strips are to be fitted at the exposed edges of the linoleum.

4. Linoleum of  $\frac{3}{16}$ -in. thickness should be secured direct to the steel deck, but where a considerable amount of flushing of the deck is necessary, such as in cruisers or larger ships,  $\frac{1}{2}$ -in. Semtex or Paratex underlay may be used and  $\frac{1}{8}$ -in. linoleum superimposed.

5. Bathrooms and washplaces are to be covered with Semtex or Paratex material containing reclaim or Niger rubber, except bathrooms which are used for decontamination purposes, which are to be tiled.

6. Galleys, galley kitchens, preparing rooms, beef screens and bakeries in all classes of ships in which tiles were formerly fitted are to be fitted with tiles. This instruction will accordingly not apply to destroyers and smaller ships.

7. Tread strips for the protection of the compositions and linoleum in way of ladderways and doorways should be fitted.

8. The foregoing arrangements are to apply to all new construction and conversion ships where deck coverings have not yet been laid and no delay in completion is involved.

In existing ships where an unsatisfactory type of non-latex deck covering has been fitted, it is to be replaced by linoleum when renewal is necessary, this work being treated as a defect.

9. A.F.O. 1251/44 is to be amended as follows:—

Paragraph 9. Delete lines 1-6 and substitute:—

"9. Deck coverings.—Linoleum, together with adhesive solutions, composition liners, etc., is a serious smoke and fire risk, and is to be reduced to the minimum essential for habitability, see A.F.O. 3435/29 Jun. 1944."

Paragraph 17 (c). Delete and substitute:—

"(c) The removal of unessential inflammable deck coverings. Lists of spaces affected to be attached. (See A.F.O. 3435/29 Jun. 1944 and paragraph 9 of this Order.)"

(A.F.O. 1251/44.)

(A.F.Os. 3803/42, 411/43, 1115/43, 4105/43, 475/44 and 2112/44 are cancelled.)

### 3436.—Cable, Electric, Pattern 13446—Introduction

(N.S. 18760/44.—29 Jun. 1944.)

To meet requirements for lead-in cable to gun mountings needing H.T. (1,500 volt) supply, electric cable, Pattern 13446, single core, R.I. screened and neoprene sheathed 40/0076, has been added to the Rate Book of Naval Stores under Subhead F.I.C., Part I, page 1368 (New Edition).

2. Arrangements are being made for the first purchase of 5,000 yds. of cable, Pattern 13446 for distribution as follows:—

Leeds	...	...	...	1,000 yds.
Mersey Area	...	...	...	1,000 yds.
Chatham	...	...	...	500 yds.
Portsmouth	...	...	...	500 yds.
Devonport	...	...	...	500 yds.
Rosyth	...	...	...	500 yds.
Severn Area	...	...	...	500 yds.
Carfin	...	...	...	500 yds.

3. It may be some time before the supplies become available.

### 3437.—Firefighting Appliances—Foam Compound—Care in Use of

(N.S. 25191/43.—29 Jun. 1944.)

Owing to the great increase in the requirements of foam compound for Government requirements the supply is quite unequal to the demand, and it is imperative that the utmost care is exercised to restrict demands to the minimum essential quantities required.

2. Attention is drawn to paragraph 8 of A.F.O. 1877/43.

(A.F.O. 1877/43.)

### 3438.—Portable Petrol Vapour Detectors—Provision of, for Trials—REPORTS Aircraft Carriers

(N.S. 19538/44.—29 Jun. 1944.)

The trials of pilot explosimeters being carried out in "Pretoria Castle," "Indefatigable," "Implacable," "Victorious" and "Illustrious" under the authority of A.L. P/SRE 1785/43 dated 22nd February, 1944, are to be extended to other carriers. One explosimeter will therefore be supplied to each of the undermentioned carriers:—

H.M.S. "Activity"  
H.M.S. "Nairana"  
H.M.S. "Vindex"  
H.M.S. "Unicorn"  
H.M.S. "Campania"  
H.M.S. "Formidable."

In addition six "Tracker" class and six "Smiter" class escort carriers should be selected for trials by the Flag Officer Carrier Training, and the names of the selected ships forwarded as soon as possible to enable further supplies to be made.

2. Purchase has been made of 18 explosimeters from Messrs. Pilot Engineering Co., under C.P. 69623/44 for delivery to the Superintending Naval Store Officer, Stanley Mills, Stroud, who will arrange supply to the ships concerned.

3. This instrument provides a means of detecting concentration of petrol vapour in carriers, and of determining whether or not, the concentration is dangerous. It can reach parts which are not normally accessible, e.g., under engines, tank space bilges, etc.

4. Each pilot explosimeter comprises:—

1 filter  
1 set of leather harness  
1 battery filter  
1 key for battery filter plug  
1 20-ft. length of sampling line  
1 connection for battery charging  
1 aspirator  
1 battery  
2 fuses for battery  
1 dilution attachment  
1 liquid trap (short).

5. To enable the trials to proceed without interruption, spares will be supplied with each instrument, on the following basis:—

3 filters  
2 filament cells  
1 battery  
1 aspirator  
1 length of rubber aspirating tube.

6. The selected ships should afford the instrument a good trial, in conjunction with the daily rounds, and on other appropriate occasions, for a period of six months, after which it should be returned to the Principal Chemist, H.M. Dockyard, Portsmouth, for a check calibration.

7. Reports should then be forwarded through the Administrative authorities on the usefulness and limitations of the explosimeter, together with any suggestions which might be incorporated, for adoption generally.

## 3439.—Signalling Projectors—24-in. Oxy-Acetylene—Disposal

(N.S. 18091/44.—29 Jun. 1944.)

Signalling projectors, 24-in. oxy-acetylene, are now obsolete, and all stocks and future returns of the projectors and their components, detailed below, should be disposed of in accordance with A.F.O. 3118/43, paragraph 4.

Subhead and Item	Pattern No.	Description
F.I.C.4	3780	Lamps, oxy-acetylene with shutter.
	3781	Holder, duplex, pastille.
	3630	Brackets, carrier for holder, etc.
	3631	Plate arms, carrier for holder, etc.
	3632	Holder, claw.
	3634	Spring, compression.
	3782	Keys, for plug and nipples.
	3783	Valves, reducing oxygen.
	3784	Generators, acetylene.
	3785	Claws, for pastille holder.
	3786	Pins, brass, split.
	3787	Drills, clearing.
	3788	Drills, clearing.
	3789	Nipples, large.
	3790	Nipples, small.
	3791	Plugs.
	3792	Springs for shutter.
	3793	Chains.
	—	Pastilles, 20 mm.

2. The Rate Book of Naval Stores will be amended.

(A.F.O. 3118/43.)

## 3440.—Shipwrights' Tools—Allowance

Frigates ("River" and "Loch" Classes) and Corvettes ("Castle" and "Flower" Classes)

(N.S. 013247/44.—29 Jun. 1944.)

The outfit of shipwrights' tools shown in the Appendix hereto is to be allowed to frigates ("River" and "Loch" classes) and corvettes ("Castle" and "Flower" classes) for use in connection with making good small defects on board the ships. These stores are in addition to any which may already be allowed for damage control or general purposes.

2. Ships concerned, in commission, should forward demands to their storing yards or Naval store depots as necessary. Supply to ships of new construction should be made by warrant and storing yards and depots in the usual manner.

3. The Sea Store Establishments will be amended.

## APPENDIX

Outfit of Shipwrights' Tools (Subhead B.11) for Frigates ("River" and "Loch" Classes) and Corvettes ("Castle" and "Flower" Classes)

Pattern Number.	D.H.T.	Admiralty.	Description.	Quantity.
1716	C.820		Planes, smoothing, 2 in. ... ..	1
2214	C.775		Saws, tenon, 12 in. ... ..	1
			<i>Consumable Stores</i>	
405	C.686		Chisels, firmer, $\frac{3}{8}$ in. ... ..	1 of each pattern.
418	C.689		Chisels, firmer, $\frac{3}{4}$ in. ... ..	
			Drills:—	
			Morse twist:—	
—	2004		$\frac{1}{4}$ in. ... ..	1 of each pattern.
—	2006		$\frac{3}{8}$ in. ... ..	
—	2016		$\frac{3}{16}$ in. ... ..	
—	2026		$\frac{3}{8}$ in. ... ..	
—	2034		$\frac{1}{8}$ in. ... ..	
—	2046		$\frac{3}{16}$ in. ... ..	
648	2A		Hand... ..	
2251	3601		Screwdrivers, 6 in. ... ..	1

(C.-in-C., Western Approaches, 27 Feb. 1944, No. W.A. 687/3895M.)

## 3441.—Station Pointer, Pattern 70 and Star Globes, Pattern 604—Allowance

U.S. Built Escort Carriers.

(N.S. 22450/44.—29 Jun. 1944.)

All U.S. built escort carriers are to be allowed one station pointer, Pattern 70 and one star globe, Pattern 604.

2. Demands should be forwarded to storing yards by ships concerned, but owing to production difficulties supply cannot be made immediately.

## 3442.—Drinking Water Coolers—Supply of—REPORTS

Capital Ships, Aircraft Carriers, Cruisers, Depot, Maintenance, Accommodation and Repair Ships

(D. 9778/44.—29 Jun. 1944.)

It has been approved in principle to supply self-contained drinking water coolers to each ship of the classes mentioned above if and when fitted for service in the tropics. The number supplied will be two, three or four per ship, according to the space available, and, in certain ships, subject to compensation being found for the additional topweight involved. In addition, up to two in number per ship have been approved for the ready rooms in aircraft carriers.

2. Particulars of the machines are:—

Weight	... ..	8½ cwt.
Dimensions	... ..	5 ft. 6 in. high by 2 ft. 2 in. by 3 ft. 4 in.
Output	... ..	6½ gallons per hour at 60 degs.
Power	... ..	Self-contained $\frac{3}{4}$ -h.p. motor.

3. Except as stated in paragraph 4 of this Order, the Commanding Officers of ships of the classes concerned, whether already fitted for service in the tropics or not, are to report the numbers which are required and the positions in which they can be accommodated. For "Renown," all cruisers, and "Titania," "Lucia" and "Aleto," the report should be accompanied by proposals for the surrender of compensating topweight.

4. The C.Os. of ships of the undermentioned classes are not required to report:—

Ships building and converting.  
"King George V" class.  
Fleet carriers.  
Light fleet carriers.  
American conversion escort carriers.  
Ships under care and maintenance.

## 3443.—Handlamps, Pattern 17008—Issue in Lieu of Pattern 8130

Aircraft Carriers

(N.S. 18359/44.—29 Jun. 1944.)

Supplies of handlamps, Pattern 8130, are difficult to obtain and until the position improves, handlamps, Pattern 17008, should be issued instead, and then clearly marked "18 watts" in paint, and used only with 18 watt lamps. This is to prevent the overloading of the electrical system.

## 3444.—Aircraft—Scales for Weighing Carbon Dioxide Cylinders

(N.S. Air 4818/44.—29 Jun. 1944.)

With reference to paragraph 11 of A.F.O. 2103/44, provision is being arranged of a Semi-Self Indicating Scale, Avery's type A.546, for use in checking the carbon dioxide content of cylinders used on life-saving waistcoats, for issue to ships and services in accordance with the following scales:—

Ships	... ..	As shown in B.R. 378.
Shore Establishments	... ..	As shown in B.R. 377.
R.N. Air Stations	... ..	

2. One set should be supplied to the following services from Rosyth without demand:—

R.N. Air Station, St. Merryn  
R.N. Air Station, Yeovilton  
R.N. Air Station, Piarco  
R.N. Air Section, Dartmouth, Nova Scotia  
R.N.T.A.G. School, R.C.A.F. Station, Yarmouth, Nova Scotia.

3. Other services concerned, with the exception of American Conversion Escort Carriers, should forward demands to Rosyth, quoting this Order as the authority for supply. Issues to American Conversion Escort Carriers should be made from Rosyth without demand, and to new services with their initial outfit of stores.

4. Purchase under Subhead B, item 10, of 200 scales has been arranged for delivery to Rosyth, but deliveries by contractors are not expected to be completed for some months. Ships and services should therefore not unduly hasten supply.

5. *Rosyth only*.—Supply to the following dockyards should be arranged to meet anticipated requirements for ships and services based abroad :—

1 to Gibraltar	1 to Freetown
1 to Malta	3 to Durban
1 to Alexandria	20 to Ceylon

6. Upon receipt of the new type of scale referred to above, services holding scales, guncotton, Ref. 4D/718, are to return these stores, together with the undermentioned weights, to the nearest R.N. Store Depot at home or dockyard abroad, as appropriate, quoting this Order as the authority.

Ref. 21C/624	Weights, brass, $\frac{1}{2}$ -dram.
Ref. 21C/622	Weights, brass, 2-dram.
Ref. 21C/633	Weights, iron ring, $\frac{1}{4}$ -lb.
Ref. 21C/632	Weights, iron ring, $\frac{1}{2}$ -lb.

(A.F.O. 2103/44.)

#### 3445.—Experimental Works—Use of Batteries, Pattern 3773

(N.S. 021486/43.—29 Jun. 1944.)

When replacement of existing dry batteries at experimental work sites is required, batteries, Pattern 3773, are to be used in future, instead of the Siemens type as previously supplied by Messrs. Sound City (Films) Ltd.

2. Battery, Pattern 3773, is rated at 66 volts, and 4 of them are to be used where 5 No. 50 volt batteries were used previously.

3. A small stock of the batteries will be held at the depots maintained by the Air Ministry, for use in emergency should Admiralty pattern batteries not be readily available.

#### 3446.—R.N. Store Depot, Whitchurch, Cardiff—Return of Stores to

(N.S. 20639/44.—29 Jun. 1944.)

Considerable difficulty is being experienced in dealing with naval stores returned by H.M. ships and establishments, to the Superintending Naval Store Officer, Severn Area, owing to the incorrect addressing of packages, etc.

2. Naval stores and relevant vouchers should be addressed to :—

The Officer-in-Charge,  
R.N. Store Depot,  
Malingriffith Tinsplate Works,  
Whitchurch, Cardiff.

Full trucks of naval stores should be consigned to :—

The Superintending Naval Store Officer,  
Severn Area,  
Pentyrch Siding,  
Tongwynlais, Glam.

3. The postal address for correspondence is :—

The Superintending Naval Store Officer,  
Severn Area,  
Stanley Mills,  
Stroud, Gloucestershire.

## Section 4

### OTHER STORES—NAVAL STORES, VICTUALLING STORES, MEDICAL STORES, CONTRACTS

#### 3447.—Purchase Tax—Purchases by Local Officers of Chargeable Goods

(C.P.10c/73411/44.—29 Jun. 1944.)

The following information consolidates previous orders issued on this subject.

2. The clause to be inserted in tenders by officers authorized to make tax free purchases of chargeable goods is as indicated below :—

“ Note.—The Tenderer should delete whichever of the following declarations is inapplicable :—

“ The Tenderer is registered for Purchase Tax purposes under No..... ; or

“ The Tenderer is not registered for Purchase Tax purposes.

“ If the Tenderer is a registered person any sale resulting from this tender shall be subject to the conditions :—

“ The price quoted shall be exclusive of Purchase Tax in respect of any sale resulting from this Tender (Order). If any claim is made for Purchase Tax in respect of the sale, the Department will indemnify the Contractor against such tax.” †

3. The wording of the above Indemnity Clause†, which was agreed by departments to meet Customs requirements, should be strictly followed whenever the clause is used.

4. The tax on chargeable goods paid for locally will be payable only in the following circumstances :—

(a) Goods despatched by registered sellers under local orders placed by officers other than those specified in paragraph 7 below.

(b) Goods despatched by unregistered sellers who have themselves already paid the tax to their suppliers. A certificate to this effect should be obtained from the contractor.

The rate and amount of tax claimed should in all instances be stated on firms' invoices together with any necessary details to identify the goods, and registered sellers should state their registered numbers.

5. Goods exported or shipped as stores by a registered seller are not chargeable provided the seller is supplied with the exportation particulars and supporting documents.

6. Local Officers who have not already received them are advised to obtain copies of Customs and Excise Notices, Nos. 77 (September 1941), 78 (September 1942) and 81A (April 1943), from the local Customs and Excise Officer.

7. The Secretary, Custom House, has been notified that the following local Officers are authorized to make tax-free purchases of chargeable goods. This list has been limited at the request of H.M. Customs and only purchases made by these Officers from registered persons or firms, out of official funds, will qualify for exemption from tax.

#### List of Officers

S.N.S.Os.	...	...	Chatham, Clyde, Devonport, Haslemere, Park Royal, Perth, Portsmouth, Rosyth, Stafford, and Mersey and Severn Areas.
N.S.Os.	...	...	Bath, Belfast, Cardiff, Carfin, Donibristle, Gateshead, Glossop, Greenock, Hull, Invergordon, Lathalmond, Londonderry, Portland, Port of London, Preston, Scapa, Sheerness, Woolston and Southampton.
D.N.S.Os.	...	...	Dover, Fleetlands, Slough and Pembroke Dock.
S.V.S.Os.	...	...	Royal Victoria Yard Deptford, Lancashire Area (Accrington), Southern Area (Thatcham), South Western Area (Launceston). (See paragraph 8 below.)



The following image is  
reproduced from a  
damaged original.

Any inconvenience is  
regretted.

*List of Officers*

V.S.Os. ... Belfast, Greenock, Jamestown, Leicester, Newtown, Rosyth, Stainland.

The Commandant .. Royal Marines, Chatham, Portsmouth, Plymouth and Depot, Exton, Devon.

The Technical Assistant to Medical Director General. Huthwaite, Mansfield, Notts.

8. The Secretary, H.M. Customs, has agreed that local orders for chargeable goods issued from sub-depots administered by the Superintending Victualling Store Officers, Southern Area and Southern Western Area, as well as those issued from the main depots at Thatcham and Lauen-eston, shall be considered as tax free purchases provided they contain the agreed Purchase Tax Indemnity clause and are signed in full "by or on behalf of the Superintending Victualling Store Officer" with an indication of the area concerned.

9. Orders placed locally under a contract arranged by the Director of Navy Contracts should quote the C.P. number and date of the contract to enable contractors to identify the goods as tax-free supplies.

(A.F.Os. 63/41, 803/41, 1540/41, 1746/41, 1747/41, 4619/40, 1451/42, 4058/42, and 5019/43 are cancelled.)

**3448.—Talcum Powder in Rubber Gloves**

(M.D.G. 30071/44.—29 Jun. 1944.)

The word "serious" in paragraph 1, line 2, of A.F.O. 3075/44 should read "serous".

(A.F.O. 3075/44.)

**3449.—Cameras, Aircraft, G.45B—Introduction**

(A.C.R.D. 841/44.—29 Jun. 1944.)

Initial supplies and replacements of aircraft cameras G.45 are now being met by the issue of "Cameras, Aircraft, G.45B", which are a modified version of the G.45 camera.

2. G.45B cameras are described in A.P. 1749, Volume I, Section 2, Chapter 14. They will bear the same reference numbers as the G.45 cameras, but a star "\*" is engraved after the number on the camera body and parts which are of new or modified design. Items bearing a starred reference number are only suitable for G.45B cameras.

3. Aircraft Stores Establishments are in course of amendment to show revised allowances of maintenance spares. Services are to ensure that demands clearly show the star in reference numbers of modified parts, and are endorsed for the type of camera spares required, viz.:—"For G.45 Cameras (Unmodified)" or "For G.45B Cameras (Modified)".

4. It is to be noted that G.45 cameras are, for the present, being replaced at wastage rates only. Units in possession of serviceable unmodified cameras are to continue to use them until further notice.

**3450.—W.R.N.S.—Uniform**

*R.N. Air Stations Abroad*

(V/1/1890/44.—29 Jun. 1944.)

The number of khaki tropical cellular shirts to be issued to W.R.N.S. ratings drafted to R.N. Air Stations abroad is to be increased from two to six and A.F.O. 96/44 is to be amended accordingly.

2. Ratings now serving at air stations abroad who received only two cellular shirts when drafted are to be given four additional shirts to complete their kit to the new scale.

(A.F.O. 96/44.)

**3451.—Landing Craft Recovery Units—Arrangements for Supply of and Accounting for Naval Stores and Special Equipment**

(N.S. 22525/44.—29 Jun. 1944.)

The following amendments are to be made to A.F.O. 2267/44:—

**Appendix A—**

Subhead E.5.—Insert new item "Kapok jerkins, 20 oz., for use with shallow water diving dress—1 No. per L.C.R.U.".

Subhead F.3.—Insert new item "Pattern 300 watches, pocket—2 No. per L.C.R.U.".

**Appendix C—**

Delete "Suction hose for trailer pump, 15 ft. length—1 length (as promulgated by A.F.O. 2664/44).

Amend description of trailer pump to read: ". . . complete with four lengths 10 ft. suction hose . . ."

(A.F.Os. 2267/44 and 2664/44.)

**3452.—Victualling Accounts—Inventory System of Accounting for Loan Clothing, Mess Gear and Reserve Provisions in Certain Small Vessels**

(V.3/4213/44.—29 Jun. 1944.)

The arrangements promulgated in A.F.O. 1445/42 under which loan clothing, mess gear and reserve stocks of provisions in trawlers and certain other small vessels are on charge in an inventory have been modified in certain respects, and the following instructions supersede those contained in the order quoted.

2. The inventory system is to be applied as widely as possible to vessels which normally take up provisions on repayment from shore bases as required and carry stocks on board only for emergency use. Circumstances may render it desirable however, for the accounts of certain of these vessels to be kept on Forms S.461 and S.462, and the decision is left to the discretion of individual bases.

3. The following forms are used:—

Cover for inventories	...	...	...	...	S.1071
Inventory of Reserve Provisions	...	...	...	...	S.1071a
Inventory of Loan Clothing	...	...	...	...	S.1071b
Inventory of Officers' Mess Traps	...	...	...	...	S.1071c
Inventory of Seamen's Mess Utensils	...	...	...	...	S.1071d
Victualling and Spirit Book	...	...	...	...	S.1072

4. The inventories should be made out in triplicate and the copies disposed as follows:—

(i) to be kept by the local Base Accountant Officer or the Accountant Officer of the parent ship—all relative vouchers to be filed with the copy;

(ii) to be kept on board;

(iii) to be sent into office with the victualling store accounts of the base parent ship to support the issues shown in the accounts.

5. *Transfer of Base Copies of Inventories.*—Whenever a flotilla or an individual vessel is transferred for berthing or accommodation from one base to another either permanently because of reallocation or temporarily for a period anticipated to exceed 14 days, the base copies of inventories are to be transferred to the Accountant Officer of the craft's new base. Local administrative authorities are responsible for the issue of directions to transfer inventories and that such instructions are received by—

(a) the base at which the craft are berthed or accommodated when their movement is ordered;

(b) the base to which they are being transferred as above;

(c) the Flotilla or Commanding Officers of the craft concerned.

See AFO 7328/40  
See AFO 5019/40  
" " 1528/40  
3826/41

6. To facilitate reference to former bases on store matters, the names of the bases and the inclusive period of attachment should be noted as a continuous record on the cover, Form S.1071. The names of former bases from which vessels have been transferred should *not* be obliterated.

7. In order that base copies of inventories may reach a new base as soon as possible, every endeavour should be made to despatch them in charge of the Flotilla or Commanding Officer of vessels concerned; this procedure will ensure that the base copies are available for delivery to the responsible accountant officer should there be a temporary or permanent alteration in the programme of movement of the vessels.

8. Inventories should not be retained at a base when vessels are being permanently transferred and the new base cannot be immediately given. The inventories should be despatched as in paragraph 7 above, under cover addressed to "Accountant Officer at port of arrival".

9. Bases are to acknowledge receipt of inventories on Form S.549.

#### MESS GEAR AND CLOTHING

10. The issues from the stocks on charge in the parent ship should be supported in the accounts by certificates as follows:—

- (a) For first supplies, by copies of the inventory.
- (b) For additions to establishment on board, by a certificate showing the quantities and certifying that the new allowances have been inserted (i) in the ship's copy of the inventory, and (ii) in the parent ship's copy of the inventory (or that the parent ship has been duly notified), and indicating the circumstances in which it has been necessary to alter the establishment.
- (c) For replacements, by certificates as follows:—
  - (i) That the supplies are in replacement of corresponding quantities returned, stating where the returned quantities have been taken on charge, *or*
  - (ii) that the supplies are in replacement of quantities lost by neglect, the value of which has been recovered, indicating where the recovery has been brought to account, *or*
  - (iii) that the supplies are in replacement of quantities lost by accident, such issues to be supported by S.1251 only, which can be endorsed as a receipt for replacements instead of S.549.

11. The Accountant Officer of the parent ship or at the base should scrutinize demands for replacements in order to ensure that the replacements are within reasonable limits. Any instances of excessive replacements should be investigated.

#### PROVISIONS

12. A stock of provisions should be carried on board each vessel as a reserve stock for use in emergency, the number of days and composition of the stock to be maintained being decided at each base according to the duties on which vessels are likely to be employed. A suggested scale is given below. These provisions are to be entered in the inventory and written off base stocks.

13. It is to be impressed on Commanding Officers that these provisions are only to be used when supplies cannot be taken up in the usual way from a base, and that when any are used they must be replaced at the earliest opportunity by taking up similar quantities on repayment as a charge against victualling allowance.

14. Tea and sugar (packed in tins) for emergency stocks should be demanded from Royal Victoria Yard, Deptford, by Base Accountant Officers; demands should be limited to the actual quantities necessary.

15. Arrangements should be made by the Accountant Officer of the parent ship or base for the provisions to be brought into use within a reasonable period, if necessary by exchange of stocks on board with fresh supplies from the parent ship or base, in order to ensure that the reserve stock on board is in a satisfactory condition for use; this matter should be dealt with by the Accountant Officer on the occasion of the periodical inspection and musters (*see below*).

16. A suggested scale for emergency stocks for 20 men for 14 days is given below:—

Tea	...	...	...	...	...	10 lb. (in 2 lb. tins)
Coffee	...	...	...	...	...	10 lb.
Milk	...	...	...	...	...	48 lb.
Sugar	...	...	...	...	...	56 lb. (in 7 lb. tins)
Biscuits	...	...	...	...	...	140 lb.
Corned beef	...	...	...	...	...	72 lb.
Steak and kidney puddings	...	...	...	...	...	24 lb.
Boiled beef and carrots	...	...	...	...	...	24 lb.
Stewed steak	...	...	...	...	...	24 lb.
Salmon	...	...	...	...	...	48 tins
Tinned sausages	...	...	...	...	...	12 tins
Tinned bacon	...	...	...	...	...	24 lb.
Tinned beetroot	...	...	...	...	...	12 tins
Tinned carrots	...	...	...	...	...	12 tins
Tinned peas	...	...	...	...	...	24 tins
Baked beans	...	...	...	...	...	48 lb.
Tinned tomatoes	...	...	...	...	...	48 tins
Jams (2's)	...	...	...	...	...	24 lb.
Golden syrup (2's)	...	...	...	...	...	24 lb.
Suet	...	...	...	...	...	8 lb.
Marrowfat peas or haricot beans	...	...	...	...	...	40 lb.

#### GENERAL

17. The clothing, provisions and permanent items of mess gear shown in the inventory should be mustered as follows:—

- (a) Monthly if possible, but at not longer intervals than six weeks, by the Commanding Officer, or an officer detailed by him, who is to furnish a certificate to the effect that the stores have been mustered and found correct or, in the event of any differences, the matter should be reported immediately to the Accountant Officer of the parent ship or base.
- (b) On change of the Commanding Officer, the officer taking over command is to certify that the stores shown in the inventory have been mustered and found correct on transfer to his custody. In the event of any differences, the matter is to be reported immediately to the Accountant Officer of the parent ship or base.

18. The inventory is to be inspected periodically by the Base Accountant Officer of the parent ship or base at least once a quarter. Where practicable, the Accountant Officer of the parent ship should arrange for a complete muster of the stores once a quarter, but where this is not practicable, he is to satisfy himself that mustering has been correctly carried out on board, making a check of certain selected items as a test.

19. On the vessel paying off, the stores (*including consumable mess gear*) are to be mustered and returned to store. Any differences should be investigated before the crew is dispersed, by the Naval Officer-in-charge or Base Accountant Officer at the paying-off port. The ship's copy of the inventory should be forwarded as a Return Note to the Base Accountant Officer or victualling yard to which the stores are returned. The parent ship's copy of the inventory should be forwarded to the Director of Victualling, Admiralty, with a notation of the disposal of the Stores.

#### VICTUALLING BOOK, FORM S.1072

20. The Victualling and Spirit Book (Form S.1072) to be kept in these vessels makes provision for:—

- (a) A daily record of persons victualled.
- (b) A daily record of receipts and expenditure of rum.

#### ACCOUNTING FOR SUPPLIES BY ONE BASE TO TENDERS OF ANOTHER BASE

21. When repayment issues are made by one base to tenders of another base, the supplying base is to obtain from the tender a receipt, preferably on Form S.77, and forward it, with a suitable covering letter or form, to the parent base. The parent base is to acknowledge the charge and communicate particulars of the cash voucher (Form S.73) on which the amount will be recovered.



22. If the cash voucher cannot be stated at once, the acknowledgment should be sent and particulars of the cash voucher notified as soon as possible.

23. The supplying base is responsible for obtaining particulars of the cash voucher, but need not delay forwarding its Provision Account for this purpose.

24. The supplying base should keep a separate record of supplies to tenders of other bases, for example, in a separate repayment book S.72, and put the total of all such issues on a separate line in the provision account; this entry is to be supported by an abstract showing total values only of issues to each tender, arranged under the different bases, and, in addition, references to parent bases' cash vouchers or acknowledgments.

25. The parent base is not required to concern itself with the provisions themselves, but merely to recover the value of them on S.73, such values being shown in red to distinguish them from the values of issues from the parent base's own stock.

26. A statement should accompany the S.73, showing the names of bases from which supplies have been drawn and for which recoveries have been included, indicating the total amount for each base.

27. It is important that the names of the tender and of the parent and supplying bases should be clearly shown on the tender's receipt for provisions, and the signature should be such as to enable the person who actually received the provisions to be readily identified at a later date if necessary.

(A.F.Os. 1445/42, 5842/42 and 2018/44 are cancelled.)

#### 3453.—Bread—Additions to List of Local Contracts, 1944-45

(CP. 5/34329/43.—29 Jun. 1944.)

The following additions should be made to the list of local bread contracts for 1944-45:—

THURSO	... Scottish Co-operative Wholesale Society, Ltd., 95, Morrison Street, Glasgow, C.5.	AGENT Barton Robinson, 17, Princes Street, Thurso. Telephone : Thurso 33
MANCHESTER	... W. Moore & Son, Ltd., Highfield Road, Pendleton, Salford, 6.	Telephone : Pendleton 1578.
STORNOWAY	... Scottish Co-operative Wholesale Society, Ltd., 37/38, Cromwell Street, Stornoway, Isle of Lewis.	Telephone : Stornoway 130.

#### 3454.—Dehydrated Meat—Use Naval Medical Establishments

(M.D.G. 24024/44.—29 Jun. 1944.)

Dehydrated meat may be issued for the use of staff in Naval Medical Establishments. It must not, however, be issued to patients.

(A.F.O. 2124/44.)

#### 3455.—Attaché Cases

(V.9/5490/43.—29 Jun. 1944.)

The stock position of attaché cases has improved and issues on repayment, which were suspended by A.F.O. 4125/43, may now be resumed.

2. Only limited supplies of these articles are, however, available at present, and production is still inadequate to meet all anticipated demands. Priority of supply will continue to be given, therefore, to requirements for new entries and

re-kitting survivors and demands on the Victualling Yards should indicate whether supplies are required—

- (a) for new entries
- (b) for re-kitting survivors;
- (c) for repayment issues.

(A.F.O. 4125/43.)

## Section 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE

### 3456.—A.M.S.Is.

(E.F.O.—29 Jun. 1944.)

There are no Admiralty Merchant Shipping Instructions for distribution with this issue of A.F.Os.

(A.F.O. 3346/44.)

### 3457.—Amendments to Books

(E.F.O.—29 Jun. 1944.)

The undermentioned amendments (A.F.Os. P. 407-427/44) 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.407/44.**—B.R. 669—Instructions for the Conduct of Cash Duties, 1932—Amendment.

**P.408/44.**—O.U. 5225—Home Dockyard Regulations, 1925—Amendment.

**P.409/44.**—O.U. 5225 (3)—Home Dockyard Regulations—Addendum No. 3 (1939)—Amendment No. 23.

**\*P.410/44.**—B.R. 380/B—Barracuda S.C.L.—Amendment No. 6.

**\*P.411/44.**—B.R. 378 (G)—Wildcat IV—A.S.E.—Amendment No. 10.

**P.412/44.**—B.R. 201/1935—Turret Gun Drill for 15-in., Mark I guns on Twin Marks I, I\* and II Mountings—1935—Amendment No. 14.

**P.413/44.**—B.R. 228—Pamphlet on Smoke Floats—Amendment No. 1.

**P.414/44.**—B.R. 236—Turret Gun Drill for 14-in., B.L., Mark VII Guns on Twin Mark II and Quadruple Mark III Mountings—1942—Amendment No. 3.

**P.415/44.**—B.R. 257—Handbook for the 4-in., Q.F., Mark XVI\* Gun on the H.A. Twin Mark XIX and Single Mark XX Mountings—1941—Amendment No. 6.

**P.416/44.**—B.R. 258 (41)—Handbook and Drill Book for the 2-pdr., Q.F. Mark VIII Gun on the Single Mark VIII\* Mounting—Amendment No. 11.

- P.417/44.**—B.R. 268 (23)—Electrical Manual, Volume II—Searchlight Control System, Mark V—Amendment No. 5.
- P.418/44.**—B.R. 312—Turret Gun Drill for 15-in., Mark I Guns on Twin Mark I/N Mountings—1938—Amendment No. 11.
- P.419/44.**—B.R. 317 (12)—Mining Drill Book—Preparation of the Mark XX Sinker, Assembly No. 1, and Mark XXIII Sinker—Amendment No. 4.
- P.420/44.**—B.R. 772—Maintenance of Torpedo Tubes in Submarines fitted with H.P. Firing Gear—Amendment No. 6.
- P.421/44.**—B.R. 834—Light Coastal Craft—Amendment No. 1.
- P.422/44.**—B.R. 862—Naval Magazine and Explosives Regulations—1941—Amendment No. 14.
- P.423/44.**—B.R. 939—Turret Gun Drill for 16-in., B.L., Mark I Gun on 16-in., Mark I (Triple Turret) Mounting for H.M. Ships “Nelson” and “Rodney”—1935—Amendment No. 11.
- P.424/44.**—B.R. 980 (B) (formerly O.U. 6090 (B))—R.T. No. 457 for 4.7-in. Guns—Amendment.
- P.425/44.**—B.R. 980 (J) (formerly O.U. 6090 (J))—R.T. No. 348 for 6-in. Guns—Amendment.
- P.426/44.**—B.R. 1046—Landing Craft Technical Memoranda—Amendment No. 4.
- P.427/44.**—O.U. 6350—Manual of Minesweeping—Amendment No. 16.

\* *Exceptionally, A.F.Os. P.410 and P.411 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. 3347/44.)

### 3458.—A.P. 1574—Aircraft Maintenance Regulations

(A.E./N.S. Air 3385/44.—29 Jun. 1944.)

Information has been received from Air Ministry that A.P. 1574 is so out of date that it will not be reprinted. R.A.F. Aircraft Maintenance Regulations will be incorporated in A.P. 1464, which is now being re-written and will be distributed, for information, in due course without demand.

2. All copies of A.P. 1574 are to be returned forthwith, in accordance with paragraph 9, page 2, of A.P. (N) 1.

3. A.P. (N) 1 will be amended accordingly.

### 3459.—B.R. 85—Abolition

(Sta. 15859/44.—29 Jun. 1944.)

No further issues of “Mechanical Engineering” (Lineham) (B.R.85) will be made, and the book has been deleted from B.R.1 (Catalogue of Books of Reference).

### 3460.—B.R. 109—Abolition

(Sta. 10191/44.—29 Jun. 1944.)

B.R. 109, Memorandum concerning the use of the Sulphonamide derivatives, is obsolete, having been superseded by Medical Research Council War Memorandum No. 10 (B.R. 828), and has been deleted from B.R. 1, Catalogue of books of reference.

(A.F.O. 2077/43.)

### 3461.—B.R. 368—Establishment of Naval Stores for Sloops, Corvettes (“Kittiwake” etc. types), etc. and Form D.129—List of Particulars—Lists of Errata No. 12

(N.S. 15571/44.—29 Jun. 1944.)

Lists of Errata No. 12 to the Establishment of Naval Stores for Sloops, Corvettes (“Kittiwake” etc. type) (B.R. 368) and to the List of Particulars (Form D.129) have been prepared and copies will be distributed from R.N. Store Depot, Park Royal, on the usual basis.

2. Three copies of the list of errata to form D.129 will be required to complete each copy of the list of particulars already supplied to ships under construction, and these should be supplied without demand by the appropriate warrant yard. Ships' officers, etc. concerned with preparing the lists should *not* demand the lists of errata from the R.N. Store Depot, Park Royal.

3. *Park Royal only.*—Each assembled copy of the 1941 reprint of the establishment (B.R. 368) when issued should be accompanied by *one* copy of the *errata portions* of lists of errata Nos. 8 to 12. Similarly each copy of Form D.129 (1940 reprint) requires *three* copies of lists of errata Nos. 8, 9, 10, 11 and 12 to that form.

### 3462.—B.R. 812/44—Drill for 40 mm., Mark IV Guns on Twin, Marks IV and IV\* Mountings—Issue

(G. 5749/43.—29 Jun. 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, London, N.W.10, when supplies become available in accordance with the following establishment, viz. :—

	Copies
Flag Officers ... ..	1
Destroyer Depot Ships ... ..	8
Flotilla Leaders ... ..	6*
Destroyers ... ..	4*
Fast Minelayers ... ..	6*
Sloops ... ..	4*
Gunboats ... ..	2*
Captain, H.M.S. “Excellent” ... ..	75
Captain (G), R.N. Gunnery School, Chatham ... ..	6
Captain (G), H.M. Gunnery School, Devonport ... ..	25
G.O.C.R.M. ... ..	10
Ministry of Supply S.S.2.B (for D. of A., A.I. and S. of E., Shoeburyness) ... ..	2
R.N. College, Greenwich ... ..	2
Commandant, Military College of Science, Queen's Road, Penkhull, Stoke-on-Trent, Staffs. ... ..	2
I.N.O., Woolwich ... ..	1
Naval Staff Library, Admiralty ... ..	1
Loan Libraries ... ..	1
N.S.H.Q., Ottawa ... ..	10
Dutch Naval Liaison Officer, Fernley Hotel, Bath ... ..	2
B.A.D. (for U.S.N.) ... ..	2
Captain, H.M. Signal School, c/o G.P.O., London (for use of Radar operators) ... ..	6
H.M.S. “Valkyrie” (for use of Radar operators) ... ..	6
D.A., Malta ... ..	1
C.O., H.M.S. “Queen Charlotte”, A/A Gunnery School, Ainsdale-on Sea ... ..	12
C.O., Northern A/A Range, Scapa ... ..	6
C.O., A/A Range, Eastney ... ..	6
C.O., A/A Range, Barton's Point, Sheerness ... ..	6

\* Ships fitted and to be fitted with the 40 mm. Gun, Mark IV, on Twin, Mark IV, Mounting.

2. This book supersedes B.R. 812, copies of which should be disposed of in accordance with B.R. 1—Books of Reference and I.D. Catalogue—when copies of the new edition are received.

(A.F.O. 2898/43 is cancelled.)

**3463.—B.R.1032 (Restricted)—Gun Sighting Manual for Fixed and Free Guns of Naval Aircraft**

(A.W.D. 203/44.—29 Jun. 1944.)

The above-mentioned book is now in the press and copies will be issued when available, without demand, by the Superintending Naval Store Officer, R.N. Store Depot, 307, Elveden Road, Park Royal, London, N.W.10, in accordance with the following establishment:—

C.-in-C., H.F. ... ..	1 copy
C.-in-C., Mediterranean ... ..	1 copy
C.-in-C., E.F. ... ..	1 copy
A.C.O.S. ... ..	1 copy
F.O.C.T. ... ..	2 copies
F.O.N.A.S. ... ..	2 copies
Com., N.A.S. (N) ... ..	2 copies
R.A.N.A.S., I.O. ... ..	2 copies
R.A.A.E.F. ... ..	2 copies
R.A.E.C.E.F. ... ..	2 copies
Com., N.A.S.E.F. ... ..	2 copies
B.A.D., Washington ... ..	2 copies
S.A.T., Washington ... ..	6 copies
Fleet and Light Fleet Carriers ... ..	3 copies
Escort Carriers ... ..	2 copies
A.G.Os. School (H.M.S. "Excellent") ... ..	12 copies
Fighter Schools ... ..	20 copies
T.B.R. Schools ... ..	15 copies
T.B.R. N.O.T.U.s. ... ..	15 copies
School of Air Combat ... ..	20 copies
Air Gunners and Air Firing School ... ..	30 copies
Observers' Schools ... ..	30 copies
Large Naval Air Stations (not covered by the above) ... ..	4 copies
Small Naval Air Stations (not covered by the above) ... ..	2 copies
1st Line Squadrons (twelve aircraft) ... ..	2 copies
1st Line Squadrons (less than 12 aircraft) ... ..	1 copy
794 Squadron ... ..	2 copies
787 Squadron ... ..	1 copy
784 Squadron ... ..	2 copies
746 Squadron ... ..	1 copy
738 Squadron ... ..	2 copies
732 Squadron ... ..	2 copies

2. This book will supersede C.B.4260R, all copies of which are to be destroyed and destruction certificates rendered.

**3464.—Form 0.6—Ammunition Labels—Additions**

(A.S./Sta. 14353/44.—29 Jun. 1944.)

Serial No.	Description	Where used	Page in Form 0.6	Sta. No.
N.913	Fuzes, Bomb, Hydrostatic, No. 1. (Instruction label.)	On top of fuze cap.	26	14353/44

2. Labels should be demanded as necessary from Naval Armament Supply Officer, Finchfield House, Compton, Wolverhampton.

**3465.—Forms S.1043 and S.1044—Clearance of Advances of Pay**

(D.N.A. 17553/43.—29 Jun. 1944.)

Form S.1043 has been introduced to facilitate clearance in bases, depots, etc., of advances of pay made in transports, etc. It is not intended that it shall be used to replace the present procedure of using forms S.1039 or nominal transfer lists, but it may be used for any purpose for which it is suitable.

2. Form S.1044 has also been introduced for similar use in respect of advances of pay notified by *military* hospitals.

3. The forms are printed on thin paper suitable for typing or indelible pencil, and may be used in duplicate or triplicate according to local needs.

4. Supplies of the forms should be demanded from the R.N. Store Depot, Park Royal, London, N.W.10.

**3466.—Aircraft Recognition Multilith Photographs, S.1700 Series**

(G.D. 0474/44.—29 Jun. 1944.)

With reference to A.F.Os. 1149/44 and 2690/44, the list of aircraft to be included in the Pacific Series has now been revised and is set out below. The stock of photographs issued in accordance with A.F.O. 1149/44 has been exhausted and these aircraft have now been given new numbers in the revised series. Three thousand copies of Nos. 20, 21, 22, 23, 24, 25 and 26, announced in A.F.O. 2690/44, are now in process of being issued on the distribution list given therein. Three thousand copies of Nos. 51, 52, 53, 54, 56, 57, 59, 60, 61, 66, 67, 68, 70, 71, 73, 79 are being printed and will be distributed through the Naval Store Officer, Elveden Road, Park Royal, London, on the same distribution list as soon as possible.

Number	Aircraft	Number	Aircraft	Number	Aircraft
S.1700 (20)	Zeke	S.1700 (38)	Jill	S.1700 (65)	Kingcobra
S.1700 (21)	Hamp	S.1700 (39)	Liz	S.1700 (66)	Liberator
S.1700 (22)	Rufe	S.1700 (40)	Jake	S.1700 (67)	Lightning
S.1700 (23)	Kate	S.1700 (41)	Judy	S.1700 (68)	Marauder
S.1700 (24)	Val	S.1700 (51)	Avenger	S.1700 (69)	Mariner
S.1700 (25)	Oscar	S.1700 (52)	Barracuda	S.1700 (70)	Mitchell
S.1700 (26)	Pete	S.1700 (53)	Beaufighter	S.1700 (71)	Mosquito
S.1700 (27)	Betty	S.1700 (54)	Boston	S.1700 (72)	Mustang III
S.1700 (28)	Lily	S.1700 (55)	Catalina	S.1700 (73)	Spitfire IX
S.1700 (29)	Helen	S.1700 (56)	Corsair	S.1700 (74)	Spitfire XII
S.1700 (30)	Sally	S.1700 (57)	Dakota	S.1700 (75)	Spitfire XXI
S.1700 (31)	Nell	S.1700 (58)	Dauntless	S.1700 (76)	Sunderland
S.1700 (32)	Nick	S.1700 (59)	Firefly	S.1700 (77)	Superfortress
S.1700 (33)	Dinah	S.1700 (60)	Fortress	S.1700 (78)	Tempest II
S.1700 (34)	Tojo	S.1700 (61)	Helleat	S.1700 (79)	Thunderbolt
S.1700 (35)	Tony	S.1700 (62)	Helldiver	S.1700 (80)	Ventura
S.1700 (36)	Mavis	S.1700 (63)	Hurricane	S.1700 (81)	Warhawk
S.1700 (37)	Emily	S.1700 (64)	Invader	S.1700 (82)	Wellington
				S.1700 (83)	Wildcat

(A.F.Os. 1149/44 and 2690/44.)

**3467.—Pilot's Notes for Naval Aircraft (Increased Allowances)—A.P. (N) 1**

(N.S. Air 1936/44.—29 Jun. 1944.)

The undermentioned A.P. (N) 1 allowances of Pilot's Notes will in future apply to *all types* of Naval aircraft.

		Copies	
A.P. (N) 1	Col. 3 ... ..	6	
	Col. 5 ... ..	3 (e)	
	Col. 6 ... ..	3 (e)	
	Col. 7 ... ..	3 (e)	
	Col. 9 ... ..	6	
	Col. 10 ... ..	12	
	Col. 11 ... ..	12	
	Col. 12 ... ..	8	
	Col. 13 ... ..	3 (e)	

(e) One additional copy for each aircraft allotted.



3473.—Prisoners of War and Civilian Internees in the Far East—Addressing of Correspondence

(N.L. 5597/43.—29 Jun. 1944.)

The Postmaster-General has recently made the following announcement regarding the method of addressing letters for prisoners of war and civilian internees definitely known to be in Japanese hands but whose camp address is not yet known.

2. Correspondence for such prisoners of war in any country in the Far East, including Japan, and for such civilian internees in any country in the Far East, except Japan proper, should be addressed—

c/o Huryojohokyoku, Tokyo, Japan.

Correspondence for civilian internees in Japan proper whose camp address is not known should be addressed—

c/o Keihokyoku Naimusho, Tokyo, Japan.

These addresses have the following meaning—

HURYOJOHOKYOKU—Prisoner of War Information Bureau.

KEIHOKYOKU NAIMUSHO—Police Affairs Bureau, Ministry of Home Affairs.

3. In neither case should the address c/o Japanese Red Cross be used in future. This address should be used only if it is not definitely known that the addressee is in Japanese hands.

4. Correspondence for prisoners of war and civilian internees in the Far East whose camp address is known should continue, as hitherto, to be addressed directly to the camps.

(A.F.O. 3806/43.)

Section 6.—SHORE ESTABLISHMENTS

3474.—Civil Servants Employed in Operational Areas—Compensation for Injury

(C.E. 9391/44.—29 Jun. 1944.)

Consideration has been given to the question of providing special injury compensation for Civil Servants who are selected by their departments for duty abroad in operational areas where there is exceptional risk of injury from enemy action.

2. It has been decided to frame a Warrant under Section 1 of the Superannuation Act, 1887, which will authorize compensation for such injuries for both established and unestablished Civil Servants, whether they were pre-war entrants into the Civil Service or entered the Civil Service since the outbreak of war, at the rates provided by Scale I of the Injury Warrant No. 1, 1935, where more favourable than the Personal Injuries (Civilians) Scheme. These rates are at present applicable only to established Civil Servants in certain dangerous occupations.

3. It may here be mentioned that the rate of widow's pension under Scale I is shortly to be raised from 10/60ths to 12/60ths of pay and emoluments at the date of the injury.

4. The special compensation will apply only to injuries sustained from enemy action in an operational area abroad which is prescribed by the Treasury for the purpose and during the period for which the area remains so prescribed. In the very special circumstances envisaged Civil Servants in a prescribed area will be regarded as being on duty, as regards eligibility for this special compensation, all the time they are in a prescribed area, whether they are actually working or not.

5. Areas to be prescribed will be decided by the Treasury from time to time, as also will be the date from which any prescribed area will cease to be prescribed for the reason that it no longer involves exceptional risk. The areas prescribed will be such as to cover journeys to the station abroad if such journeys are held to involve exposure to exceptional risk from enemy action.

6. The following areas may be regarded as prescribed areas until further notice:—

(i) The North Sea and the English Channel (outside British territorial waters), the Bay of Biscay and the countries bordering on all these (with the exception of Spain),

(ii) Murmansk,

(iii) Italy (north of Naples).

7. Announcements of other areas which are to be prescribed will be made from time to time.

8. In the case of individuals who are serving in the Civil Service without pay, the Treasury will be prepared to grant compensation on the basis stated above, the calculation being made upon the notional salaries of the posts occupied by such individuals as agreed by the department concerned and the Treasury. In these cases, as the grants would be extra statutory, annual allowances would generally be replaced by lump sum equivalents.

3475.—Pharmacists—Payment for Extra Attendance

(C.E. 4986/44.—29 Jun. 1944.)

As a temporary war-time measure, Pharmacists (both temporary and permanent) employed in Naval Establishments at home and abroad may be paid on a weekly basis, for hours worked in excess of 46 a week, inclusive of meal times, at a fixed rate of 3s. 3d. an hour. This arrangement will apply as from the week commencing 26th March, 1944, payments under A.F.O. 1319/42 having been discontinued as from 25th March, 1944.

2. At establishments abroad the amount payable under the above conditions will be increased by the appropriate local percentage increase authorized for overtime payments to staff sent out from the United Kingdom. The scheme does not apply to locally entered staff abroad.

3. Actual payments for extra attendance on the above-mentioned basis should be arranged in accordance with the provisions of A.F.O. 1328/44 for payment of overtime to non-industrial staff generally.

4. This Order does not apply to Senior Pharmacists.

(A.F.Os. 3952/40, 4455/40, 2331/41 and 1328/44.)

(A.F.O. 1319/42 is cancelled.)

### 3476.—Foremen and Inspectors of Dockyard Branches and Trades and Comparable Grades—Grant of War Allowances

(C.E. 4928/44.—29 Jun. 1944.)

In view of the further disturbance which has occurred in the earnings relativities of certain supervisory technical officers and the staffs in their charge, approval is given for allowances as shown below to be paid, with effect from the 1st January, 1944, to all officers at home and abroad in the grades concerned, except those employed in the Overseeing Service:—

*Allowance at rate of £60 per annum*

Foremen of Branches and Trades on the salary scales of £380 × £18 — £540 and £380 × £18 — £480.

Foreman of Factory (ex mechanic), Naval Ordnance Inspection Department.

Foreman of Factory in Armament Supply Department Establishments.

Foreman of Fitters, Torpedo Depots.

Torpedo Foreman, R.N. Torpedo Factory, Greenock.

General Foreman of Works.

Senior Foreman of Works.

Inspectors of Dockyard Trades on the scale £270 × £12 — £350.

Assistant Foreman of Factory (ex mechanic), and Assistant Foreman of Joiners, Naval Ordnance Inspection Department.

Assistant Foreman of Factory in Armament Supply Department Establishments.

Inspectors of Fitters, Torpedo Depots.

Torpedo Assistant Foreman, R.N. Torpedo Factory, Greenock.

Assistant Foreman of Patternmakers, R.N. Torpedo Factory, Greenock.

Assistant Foreman of Coppersmiths, R.N. Torpedo Factory, Greenock.

Assistant Foreman of Moulders, R.N. Torpedo Factory, Greenock.

Foreman of Works.

*Allowance at rate of £50 per annum*

Foremen of Dockyard Trades on the scale £320 × £12 — £380.

Foreman of Factory (non-mechanic), Naval Ordnance Inspection Department.

Inspectors of Dockyard Trades on the scale £230 × £12 — £305.

Assistant Foreman of Factory (non-mechanic), Naval Ordnance Inspection Department.

2. In the case of the Inspectors and Foremen of Works and other comparable grades, these allowances are in addition to the normal salary scales. The option of flat rates of £330 a year and £285 a year which has hitherto been available to certain officers holding acting appointments in these grades is withdrawn. Officers at present in receipt of those optional flat rates are to be assimilated to the normal salary scales of their grades, with effect from the 1st of January, 1944, the period of their service on flat rates being counted for assessing their points of entry into, and their incremental dates on, salary scales.

3. The allowances payable to Foremen of Trades, Foremen in the Armament Supply and Naval Ordnance Inspection Departments, General Foremen of Works and Senior Foremen of Works are subject to the maxima of the salary scales not being exceeded.

4. These arrangements are intended to be a purely wartime measure only.

(A.F.Os. 1474/42 and 3180/42 are cancelled.)

### 3477.—Furniture, etc., Taken Over in Requisitioned Premises

(C.E.-in-C. 5002/44/40a.—29 Jun. 1944.)

The references to the Chief Surveyor of Lands, Bath, in paragraphs 6, 7, 8 and 10 of A.F.O. 649/44, should in future be read as "the appropriate local Surveyor of Lands as indicated in section IV of A.F.O. 2153/44".

(A.F.Os. 649/44 and 2153/44.)

### 3478.—Merchant Shipbuilding and Repairs—Regional Organization

(M.S. 684/44.—29 Jun. 1944.)

This Order consolidates and brings up to date the information previously promulgated in relation to the Merchant Shipbuilding and Repairs Regional Organization.

2. *Regional Directors.*—The Regional Directors, appointed to be the representatives of the Controller of Merchant Shipbuilding and Repairs in the principal merchant shipbuilding and repairing districts, carry out the following duties:—

(i) To represent the Controller of Merchant Shipbuilding and Repairs in their respective areas.

(ii) To keep in touch with firms engaged on merchant shipbuilding, marine engineering and repairs, with a view to co-ordinating their efforts.

(iii) To supervise generally the local operations carried out by the Departments of the Director of Merchant Shipbuilding and the Director of Merchant Ship repairs.

The following are the names and offices of the Regional Directors and (where appointed) Deputy Regional Directors:—

(i) *West of Scotland and Northern Ireland*—

Regional Director ... .. G. S. Cromar, Esq., O.B.E.,  
Admiralty Offices,  
St. Enoch Hotel,  
Glasgow, C.1.  
Telephone : Glasgow Central 8700

(ii) *East of Scotland*—

Regional Director ... .. Henry Main, Esq., C.B.E.,  
c/o Caledon Shipbuilding & Engi-  
neering Co., Ltd., Dundee.  
Telephone : Dundee 81754

(iii) *North-East of England*—

Regional Director ... .. Sir Summers Hunter.  
Deputy Regional Director G. E. Jenkins, Esq.,  
(Repairs). Admiralty Offices,  
Central Exchange Hotel,  
Newcastle-upon-Tyne, 1.  
Telephone : Newcastle-upon-Tyne 25111

(iv) *West of England*—

Regional Director ... .. Sir Llewellyn Soulsby.  
Deputy Regional Director F. E. S. Beavan, Esq.,  
(Bristol Channel area). c/o Mount Stuart Dry Docks, Ltd.,  
Cardiff.  
Telephone : Cardiff 5103

Deputy Regional Director W. L. Robinson, Esq.,  
(North-West of England Admiralty Offices,  
Area). Royal Liver Buildings,  
Liverpool.  
Telephone : Liverpool Central 8060

3. *Merchant Ship Repair Licensing Officers.*—The issue of licences on behalf of the Admiralty for the repair of merchant ships is carried out by these officers at the following ports :—

Aberdeen, Barrow, Barry, Belfast, Bristol, Cardiff, Dundee, Falmouth, Fleetwood, Glasgow, Gt. Yarmouth, Greenock, Grimsby, Hull, Leith, Liverpool, London, Manchester, Middlesbrough, Milford Haven, Newcastle-upon-Tyne, Newport (Mon.), Oban, Plymouth, Southampton, Sunderland, Swansea.

4. *Merchant Ship Repair Liaison Officers.*—Merchant Ship Repair Liaison Officers have been appointed in the following ports :—

Aberdeen, Belfast, Bristol, Cardiff, Falmouth, Hull, Leith, Liverpool, London, Manchester, Plymouth, Southampton.

These officers are representatives of the ship repairing industry in their respective ports. They have the duty of advising, when necessary, the Flag Officer-in-Charge, and the Repair Licensing Officers, regarding the allocation of repair facilities. They are responsible to the Regional Directors, in areas where these have been appointed, and in other areas to the Admiralty (Director of Merchant Ship Repairs).

5. The Classification Societies (Lloyds and the British Corporation) carry out the following duties :—

- (1) Supervise new construction both as to scantlings and specifications.
- (2) Certify progress for the purpose of instalment claims on all merchant vessels (other than certain tankers) building for Government account.
- (3) Supervise the work carried out under licences granted by the Repair Licensing Officers.

(A.F.O. 3238/43 is cancelled.)

#### 3479.—Scottish Supplementary Medical Service—Co-operation with Admiralty Industrial Establishments in Scotland

(L.15532/42.—29 Jun. 1944.)

The Department of Health for Scotland has established a special scheme for the early detection and prevention of disease, particularly amongst young workers, with a view to avoiding breakdowns and excessive sickness absence. The scheme applies in all industrial areas of Scotland and to all insured workers, irrespective of age, and is known as the Scottish Supplementary Medical Service.

2. The facilities provided by the Service are as follows :—

- (i) Insured workers who are considered by their general practitioner to be in a debilitated state, or who present symptoms suggesting the need of a more expert diagnosis, are referred to a medical officer of the Department of Health, who makes a preliminary full examination of the case, with the aid of a specialist if thought desirable, and sends a full report to the worker's own doctor.
- (ii) Where necessary, the medical officer of the Department of Health arranges for the admission of the patient to a hospital for observation and full clinical investigation, or, where a period of rest and building up is required, to a convalescent hospital. A further report in those cases is sent to the doctor on the patient's discharge from hospital.
- (iii) In cases where, on medical grounds, it is found that a change of work would be beneficial, the circumstances are reported to the Regional Office of the Ministry of Labour and National Service for any necessary action.
- (iv) All the benefits of the Scheme are provided free of cost to the patient, and travelling expenses to and from the place of examination or hospital are paid by the Department of Health for Scotland.

3. It is desirable that Admiralty employees who may need them should participate fully in the benefits of the scheme. Officers-in-Charge are therefore authorized to grant leave of absence in accordance with normal regulations, to enable insured persons to undergo medical examination or to be admitted to hospital under the scheme (*vide* paragraph 2 (i) and (ii) above).

4. It has been found that in many of the cases dealt with under the scheme, factors such as those of uncongenial or unsuitable work, excessive hours, transport difficulties, etc., which might have been avoided by suitable welfare measures, have been responsible for the illness or debilitation. An endeavour will be made to inform the appropriate Admiralty medical officers or surgeons and agents of any cases of Admiralty employees dealt with under the scheme, where work factors appear to be involved and there may be a case for action on welfare lines. If a change of work is suggested, efforts should be made, so far as the exigencies of the public service allow, to give effect to any recommendation, and medical officers or surgeons and agents should consult the Head of the Establishment in any such case. If it is not possible to effect a change of employment within the establishment, the Ministry of Labour and National Service will be approached in accordance with the normal procedure under the scheme (*see* 2 (iii) above).

5. As stated in paragraph 1, the facilities of the scheme are available in industrial areas of the country. The following counties are, however, meantime excluded, and workers in establishments in these areas will therefore not come under its operation, viz. :—

Argyll (except Cowal district), Caithness, Inverness, Orkney, Ross and Cromarty, Sutherland and Zetland.

#### 3480.—Travel Between the United Kingdom and the Continent—Individuals and Small Parties

(N.L. 9542/44.—29 Jun. 1944.)

Attention is drawn to-A.F.O. 3388/44 published in Section II of this issue.

(A.F.O. 3388/44.)

