

HPB

A.F.Os. 5378—5507/44

HEAD OF "P" BRANCH  
22 DEC 1944

(See A.F.O. Diagram Issue No. 42/44)

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# ADMIRALTY FLEET ORDERS

ADMIRALTY, S.W.1,  
12th October, 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. 3758/44), Superintendents or Officers in Charge of H.M. Naval Establishments, and Admiralty Overseers concerned.*

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

HEAD OF "P" BRANCH

## ADMIRALTY FLEET ORDERS

- | No.   | Subject.  |
|-------|---|
| 5376. | Reception and Disposal of Prisoners of War Repatriated from Germany. <i>Issued separately on 5th October, 1944.</i>   |
| 5377. | Instructional Film Training—Provision of Cinema Projectors, Films and Associated Apparatus. <i>Issued separately.</i> |

12th October, 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.)

5378. Ballistic Data of Navigational Seamarkers for Use by Naval Aircraft.  
 5379. Resident Naval Officers in the Aberdeen Sub-Command—Abolition of.  
 5380. Speed of H.M. Ships with Cylindrical Boilers—Necessity for Care in Making Large Changes.  
 5381. Enemy Aircraft Shot Down or Damaged by Ship's Gunfire or Naval Aircraft.  
 5382. *Cancelled.*

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

5383. Honours and Awards—"London Gazette" Supplement of 3rd October, 1944.  
 5384. Honours and Awards—United States Navy and Naval Reserve.  
 5385. Honours and Awards—United States Naval Reserve.  
 5386. Honours and Awards—French Navy.  
 5387. Honours and Awards—Royal Hellenic Navy.  
 5388. Meritorious War Service—Grant of Additional Seniority.  
 5389. Officers Promoted from the Lower Deck—Commencing Date of Full Pay.  
 5390. Royal Marines—Promotion of Hostilities Only Ranks.  
 5391. Royal Marines—Disposal of Uniform Effects and Provision of Plain Clothes on Discharge or Indefinite Release from the Service.  
 5392. Examination for Warrant Aircraft Officer—Future Dates.  
 5393. Gunners' Mates and R.M. Gunnery Instructors—Length of Qualifying Courses.  
 5394. Radar Ratings.  
 5395. Volunteers for Service in Submarines—Procedure.  
 5396. Uniform for Acting Regulating Petty Officers.  
 5397. Civilian Clothing for Naval Ratings Discharged or Released from the Service.  
 5398. W.R.N.S.—Married Officers and Ratings—Release of.  
 5399. W.R.N.S.—Advancement to Petty Officer Cinema Operators  
 5400. W.R.N.S.—Register for Relief Work Abroad.  
 5401. W.R.N.S. Stewards and Cooks—Description.  
 5402. W.R.N.S.—Plain Clothes Gratuity.  
 5403. Shorthand Typist—Increases in Numbers and Revised Qualifications.  
 5404. Mersey Tunnel—Government Warrants.  
 5405. Loss of Effects—War Risks Insurance—Revised Premiums.  
 5406. Admiralty Surgeons and Agents.  
 5407. Yellow Fever—Protective Inoculation and Vaccination for Personnel Proceeding Abroad.  
 5408. Seventh Victory Loan—Canada—Instructions for Canadian Personnel.  
 5409. War Record Films Produced by Special Services of the U.S. Forces.  
 5410. Slide Strips—use of in Still Projectors.  
 5411. Correspondence Courses—City and Guilds of London Institute—Electrical Engineering Practice.  
 5411a. Broadcast Talk by Admiral Sir James Somerville, G.C.B., K.B.E., D.S.O. (*Notice Boards only.*)  
 5412. R.N. Air Stations, Nairobi and Tanga—Canteen Funds—Disposal. (*Notice Boards only.*)

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

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

5413. Aircraft—Guns—Hispano, 20 mm.—Rods, Cleaning Chamber.  
 5414. Aircraft—Guns—Machine—Browning, 0.50 in. Control Trigger, Electric.  
 5415. Ammunition—Fuzes, Primers and Tubes—Primers No. 26, Lots 70 and 78—R.L. Manufacture Required for Examination.  
 5416. Ammunition—Fuzes, Primers and Tubes—Primers, Percussion, No. 26—R.L. Manufacture, Lots 79 and 80, Filled—B.R.10/41—REPORTS.  
 5417. Ammunition—Miscellaneous A.A.D. Weapons—Apparatus A.D., Type D (P.A.C.) and Snowflake Rockets—Weathering.

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

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

5418. Ammunition—20 mm. Oerlikon—Clearing Charges—One-Round Magazine, for Use with—Introduction.  
 5419. Ammunition—Mortars—Bombs, 10 lb., H.E., for B.L., 4-in. Mortars, Mark I.  
 5420. Anti-Ship Fire Control—Director Control Towers—Fitting of Weights to Balance Cross Levelling Units—As. and As.  
 5421. Guns—Q.F., 2-Pdr., Mark VIII W—Modification to Prevent Leakage.  
 5422. Guns—20 mm., Oerlikon—Barrel Springs, Mark II, and Barrel Spring Casing, Mark III—Introduction and Assembly.  
 5423. Guns—20 mm., Oerlikon—Shoulder Rests, Mark III—Restricted Use.  
 5424. Gun Mountings—Quotation of Full Particulars in Demands on Defect Lists for Mountings or Spares.  
 5425. Gun Mountings—4-in., Twin, Mark XIX—Sight and Elevation Receiver Drive Pinions.  
 5426. Rangefinders—Combined Air-Disturbing, Desiccating and Window—Cleaning Units, Types Q.G.—Marks I, II and IV—Supply of Lissapol Powder.  
 5427. Small Arms—Pistols, Revolver, 0.38 in.—Personal Issue to all Aircrews of First Line Operational Squadrons.  
 5428. Small Arms—Allowances for Aircraft Carriers.  
 5429. Training—Instructional Appliances—Battle Teachers—Improved Thunderflashes and Chinese Crackers.  
 5430. Training—Instructional Appliances—Cinema Laying and Training Teacher.

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

5431. Torpedoes—22.4 in., U.S.A.—Exercise Heads, Mark 26—Air Releasing Mechanism, Mark 3.  
 5432. Torpedo Stores—Allowances.  
 5433. Torpedo Stores—Boxes, Tools and Spare Gear for Recorders D and R, Mark III—Additions to Contents.  
 5434. Automatic Emergency Lanterns, American Type.  
 5435. Dorman, 8 V.R.M., Engines Fitted in 30-ft. Fast Motor Boats—Modification to Heater Plug Circuits.  
 5436. Safe Underwater Range for Divers in Flexible Self-contained Suits.

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

5437. American Magnetic Compasses—Replacement of Defective Instruments.  
 5438. *Cancelled.*  
 5439. Sextants—Allowance.

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

5440. Boiler Tubes, etc.  
 5441. Boiler Tube Cleaning Apparatus—Power-driven—S.W. Brushes for.  
 5442. A-Bracket Lubrication—Modification to Oil Supply Pipes and Cover Plates.  
 5443. Hydrogen Cylinders—Increased Charging Pressure.  
 5444. Refrigerators of U.S. Manufacture—Use of Methyl Chloride in.  
 5445. Steam Reciprocating Electric Generating Engines—Rowan Type Piston Rings—As. and As.

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

5446. Communication Wavemeter Outfits—Allowances.  
 5447. General Requirements for Fitting Internal Signal Communications.  
 5448. Types CXFR and TDY—Failure of Magnetron, Type ZP579.  
 5449. Radar, Type 291—Aerial Outfit ATR—Defect in Wiring.  
 5450. Radar, Types 271/2/3/X/P—Modulator—Failure of Pattern 5001 Condenser.  
 5451. Radar, Types 286P and 291—Aerial Outfits ATQ/R—Retrospective Fitting of "M" Type Transmission to Pattern W.2429A Coupling Box.

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

5452. Incorrect Use of Depth Charge Firing Buzzer.

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

5453. Aircraft—Helmets, Tropical, Type D, Wired, Naval Pattern—Introduction.  
 5454. Aircraft Radio—AYF Radio Altimeters—Restriction of Range.  
 5455. Hellcat II A.S.I. Readings.

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

5456. Outer Bottom Planking—Scoring of.  
 5457. Depth Charge Rails and Minesweeping Gear and Davits—Revised Layout—As. and As.  
 5458. Upper Deck—Reinforcement of—As. and As.  
 5459. Living Conditions—Modifications to Effect Improvement—As. and As.  
 5460. Air-driven Portable Pumps and Fans—Supply.  
 5461. Naval Store Accounting Procedure.  
 5462. Bomb Carriers, Pattern 5575—Allowances.  
 5463. Chart Table in Chart House—New Design—As. and As.  
 5464. History Sheet of Moorings—Forms D.233 and D.233a—Modification.  
 5465. Photographic Reproduction of Plans, Drawings, etc.  
 5466. Off-Grade Pig-iron for Ballasting of Ships—Economy in Use of.  
 5467. Amplifier, Pattern 13316B—Spares—Introduction.  
 5468. Aircraft—Refuelling Funnel, Type "B"—Ref. 1A/4027.  
 5469. Aircraft Carriers—Mobile Cranes and Vehicles—REPORTS.  
 5470. Aircraft Carriers—Tray for Embarking Aircraft Stores.  
 5471. Radio Interference Suppression Coil (Toroidal Dust Core)—Introduction  
 5472. Radio Interference Suppression—Use of Condensers, Patterns 19436 and 19436A, for Requirements of Patterns 19437 and 19437A.  
 5473. Rangefinders, 80 c.m. or 1 m. Base—Allowance.  
 5474. Stocks and Dies—Introduction of New Patterns.

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

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

5475. Barrels for Mess Gear—Return in a Complete State.  
 5476. Dehydrated Soups.  
 5477. Edible Oils—Return of Empty Drums.  
 5478. Margarine—Collection and Return of Empty Containers.  
 5479. W.R.N.S. Officers and Nursing Personnel—Loan Clothing.  
 5480. Bristol Aero-Engines—Establishment of Tools—Amendment.  
 5481. Supplies to United States Warships and Armed Forces—Lend-Lease Stores Returned.

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

5482. A.M.S.Is.  
 5483. Amendments to Books.  
 5484. Aircraft—Issue of O.U.5225 and O.U.5225A.  
 5485. Air Publications Distributed during May, 1944, and July, 1944.  
 5486. Air Publications—Distribution of Amendment Lists and Leaflets during August, 1944.  
 5487. Air Publications—Distribution of Amendment Lists and Leaflets during August, 1944, from the Naval Store Depot, Belfast.  
 5488. Air Ministry Confidential Documents—Down Grading.  
 5489. B.R.141—R.M. Clothing, Appointments, etc.—Issuing Prices, etc.—Reprint.  
 5490. B.R.973—Manual of Gunnery (Vol. III) for His Majesty's Fleet—Exhaustion of Stock.  
 5491. B.R.980(J)—Additional Pages to R.Ts. 342, 348, 408 and 408A, for B.L., 6-in. Guns, Marks XXII and XXIII—Dated July, 1944—Issue.  
 5492. B.R.980(K)—Revised and Additional Pages to Range Tables 373A and 373B, for Q.F., 4-in., Mark XVI\* Guns—Issue.  
 5493. Forms O.460 and O.460A—Introduction.  
 5494. Supersession of Forms S.1512A and B, and R.P.S14A and B, by S.1512/R.P.S.14C.  
 5495. O.U.5292—Block Sketch Cards of British War Vessels—Tracings of Silhouettes.  
 5496. H.M.S. "Birmingham" and Naval Cashier, Birmingham—Addressing of Correspondence.  
 5497. National Health and Pensions Insurance—Pamphlet D.  
 5498. Photographic Catalogue of American Aeronautical Material, Spare Parts and Equipment.  
 5499. Supply Position of Airframe and Engine Publications.

## SECTION 6.—SHORE ESTABLISHMENTS

5500. Temporary Clerks—Recruitment Pay and Conditions of Service.  
 5501. Non-Industrial Staffs—Employment and Conditions of Service of Juveniles.  
 5502. Fire-Fighting Training—Precautions.  
 5503. Machine Tools Imported from U.S.A. for Naval Establishments at Home—Revised Payment Arrangements.  
 5504. Workmen Sleeping in Admiralty Establishments for Fire, etc., Duties—Revised Allowance.  
 5505. Workpeople Released to Take Up Other Work of National Importance during the War or Discharged on Redundancy.  
 5506. Photographic Reproduction of Plans, Drawings, etc.  
 5507. Mersey Tunnel—Government Warrants.

(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.

#### 5378.—Ballistic Data of Navigational Seamarkers for use by Naval Aircraft (A.W.D. 793/44.—12 Oct. 1944.)

The following tables show the time of fall from various heights at varying speeds, the trail angle and time intervals to be used when using the four-point method of wind finding with:—

- (i) Signal, Drift, Night, A.N., Mark V, Modification I.
- (ii) Smoke Float, Aircraft, No. 1, Mark IV.
- (iii) Sea Marker, Aluminium, Mark I.
- (iv) Sea Marker, Aluminium, Mark II.
- (v) Flame Float, Aircraft, Navigation, Mark I.
- (vi) Flame Float, Aircraft, Navigation, Mark II.

#### SIGNAL DRIFT, NIGHT A.N., MARK V, MOD. I Terminal Velocity—250 ft. per sec.

Height of Release (feet)	Interval after release of sea mark to start time measurement (secs.)										Time of fall of sea mark (secs.)										Trail Angle (Degrees)										
	Air speed (knots)										Air speed (knots)										Air speed (knots)										
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220
1,000	6.3	6.1	5.9	5.7	5.6	5.4	5.3	5.1	8.9	9.0	9.1	9.1	9.2	9.3	9.3	9.4	23.7	30.3	36.7	42.5	47.8	52.5	56.5	60.1							
2,000	8.0	7.7	7.5	7.2	7.0	6.7	6.5	6.3	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	24.8	30.7	36.5	40.9	46.7	50.9	54.7	57.9							
3,000	9.1	8.7	8.4	8.1	7.8	7.5	7.2	7.0	17.6	17.7	17.9	18.0	18.1	18.2	18.3	18.4	25.7	31.4	36.8	41.8	46.3	50.3	53.8	56.9							
4,000	9.7	9.3	9.0	8.6	8.3	8.0	7.7	7.5	21.5	21.6	21.8	21.9	22.0	22.1	22.2	22.3	26.4	31.9	37.1	41.8	46.1	50.0	53.4	56.3							
5,000	10.2	9.8	9.4	9.1	8.7	8.4	8.1	7.8	25.3	25.4	25.6	25.7	25.8	25.9	26.0	26.1	27.0	32.3	37.4	41.9	46.1	49.8	53.1	56.0							
6,000	10.6	10.2	9.8	9.4	9.1	8.7	8.4	8.1	29.0	29.1	29.3	29.4	29.5	29.6	29.7	29.8	27.3	32.6	37.5	42.0	46.0	49.6	52.8	55.7							
7,000	10.9	10.5	10.1	9.7	9.3	9.0	8.8	8.4	32.6	32.8	32.9	33.0	33.2	33.3	33.4	33.5	27.6	32.8	37.6	42.0	46.0	49.5	52.5	55.4							
8,000	11.2	10.8	10.3	10.0	9.6	9.3	8.9	8.6	36.2	36.3	36.5	36.6	36.7	36.8	37.0	37.1	27.8	32.9	37.7	42.0	45.9	49.3	52.4	55.2							
9,000	11.5	11.0	10.6	10.2	9.8	9.5	9.2	8.9	39.7	39.8	40.0	40.1	40.2	40.4	40.5	40.6	27.9	33.0	37.7	41.9	45.8	49.2	52.3	55.0							
10,000	11.7	11.3	10.8	10.4	10.1	9.7	9.4	9.1	43.2	43.3	43.4	43.6	43.7	43.8	43.9	44.0	28.0	33.0	37.6	41.8	45.6	49.0	52.1	54.8							
11,000	12.0	11.5	11.1	10.7	10.3	9.9	9.6	9.3	46.6	46.7	46.8	47.0	47.1	47.2	47.3	47.4	28.0	33.0	37.5	41.7	45.5	48.8	51.9	54.6							
12,000	12.2	11.7	11.3	10.9	10.5	10.2	9.8	9.5	49.9	50.1	50.2	50.3	50.5	50.6	50.7	50.8	27.9	32.9	37.4	41.6	45.3	48.7	51.7	54.3							

SMOKE FLOAT, AIRCRAFT, No. 1, MARK IV  
Terminal Velocity : 230 ft. per second

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Height of release (ft.)	Interval after release of sea mark to start time measurement (secs.)								Time of fall of sea mark (secs.)								Trail angle (degrees)							
	Air speed (knots)								Air speed (knots)								Air speed (knots)							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
1,000	6.1	5.8	5.6	5.5	5.3	5.1	5.0	4.8	9.1	9.2	9.2	9.3	9.4	9.5	9.5	9.6	26.9	33.8	40.3	46.1	51.2	55.7	59.4	62.7
2,000	7.6	7.3	7.0	6.7	6.5	6.3	6.0	5.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	27.9	34.2	40.0	45.3	50.0	54.0	57.5	60.5
3,000	8.5	8.1	7.8	7.5	7.2	6.9	6.7	6.4	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.0	28.8	34.8	40.3	45.2	49.5	53.4	56.7	59.6
4,000	9.0	8.6	8.3	7.9	7.6	7.3	7.1	6.8	22.5	22.6	22.7	22.8	23.0	23.1	23.2	23.2	29.5	35.2	40.5	45.2	49.4	53.0	56.2	59.0
5,000	9.4	9.0	8.6	8.3	7.9	7.6	7.4	7.1	26.5	26.7	26.8	26.9	27.1	27.2	27.3	27.4	30.0	35.6	40.7	45.2	49.3	52.8	55.9	58.6
6,000	9.7	9.3	8.9	8.6	8.2	7.9	7.6	7.4	30.5	30.7	30.8	30.9	31.1	31.2	31.3	31.4	30.3	35.8	40.8	45.2	49.1	52.6	55.7	58.3
7,000	10.0	9.6	9.2	8.8	8.5	8.1	7.9	7.6	34.5	34.6	34.8	34.9	35.0	35.1	35.2	35.3	30.5	35.9	40.8	45.2	49.0	52.4	55.4	58.1
8,000	10.3	9.8	9.4	9.0	8.7	8.3	8.0	7.8	38.3	38.5	38.6	38.8	38.9	39.0	39.1	39.2	30.7	36.0	40.8	45.1	48.9	52.3	55.2	57.9
9,000	10.5	10.0	9.6	9.2	8.9	8.5	8.2	8.0	42.2	42.3	42.4	42.6	42.7	42.8	42.9	43.0	30.7	36.0	40.8	45.0	48.8	52.1	55.0	57.6
10,000	10.7	10.2	9.8	9.4	9.1	8.7	8.4	8.1	45.9	46.1	46.2	46.3	46.4	46.5	46.7	46.8	30.7	36.0	40.7	44.9	48.6	51.9	54.8	57.4
11,000	10.9	10.5	10.0	9.6	9.3	8.9	8.6	8.3	49.6	49.7	49.9	50.0	50.1	50.2	50.4	50.5	30.7	35.9	40.6	44.7	48.5	51.7	54.6	57.2
12,000	11.1	10.7	10.2	9.8	9.5	9.1	8.8	8.5	53.2	53.4	53.5	53.6	53.8	53.9	54.0	54.1	30.6	35.8	40.4	44.6	48.3	51.5	54.4	57.0

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SEA MARKER, ALUMINIUM, MARK I  
Terminal Velocity : (Est.) 100 ft. per second

Height of Release (ft.)	Interval after release of sea mark to start time measurement (secs.)								Time of fall of sea mark (secs.)								Trail angle (degrees)							
	Air speed (knots)								Air speed (knots)								Air speed (knots)							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
1,000	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	12.7	12.7	12.8	12.9	12.9	13.0	13.0	13.0	58.6	63.8	67.6	70.6	72.9	74.8	76.3	77.5
2,000	3.1	2.8	2.6	2.5	2.3	2.2	2.1	2.0	22.4	22.5	22.6	22.6	22.7	22.7	22.8	22.8	58.5	63.4	67.0	69.9	72.1	73.9	75.3	76.7
3,000	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	32.0	32.1	32.2	33.3	32.3	32.4	32.4	32.4	58.4	63.1	66.7	69.5	71.8	73.6	75.1	76.3

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SEA MARKER, ALUMINIUM, MARK III  
Terminal Velocity : 480 ft. per second

Height of Release (ft.)	Interval after release of sea mark to start time measurement (secs.)								Time of fall of sea mark (secs.)								Trail angle (degrees)							
	Air speed (knots)								Air speed (knots)								Air speed (knots)							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
1,000	7.4	7.3	7.2	7.1	7.0	7.0	6.9	6.8	8.3	8.4	8.5	8.5	8.5	8.6	8.6	8.6	8.0	11.4	14.8	18.8	22.9	27.1	31.2	34.9
2,000	9.9	9.8	9.7	9.5	9.4	9.3	9.2	9.1	12.1	12.2	12.2	12.3	12.3	12.4	12.4	12.5	9.2	11.9	14.8	18.5	22.3	26.2	29.8	33.4
3,000	11.8	11.6	11.5	11.3	11.1	11.0	10.8	10.7	15.2	15.3	15.3	15.4	15.5	15.5	15.6	15.7	9.7	12.4	15.2	18.7	22.3	25.9	29.3	33.0
4,000	13.2	13.1	12.9	12.7	12.5	12.3	12.1	11.8	17.9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	10.3	13.0	15.8	19.1	22.6	26.1	29.6	33.0
5,000	14.5	14.3	14.0	13.7	13.5	13.3	13.1	12.9	20.5	20.5	20.6	20.7	20.8	20.9	21.0	21.1	10.6	13.3	16.2	19.5	22.8	26.1	29.5	32.7
6,000	15.5	15.2	15.0	14.8	14.5	14.2	14.0	13.7	22.8	22.9	23.1	23.2	23.3	23.3	23.4	23.5	10.9	13.6	16.4	19.6	22.9	26.2	29.5	32.6
7,000	16.4	16.2	15.9	15.6	15.4	15.1	14.8	14.5	25.1	25.2	25.4	25.5	25.6	25.7	25.8	25.9	11.2	13.9	16.8	20.0	23.1	26.3	29.4	32.5
8,000	17.3	16.9	16.6	16.3	16.0	15.7	15.5	15.2	27.2	27.4	27.5	27.6	27.7	27.8	27.9	28.0	11.3	14.2	17.0	20.2	23.3	26.4	29.5	32.5
9,000	18.0	17.7	17.3	17.0	16.7	16.4	16.1	15.7	29.4	29.5	29.7	29.8	29.9	30.0	30.1	30.2	11.7	14.5	17.3	20.4	23.4	26.5	29.5	32.5
10,000	18.6	18.3	17.9	17.6	17.3	17.0	16.7	16.3	31.4	31.5	31.8	31.9	32.0	32.1	32.2	32.3	11.9	14.6	17.6	20.6	23.5	26.6	29.6	32.5
11,000	19.2	18.9	18.4	18.1	17.8	17.5	17.2	16.8	33.4	33.5	33.7	33.8	33.9	34.0	34.2	34.3	12.1	14.9	17.8	20.8	23.7	26.6	29.6	32.5
12,000	19.8	19.5	19.1	18.7	18.4	18.1	17.7	17.3	35.4	35.5	35.7	35.8	35.9	36.1	36.2	36.3	12.3	15.1	18.0	20.9	23.8	26.7	29.6	32.4

FLAME FLOAT, AIRCRAFT, NAVIGATION, MARK I  
Terminal Velocity : (Est.) 200 ft. per Second

Height of Release (ft.)	Interval after release flame float to start time measurement (secs.)								Time of fall of flame float (secs.)								Trail angle (degrees)							
	Air speed (knots)								Air speed (knots)								Air speed (knots)							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
1,000	5.6	5.4	5.2	5.0	4.8	4.6	4.5	4.3	9.4	9.5	9.6	9.7	9.7	9.8	9.9	9.9	32.3	39.6	46.1	51.7	56.4	60.3	63.6	66.4
2,000	6.9	6.5	6.2	6.0	5.7	5.5	5.3	5.1	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	33.3	39.9	45.7	50.7	55.0	58.6	61.7	64.3
3,000	7.5	7.1	6.8	6.5	6.2	5.9	5.7	5.5	19.6	19.7	19.8	20.0	20.1	20.2	20.2	20.3	34.2	40.4	45.8	50.5	54.6	58.0	61.0	63.5

Height of Release (ft.)	Interval after release of sea mark to start time measurement (secs.)										Time of fall of sea mark (secs.)										Trail angle (degrees)									
	Air speed (knots)										Air speed (knots)										Air speed (knots)									
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240						
1,000	7.5	7.4	7.3	7.2	7.1	7.1	7.0	6.9	8.1	8.2	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.4	6.5	9.7	13.0	16.4	20.0	23.7	27.6	31.1				
2,000	10.2	10.1	10.0	9.8	9.7	9.6	9.5	9.4	11.8	11.9	11.9	12.0	12.0	12.0	12.1	12.1	12.2	12.2	7.6	10.1	12.8	16.0	18.3	22.7	26.1	29.5				
3,000	12.2	12.0	11.9	11.7	11.5	11.4	11.2	11.1	14.7	14.8	14.8	14.9	15.0	15.1	15.2	15.2	15.2	15.2	8.0	10.4	13.1	16.0	19.1	22.3	25.5	29.0				
4,000	13.7	13.6	13.4	13.2	13.0	12.8	12.6	12.4	17.3	17.4	17.4	17.5	17.6	17.7	17.8	17.9	17.9	17.9	8.5	10.9	13.5	16.3	19.3	22.4	25.6	28.8				
5,000	15.1	14.9	14.7	14.4	14.2	14.0	13.8	13.6	19.7	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.3	20.3	8.7	11.1	13.7	16.5	19.4	22.3	25.4	28.4				
6,000	16.3	16.0	15.8	15.6	15.3	15.0	14.8	14.6	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.5	22.5	22.5	8.9	11.3	13.8	16.5	19.4	22.3	25.3	28.2				
7,000	17.3	17.1	16.8	16.5	16.3	16.0	15.7	15.5	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.7	24.7	9.1	11.4	14.0	16.7	19.4	22.2	25.1	28.0				
8,000	18.3	17.9	17.7	17.4	17.1	16.8	16.6	16.3	25.9	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.7	26.7	9.1	11.6	14.1	16.8	19.5	22.2	25.1	27.9				
9,000	19.1	18.8	18.5	18.2	17.9	17.6	17.3	17.0	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.7	28.7	9.4	11.8	14.2	16.8	19.5	22.2	25.0	27.8				
10,000	19.9	19.6	19.2	18.9	18.6	18.3	18.0	17.7	29.8	29.9	30.1	30.2	30.3	30.4	30.5	30.6	30.6	30.6	9.5	11.8	14.3	16.9	19.5	22.2	24.9	27.6				
11,000	20.6	20.3	19.9	19.6	19.3	19.0	18.7	18.4	31.7	31.8	31.9	32.0	32.1	32.2	32.4	32.5	32.5	32.5	9.6	11.9	14.4	16.9	19.5	22.1	24.8	27.5				
12,000	21.3	21.0	20.7	20.3	20.0	19.7	19.3	19.0	33.5	33.6	33.7	33.8	33.9	34.1	34.2	34.3	34.3	34.3	9.7	12.0	14.4	16.9	19.5	22.1	24.7	27.3				

(A.F.O. 4986/44 is cancelled.)

**5379.—Resident Naval Officers in the Aberdeen Sub-Command—Abolition of**  
(M. 09921/44.—12 Oct. 1944.)

Approval has been given to the abolition of all the Resident Naval Officers in the Aberdeen Sub-Command. These are as follows:—

Lossiemouth  
Buckie  
Macduff  
Fraserburgh  
Peterhead  
Stonehaven.

2. The offices should be regarded as being closed down as from the 30th September, 1944.

**5380.—Speed of H.M. Ships with Cylindrical Boilers—Necessity for Care in Making Large Changes**

(H.M. Ships fitted with cylindrical boilers.)

(E.in-C/N.L. 9939/44.—12 Oct. 1944.)

Attention is drawn to the necessity for care in making large changes of speed in ships fitted with cylindrical boilers in order to avoid damage to boilers and/or collapse of furnaces due to the inherent lack of flexibility in boilers of this type.

2. Where such boilers are coal fired, the necessity for thickening or burning down the fires automatically restricts the rate at which changes of speed can be effected; even so, unskilful firing or excessive use of forced draught may lead to local overheating or cooling, which may impose severe strain on the boiler parts causing distortion of furnaces, leakage at tube ends or riveted seams and other defects.

3. The limitations referred to in paragraph 2 above do not obtain when oil firing is employed and it is particularly necessary to exercise care when increasing or decreasing the rate of fuel supply to the boilers to avoid exposing them to excessive strain.

4. A.F.O. 3574/40 contains instructions regarding the procedure to be observed when making large changes of speed in "Flower" Class corvettes fitted with cylindrical boilers.

These instructions should be observed in so far as they are applicable in all ships fitted with cylindrical boilers.

(A.F.O. 3574/40.)

**\*5381.—Enemy Aircraft Shot Down or Damaged by Ships' Gunfire or Naval Aircraft**

(G.D. 800/44.—12 Oct. 1944.)

Casualties to enemy aircraft by ships' gunfire are as follows from 12th April, 1940, to 30th September, 1944:—

	Confirmed	Probable	Damaged
*By H.M. ships ... ..	681	223	331
*By H.M. ships and merchant ships jointly ...	164	29	21
By merchant ships and fishing vessels ...	149	48	120
Last reported totals (31st August, 1944) ...	994	300	472
Increases ... ..	5	—	—

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

Confirmed	Probable	Damaged
<i>H.M. Ships</i>		
Nil	Nil	Nil
<i>H.M. Ships and Merchant Ships Jointly</i>		
H.M. escorts and merchant ships in convoy U.G.S. 48 (1).	Nil	Nil
<i>Merchant Ships and Fishing Vessels Jointly</i>		
S.S. "Regfos" (1)	Nil	Nil
S.S. "Fort Wellington" (1)		
S.S. "Odysseus" (1)		
S.S. "Carlton" (1)		

*Enemy Aircraft Shot Down by Naval Aircraft*

The results are as follows from the beginning of the war to 30th September, 1944 :—

	Confirmed	Probable	Damaged
Present totals ... ..	269	44	165
Last reported totals (31st August, 1944) ...	269	44	165
	—	—	—

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

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

(A.F.O. 4851/44 is cancelled.)

\*5382.—Cancelled.

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

\*5383.—Honours and Awards—"London Gazette" Supplement of 3rd October, 1944

(H. & A.—12 Oct. 1944.)

CENTRAL CHANCERY OF THE ORDERS OF KNIGHTHOOD,

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

3rd October, 1944.

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

*To be an Additional Officer of the Military Division of the said  
Most Excellent Order*

Temporary Acting Lieutenant-Commander Charles Gordon Staines, R.N.V.R.

For bravery, determination and skill in salvaging a cargo of bombs  
after an air attack.

*To be an Additional Member of the Military Division of the said  
Most Excellent Order*

Acting Temporary Lieutenant-Commander John Henry Rouson, G.M., R.N.V.R.  
For gallantry and devotion to duty.

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

Acting Temporary Petty Officer Mohamed Ishaq Khan, 6130, R.I.N.

For great courage and coolness in rescue work from the engine room  
after an explosion on board ship.

ADMIRALTY,

*Whitehall,*

3rd October, 1944.

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

For outstanding leadership, skill and devotion to duty in H.M.  
Canadian ships "Qu'appelle," "Skeena," "Saskatchewan" and "Resti-  
gouche," in a successful action with enemy trawlers and U-boats—

*The Distinguished Service Cross.*

Commander Alec Murray McKillop, R.N. (Bentworth).

*The Distinguished Service Medal*

Chief Petty Officer Douglas Bernard Babineau, R.C.N., 2857 (Halifax).

Temporary Ordnance Artificer John Beresford Elwell, R.C.N.V.R., V.30802 (New  
Westminster, British Columbia).

Yeoman of Signals George Henry Bloomfield, R.C.N.V.R., V.9856 (Winnipeg).

Acting Able Seaman Frederick Arthur Masters, R.C.N.V.R., V.49589 (Niagara-on-  
Lake, Ontario).

Temporary Able Seaman Robert Crowthers Deane, R.C.N.V.R., V.50218 (Toronto).

*Mention in Despatches (Posthumous)*

Telegraphist Reynold Joseph Jeannotte, R.C.N.V.R., V.11421 (St. Walburg,  
Saskatchewan).

*Mention in Despatches*

Acting Lieutenant-Commander David Walter Groos, R.C.N. (Victoria).

Acting Lieutenant-Commander Patrick Francis Xavier Russell, R.C.N.

Temporary Lieutenant-Commander Alan Herbert Easton, D.S.C., R.C.N.R.

Lieutenant Alfred William Everett, R.C.N. (Winnipeg).

Lieutenant William Selkirk Taylor McCully, R.C.N.

Temporary Lieutenant Henry Stanley Donald Bauld, R.C.N.V.R. (Halifax).

Lieutenant Douglas Charles Clarence, R.C.N.V.R. (Vancouver).

Sub-Lieutenant William Charles McPhillips, R.C.N.V.R. (London, Ontario).

Chief Petty Officer James Nolan Fryer, R.C.N.V.R., V.5172 (Montreal).

Chief Petty Officer Edward Albert Rigby, R.C.N., 2796 (Halifax).

Temporary Chief Petty Officer Donald Francis Doyle, R.C.N., 2204 (Halifax).

Chief Engine Room Artificer Terence Whiting, R.C.N.V.R., V.5478 (Brantford,  
Ontario).

Ordnance Artificer Joseph Osborn McDonald, R.C.N.V.R., V.11813 (Prince Albert,  
Saskatchewan).

Chief Stoker Joseph Edmond Patry, R.C.N., 21178 (Quebec).

Engine Room Artificer Fourth Class John Frederick Tate, R.C.N.V.R., V.213931  
(Victoria).

Stoker Petty Officer Allan Foley, R.C.N.V.R., V.31892 (Glace Bay, Nova Scotia).

Temporary Petty Officer Cook (S) Arthur Edward Grange, R.C.N.V.R., V.17386  
(Goderich, Ontario).

Able Seaman Michael Bowyer, R.C.N.V.R., V.10607 (Victoria).

Able Seaman John James Hannivan, R.C.N.V.R., V.39781 (Miramichi, Ontario).

Able Seaman Roman Martin Saretsky, R.C.N.V.R., V.45575 (Humboldt, Saskat-  
chewan).



For undaunted courage, resolution and skill during a series of actions against enemy forces while serving in Light Coastal Craft :—

*The Distinguished Service Medal*

Acting Petty Officer Motor Mechanic William John Goodhew, R.C.N.V.R., V.39152 (Halifax).

Able Seaman Edward Thomas Bishop, C/JX.341453.

Signalman Alfred Charles Westcott, C/LD.9/X.4710 (Chester-le-Street).

Ordinary Seaman Edward Morris, P/JX.567300 (Coney Hill).

*Mention in Despatches (Posthumous)*

Leading Seaman Charles R. Mason, R.C.N., 3884 (Vancouver).

Able Seaman James Hindley, P/JX.420121 (Leigh).

*Mention in Despatches*

Lieutenant-Commander James Ralph Hilborn Kirkpatrick, D.S.C., R.C.N.V.R.

Lieutenant Oliver Band Mabee, R.C.N.V.R. (Toronto).

Temporary Lieutenant Richard Booker, R.N.V.R. (Dronefield).

Temporary Lieutenant Arthur Harold Clayton, R.N.V.R. (Ickenham).

Temporary Lieutenant Basil Henry Cuthbert Robinson, R.N.V.R. (Bournemouth).

Stoker Glenn Irwin Gander, R.C.N.V.R., V.45526.

Able Seaman Donald Imrie, R.C.N.V.R., V.45103.

For distinguished services as Commodores of Ocean Convoys :—

*Mention in Despatches*

Vice-Admiral (Commodore 2nd Class, R.N.R.) Lewis Gonne Eyre Crabbe, C.B., C.I.E., D.S.O. (Retired).

Captain (Commodore 2nd Class, R.N.R.) Edward Conyngham Denison, M.V.O., Royal Navy (Retired).

Captain (Commodore 2nd Class, R.N.R.) Bertram William Lothian Nicholson, D.S.O., R.N. (Retired).

For good services in damage control, thereby saving his ship :—

*Mention in Despatches*

Acting Lieutenant (E) Edward James Alfred Gibson, R.N. (Plymouth).

For bravery and devotion to duty in helping to salvage a cargo of bombs after an air attack :—

*Commendation*

Temporary Acting Lieutenant Ronald Henry Saull, R.N.V.R.

Temporary Sub-Lieutenant Douglas Talbot Sidney Brickel, R.N.V.R.

For outstanding leadership and skill in H.M.S. "Affleck" on convoy escort duty :—

*The Distinguished Service Medal*

Stoker First Class James Smith, P/KX.136596.

(Other awards for this action were published in the "London Gazette" Supplement No. 36551 of 6th June, 1944.)

**5384.—Honours and Awards—United States Navy and Naval Reserve**

(H. & A. 549/44.—12 Oct. 1944.)

The King has been graciously pleased to approve the following Honorary Appointment and Awards for services in salvage operations in Tunisia :—

*To be an Honorary Member of the Military Division of the Order of the British Empire*

Lieutenant Leo Rolland Brown, U.S.N.

*British Empire Medal (Military)*

Chief Machinist's Mate Thomas Boyd Hudgins, U.S.N.R.

Fitter First Class Floyd Bertie Stufflebean, U.S.N.R.

2. This Appointment and these Awards will not be gazetted.

**5385.—Honours and Awards—United States Naval Reserve**

(H. & A. 655/44.—12 Oct. 1944.)

The King has been graciously pleased to approve the following Awards for good services in the occupation of the Port of Anzio :—

*Mention in Despatches*

Lieutenant Melvin August Olson, D-V(G), U.S.N.R. (117320)

Lieutenant (j.g.) Robert Schultics Burns, D-V(S), U.S.N.R. (200879)

2. These Awards will not be gazetted.

**5386.—Honours and Awards—French Navy**

(H. & A. 853/44.—12 Oct. 1944.)

The King has been graciously pleased to approve the following awards for services in M.T.B. "98" in action against a well-armed enemy Force :—

*Distinguished Service Cross*

Lieutenant de Vaisseau Roger Louis Eugène Lagersie, F.N.

*Distinguished Service Medal*

Quartier-Maitre de premiere classe Lucien Pruffer, 5633, F.N.40

*Mention in Despatches*

Quartier-Maitre Joseph Marie Simon Porsmcguer, 4876, F.N.40

2. These Awards will not be gazetted.

**5387.—Honours and Awards—Royal Hellenic Navy**

(H. & A. 842/44.—12 Oct. 1944.)

The King has been graciously pleased to approve the following Awards for gallantry and devotion to duty shown in H.H.M. Submarine "Katsonis" :—

*Bar to the Distinguished Service Cross*

Lieutenant Elias Tsoukalas, D.S.C., R.H.N.

*The Distinguished Service Medal*

Petty Officer (G) Anastasios Tsigros, 43767, R.H.N.

Petty Officer Antonios Antoniou, 28871, R.H.N.

2. These Awards will not be gazetted.

**5388.—Meritorious War Service—Grant of Additional Seniority**

(C.W. 51127/44.—12 Oct. 1944.)

Additional seniority, under the terms of A.F.O. 5140/44 has been granted to the following officers :—

Lieutenant-Commander R. F. Phillimore, M.B.E., R.N. ... ..	3 months
Lieutenant-Commander P. E. Yonge, R.N. ... ..	6 months
Lieutenant-Commander R. M. Favell, D.S.C., R.N. ... ..	3 months
Lieutenant-Commander C. le M. Scott, R.N. ... ..	6 months
Lieutenant-Commander D. Vincent-Jones, D.S.C.*, R.N. ... ..	9 months
Lieutenant-Commander E. W. Ridley, D.S.C., R.N. ... ..	6 months
Lieutenant-Commander L. E. D. Walthall, D.S.C., R.N. ... ..	6 months
Lieutenant-Commander F. M. Berncastle, D.S.C.*, R.N. ... ..	18 months
Lieutenant-Commander P. D. Gick, D.S.C.*, R.N. ... ..	18 months
Lieutenant-Commander C. M. W. Thomas, R.N. ... ..	9 months
Lieutenant-Commander I. M. Clegg, R.N. ... ..	9 months
Lieutenant-Commander J. R. F. W. Green, D.S.C., M.B.E., R.N. ... ..	18 months
Lieutenant N. L. A. Jewell, D.S.C., M.B.E., R.N. ... ..	6 months
Lieutenant R. N. Hankey, D.S.C.*, R.N. ... ..	12 months
Lieutenant R. Boyd, D.S.O., D.S.C., R.N. ... ..	6 months
Lieutenant (Acting Lieutenant-Commander) J. C. Reed, D.S.C., R.N. ... ..	12 months
Lieutenant C. D. Madden, D.S.C., R.N. ... ..	6 months
Lieutenant P. H. B. Taylor, R.N. ... ..	9 months
Lieutenant J. L. Buckridge, R.N. ... ..	12 months

Lieutenant J. C. Wells, D.S.C., R.N....	6 months
Lieutenant (Acting Lieutenant-Commander) A. B. Fraser-Harris, D.S.C.*, R.N.	3 months
Lieutenant R. J. Clutterbuck, D.S.O., R.N.	6 months
Lieutenant E. J. D. Turner, D.S.O., D.S.C., R.N.	9 months
Lieutenant D. H. Swift, D.S.C., R.N.	9 months
Lieutenant A. J. W. Pitt, D.S.O., R.N.	9 months
Lieutenant J. A. Holdsworth, R.N.	6 months
Lieutenant H. R. Webber, R.N.	9 months
Lieutenant W. D. O'Brien, D.S.C., R.N.	6 months
Lieutenant J. A. H. Hamer, R.N.	12 months
Lieutenant E. P. Reade, D.S.C., R.N.	6 months
Lieutenant P. N. Howes, D.S.C., R.N.	3 months
Lieutenant E. Swanson, R.N.	18 months
Lieutenant (Acting Lieutenant-Commander) J. R. Lang, R.N.	6 months
Lieutenant (Acting Lieutenant-Commander) D. C. E. F. Gibson, D.S.C., R.N.	12 months
Lieutenant J. D. Hanron, D.S.C., R.N.	9 months
Lieutenant E. Palmer, D.S.C., R.N.	6 months
Lieutenant H. G. Barnard, R.N.	9 months
Lieutenant R. H. Graham, D.S.C., R.N.	12 months
Lieutenant G. E. Hunt, D.S.C.*, R.N.	12 months
Lieutenant T. H. P. Wilson, R.N.	12 months
Lieutenant G. J. Kirkby, D.S.C.*, R.N.	12 months
Lieutenant J. D. Lock, R.N.	12 months
Lieutenant H. F. Short, M.B.E., R.N.	6 months
Lieutenant A. E. Fanning, D.S.C., R.N.	18 months
Lieutenant J. Mason, R.N.	6 months
Lieutenant J. H. Adams, R.N.	3 months
Lieutenant G. Kilmartin, R.N.	9 months
Lieutenant T. V. A. Cleeve, R.N.	6 months
Lieutenant B. C. Moth, R.N.	3 months
Lieutenant P. W. B. Ashmore, D.S.C., R.N.	18 months
Lieutenant D. A. Dunbar-Nasmith, D.S.C., R.N.	18 months
Lieutenant R. R. B. Mackenzie, R.N.	6 months
Lieutenant J. A. Davidson, R.N.	3 months
Lieutenant D. L. Cobb, R.N.	3 months
Lieutenant W. L. Clinton-Baker, R.N.	9 months
Lieutenant A. C. O'Riordan, R.N.	6 months
Lieutenant J. O. Coote, R.N.	3 months
Lieutenant S. F. Berthon, R.N.	3 months
Lieutenant G. C. Yorke, R.N.	3 months
Lieutenant D. L. Syms, R.N.	6 months
Lieutenant B. L. D. Rowe, D.S.C., R.N.	3 months
Lieutenant (A) (Acting Lieutenant-Commander (A)) R. H. P. Carver, D.S.C., R.N.	9 months
Lieutenant (A) (Acting Lieutenant Commander (A)) W. H. Martyn, D.S.C., R.N.	12 months
Lieutenant (A) (Acting Lieutenant-Commander (A)) R. F. Spinks, R.N.	6 months
Lieutenant (A) (Acting Lieutenant-Commander (A)) F. Stovin-Bradford, D.S.C., R.N.	12 months
Lieutenant (A) (Acting Lieutenant-Commander (A)) K. H. Gibney, D.S.C.*, R.N.	12 months
Lieutenant (A) (Acting Lieutenant-Commander (A)) B. H. C. Nation, R.N.	6 months
Lieutenant-Commander (E) (Acting Captain (E)) M. Luby, R.N.	6 months
Lieutenant (E) D. G. Thompson, R.N.	12 months
Lieutenant (E) (Acting Lieutenant-Commander (E)) P. C. Gibson, R.N.	12 months
Lieutenant (E) G. W. Gay, R.N.	6 months
Lieutenant (E) J. F. Tucker, R.N.	6 months
Lieutenant (E) (Acting Lieutenant-Commander (E)) H. T. Lewis, R.N.	12 months
Lieutenant (E) J. T. Tayler, D.S.C., R.N.	6 months

Lieutenant (E) (Acting Lieutenant-Commander (E)) G. F. Blake, R.N.	12 months
Lieutenant (E) G. P. Henwood, R.N.	6 months
Lieutenant (E) A. S. C. Sanderson, R.N.	6 months
Lieutenant (E) A. A. Summerhayes, D.S.C., R.N.	12 months
Lieutenant (E) R. H. P. Elvin, R.N.	6 months
Instructor-Lieutenant R. G. Cross, R.N.	6 months
Paymaster Lieutenant-Commander (Acting Paymaster Commander) H. L. Cryer, R.N.	6 months
Paymaster Lieutenant-Commander (Acting Paymaster Commander) J. K. Watkins, R.N.	12 months
Paymaster Lieutenant-Commander P. F. G. Page, R.N.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) J. H. M. Cole, R.N.	6 months
Paymaster Lieutenant (Temporary Paymaster Commander) B. S. Jones, R.N.	6 months
Paymaster Lieutenant H. R. Butchers, R.N.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) A. B. Hilliar, R.N.	3 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) R. N. D. Porter, M.B.E., R.N.	3 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) P. C. Eliot, R.N.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) G. P. Bewley, R.N.	3 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) W. H. Field, D.S.C., R.N.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) A. C. Reynolds, R.N.	6 months
Paymaster Lieutenant D. C. Woolf, R.N.	6 months
Paymaster Lieutenant M. B. Spear-Cole, R.N.	3 months
Paymaster Lieutenant G. H. Boxer, R.N.	3 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) R. H. Martin, R.N.	3 months
Paymaster Lieutenant I. R. Humphrey, R.N.	3 months
Paymaster Lieutenant J. N. Humphreys, R.N.	6 months
Paymaster Lieutenant P. D. deL. Alley, R.N.	3 months
Paymaster Lieutenant W. R. H. Lapper, R.N.	3 months
Paymaster Lieutenant C. A. W. Weston, R.N.	6 months
Lieutenant-Commander H. J. Hall, D.S.O., D.S.C., R.D., R.N.R.	18 months
Lieutenant-Commander (Acting Commander) R. E. Brett, D.S.O., D.S.C., R.N.R.	12 months
Lieutenant (Acting Lieutenant-Commander) H. A. Dunnett, R.N.R.	18 months
Lieutenant R. Atkinson, D.S.C.*, R.N.R.	12 months
Lieutenant J. D. Blackwell, R.N.R.	6 months
Lieutenant M. Wallrock, R.N.R.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) N. B. Horwood, R.N.R.	6 months
Paymaster Lieutenant (Acting Paymaster Lieutenant-Commander) H. S. Rousseau, R.N.R.	6 months
Lieutenant-Commander C. P. C. Noble, D.S.C., R.N.V.R.	12 months
Lieutenant (Acting Commander) R. A. Allan, O.B.E., D.S.O., R.N.V.R.	12 months
Lieutenant (Acting Lieutenant-Commander) W. Lambert, R.N.V.R.	12 months
Lieutenant The Hon. R. A. Inskip, D.S.C., R.N.V.R.	12 months
Lieutenant E. L. Cook, D.S.C., R.N.V.R.	6 months
Lieutenant Sir John D. Clerk, Bt., R.N.V.R.	3 months
Paymaster Lieutenant J. S. Gofton, R.N.V.R.	6 months

2. No adjustments of pay are to be made as a result of these awards without further authority. In the case of (a) officers becoming eligible for increments, instructions will be issued by the D.N.A.; (b) Lieutenants attaining 8 years' seniority through an award, promotion to Lieutenant-Commander and the date from the increment rate of pay is issuable, will be notified in the Daily List.

3. No further half-yearly awards of additional seniority under this scheme will be made (*vide* A.F.O. 5140/44).

**5389.—Officers Promoted from the Lower Deck—Commencing Date of Full Pay**  
(C.W. 39329/44.—12 Oct. 1944.)

In certain cases the *seniority* of officers promoted from the lower deck may be ante-dated, e.g. to the date on which courses were completed. The attention of Accountant Officers is drawn to the fact that officers whose seniority is so adjusted are not entitled to full pay for the period of the ante-date, but only with effect from the date of promotion as notified in the Daily List of Appointments.

2. Formerly, the date of promotion as shown in the daily list has, in some cases, been combined with the date of first appointment. In future, when an officer is promoted with ante-dated seniority, the date of promotion will be shown separately in order to avoid any misconception as to the commencing date of officer pay and allowances.

3. K.R. & A.I., Article 1549, will be amended.

**5390.—Royal Marines—Promotion of Hostilities Only Ranks**

See AFO 106/45.

(N. 15797/44.—12 Oct. 1944.)

Their Lordships have decided that Royal Marine Hostilities Only ranks will, if recommended and considered suitable, receive Temporary Non-commissioned rank automatically under the following conditions:—

Rank	Qualifications
Temporary Corporal ... ..	After holding rank of acting temporary corporal for six months, provided he has two years total service.
Temporary Sergeant ... ..	After holding rank of acting temporary sergeant for nine months provided he has two years total service.
Temporary Colour Sergeant ...	After holding rank of acting temporary colour sergeant for nine months, provided he has three years total service.
Temporary Company Sergeant-Major and higher ranks.	After holding the acting temporary rank concerned for twelve months, provided he has three years total service.

*Note.*—Acting temporary rank must be held at the time of promotion to temporary rank but broken time in acting temporary rank will count towards the qualifying time required, provided the break was not due to inefficiency or misconduct.

2. *Effect of reversion for misconduct or inefficiency.*—A N.C.O. reverting from temporary or acting temporary rank for these reasons will be subject to the existing regulations as regards re-promotion. He will forfeit for the purpose of any subsequent grant of temporary rank all time served in any rank higher than that to which he is reduced.

3. *Seniority.*—To allow for their greater experience and length of service, C.S. N.C.Os. holding substantive or temporary rank will be senior to H.O. N.C.Os. of the same rank irrespective of the length of time the rank has been held. The order for seniority in any one rank will therefore be:—

- (a) Substantive N.C.Os. (C.S.).  
(b) Temporary N.C.Os. (C.S.).

- (c) Temporary N.C.Os. (H.O.)  
(d) Acting Temporary N.C.Os. (H.O.)

Seniority being reckoned by the total amount of temporary and/or acting temporary time to count in the rank.

Acting N.C.Os. (C.S.) will rank with N.C.Os. in (c) and (d) according to the date of their current appointment to the rank.

4. *Method of Implementing New Regulations.*—(a) The change will take effect from 1st September, 1944. The authority for making the change will be the C.O. under whom the N.C.O. is now serving. In case of doubt he will refer to the

Commandant of the Division concerned (C.O. Depot, R.M., Lympstone in the case of EX numbers). Notations of all changes will be shown on the next S.365a rendered. Commandants concerned will be responsible for checking that the changes are correct according to records.

(b) A man who prior to 1st September, 1944, had reverted from a higher rank will not be eligible for re-promotion on the grounds that he had completed the qualifying time in that rank. Provided, however, that his reversion was not due to misconduct or inefficiency he may on re-promotion count former acting temporary time towards temporary rank.

*Examples.*—(i) A corporal after serving 12 months as acting temporary sergeant, reverted owing to change of unit. He will not be promoted to temporary sergeant on this Order. Should, however, he be promoted subsequently in the normal course of events, he will immediately become a temporary and not acting temporary sergeant.

(ii) Similarly a corporal who reverts after four months as acting temporary sergeant, will become a temporary sergeant five months after he is re-promoted.

5. *Records.*—Records of N.C.Os. will, as in the past, be kept by Commandants of Divisions concerned (C.O. Depot, R.M., Lympstone, in the case of EX numbers). The authority who authorizes the promotion to temporary rank will be responsible that it is noted on the C.C.S. and also on the last page of S.43A. In the case of men given temporary rank on 1st September, 1944, as a result of this order, the date of promotion will be shown in S.43A as 1st September, 1944, and a note inserted to show the date to count for relative seniority, e.g. a N.C.O. who has served as acting temporary sergeant for one year will be shown as Temporary Sergeant, 1st September, 1944 (relative seniority 1st September, 1943).

6. There will be no change in the regulations for the promotion of Continuous Service N.C. Officers.

(A.F.Os. 401/40, 3292/40 and 1651/44.)

**5391.—Royal Marines—Disposal of Uniform Effects and Provision of Plain Clothes on Discharge or Indefinite Release from the Service**

See AFO 1963/45.

See AFO 2560/45.

(N. 17319/44.—12 Oct. 1944.)

The present arrangements for disposal of uniform effects and provision of plain clothes for ranks on final discharge or indefinite release from the Service have been under review, and the following modified arrangements will operate as from 16th October, 1944.

2. Payment of plain clothes gratuity will cease as from the above date.

*Uniform Effects*

3. Ranks will return into store all articles of kit, with the exception of the following, which may be retained:—

1 No. Kit bag, A.P.	1 No. Cap badge.
2 No. Vests, woollen.	1 No. Brush, hair.
*2 Prs. Drawers, woollen or cellular.	1 No. Brush, button.
2 Pr. Socks.	1 No. Brush, nail.
2 No. Shirts.	1 No. Brush, shaving.
2 No. Towels.	1 No. Brush, tooth.
1 No. Jersey, pullover.	1 No. Comb.
1 Pr. Gloves.	1 No. Razor, safety.
1 Pr. Braces, trouser.	1 No. Housewife.
1 No. Belt, blue.	1 No. Button stick.
1 Pr. Boots.	1 Set Identity discs.

\* An exchange of drawers—woollen for cellular (or vice versa)—may be permitted before discharge, irrespective of the season of the year, if ranks so desire.

When it is found that ranks, who, on discharge, are not in possession of the whole of the above items, no action is to be taken to complete to scale. Exceptions will be ranks who are deficient to kit owing to enemy action. In such cases, the above scale is to be completed.

4. In the case of Royal Marines discharged direct to their homes from R.N. Hospitals, the Senior Medical Officer will arrange for articles of kit and equipment so withdrawn to be returned to the man's Headquarter R.M. Division.

5. Ranks unable to proceed to their homes in civilian clothes may be permitted to retain temporarily one suit of battle dress and one beret. In such cases the men are to be instructed to return these items to the establishment from which they were discharged as soon as possible after final date of discharge. They are to be provided with a yellow "Official Paid" label (Form S.518B) for this purpose, on which the address of the Establishment and the words "Letter Post" have been inserted. The man's name, rating and official number should also be inserted on the bottom left-hand corner of the label before it is handed to him, and he should be instructed to attach it to the parcel containing the clothing. The parcel should be handed in at the nearest post office. With reference to the printed note at the foot of Form S.518B, it is explained that although the package will be in the form of a parcel it will be accepted and dispatched by the G.P.O. as a "letter".

In the event of the beret and battle dress not being returned within a reasonable period, efforts should be made to recover the items, but in no circumstances is the issue of the documents and items referred to in paragraph 7 below to be withheld pending return of uniform items.

6. *Plain Clothes.*—All non-commissioned officers and marines will be entitled to the outfit of civilian clothing on discharge or indefinite release, except those in the following categories:—

- (a) Men discharged for misconduct or fraudulent entry.
- (b) Men discharged having made a mis-statement regarding age on enlistment, if discharge takes place after less than 12 months' service.
- (c) Men discharged within one month of entry into the Service.
- (d) Men who have re-entered the Service after a break of less than six months and have previously received a plain clothes gratuity or civilian clothing in lieu.
- (e) Men released from the Service for a specified period.

7. Each rank entitled to the civilian outfit will be given on discharge or indefinite release:—

- (a) One book of clothing vouchers,
- (b) 59 emergency clothing coupons,
- (c) one pair of cuff links, two studs and two pairs of civilian socks.

8. The vouchers will be in the form of a booklet (Admiralty Form S.1073) comprising a front cover and five vouchers, valid for the following articles of clothing:—

- (1) One shirt with two collars and one tie.
- (2) A ready-to-wear suit.
- (3) A ready-to-wear raincoat.
- (4) A pair of shoes.
- (5) A hat.

Vouchers will be valid at any retail shop; when the goods are supplied, the appropriate voucher and the correct number of clothing coupons must be surrendered to the retailer who will later claim payment from the Director of Navy Accounts. Detailed instructions for use are printed on the cover and on the vouchers, for the information of the holder and the retailers.

9. The attention of ranks to whom vouchers are issued should be specially drawn to the following points:—

- (i) Vouchers will be valid at any retail shop and different vouchers may be used at different shops;

- (ii) men may select garments from within the ranges described on the vouchers;
- (iii) payment for the articles supplied in accordance with the vouchers, including any alterations to suits to provide a proper fit, will be made by the Admiralty. No payment should be made by the rank concerned.

10. When Forms S.1073 are issued, the name, rank and the Register No. of the person to whom it is issued, are to be inserted by the Issuing Officer on the front cover, which is to be signed by the Commanding Officer and date-stamped. Each individual voucher is also to be date-stamped, and on the voucher for shirt, collar and tie, the scale for men dressed as seamen (i.e., two shirts and four collars) is to be deleted, observing that all Royal Marines are entitled only to one shirt and two collars.

11. Forms S.1073 are numbered serially. They are to be kept in safe custody, under arrangements made by Commanding Officers, and a careful record maintained of the particulars of the persons to whom they are issued.

12. Initial supplies of books of vouchers (Forms S.1073) will be sent to Chatham, Portsmouth and Plymouth Divisions, R.M.; Lympstone and Deal; and R.N. School of Music, Scarborough, without demand. Any further requirements may be obtained on demand from S.N.S.O., R.N. Store Depot, 307, Elveden Road, Park Royal, N.W.10.

13. The issue of Form S.1073 is to be recorded on the man's Service Certificate.

14. In addition to the items enumerated in paragraph 8 ranks will also be provided with the following items, which are to be issued in kind, direct from Service sources:

- 1 pair cuff links.
- 1 back stud.
- 1 front stud.
- 2 pairs civilian socks.

A small initial supply of studs and cuff links is being made to each of the R.M. establishments mentioned in paragraph 12 above. Further requirements are to be demanded by 1st Quartermasters as necessary from the local victualling yards. Arrangements are being made for the provision of socks from Ministry of Supply sources. Pending these becoming available, civilian socks, in sufficient quantities to meet immediate requirements only, are to be purchased locally by 1st Quartermasters as a charge to Vote 2N. 1st Quartermasters will be responsible for issue of items referred to in this paragraph and for maintenance of a record of such issues.

15. In the case of ranks who are discharged direct to their homes from R.N. hospitals, necessary arrangements for issue of Form S.1073, together with necessary Emergency Clothing Coupons, and the civilian items enumerated in paragraph 14 above, will be made by Senior Medical Officer concerned. As stocks of civilian socks will be maintained at R.M. Divisions, requirements of these items should normally be demanded by the Senior Medical Officer from the nearest R.M. Division. Demands should indicate colour and size required. In cases of emergency, when time does not permit of socks being obtained from a R.M. Division, or if inconvenient for any other reason, socks may be purchased locally by the Senior Medical Officer as a charge to Vote 2N. Issue of the remaining items enumerated in paragraph 15 is to be made by the Senior Medical Officer from Naval stocks in the normal manner. The Commandant of the man's Headquarter R.M. Division is to be notified of the issue of Form S.1073 and the items enumerated in paragraph 14 above, for completion of records and to avoid any possibility of duplication of issue.

16. *Emergency Clothing Coupons.*—Arrangements have been made for a supply of Emergency Clothing Coupons to be made to the R.M. establishments mentioned in paragraph 12 above, without demand, from the Board of Trade. Any further requirements are to be demanded from the Board of Trade in the usual manner. (Paragraph 21 of A.F.O. 5817/43.)

17. A note of the number of coupons issued for this purpose is to be shown separately on the monthly statement rendered to the Board of Trade, under paragraph 22 of A.F.O. 5817/43.

(K.R. & A.I. Article 1602.)

(A.F.O. 5817/43.)

(A.F.Os. 1782/44 and 3203/44 are cancelled.)

**\*5392.—Examination for Warrant Aircraft Officer—Future Dates**

(C.W./A.M.R. 869/44.—12 Oct. 1944.)

The next professional examination for Warrant Aircraft Officer will be held in May, 1945, instead of February as laid down in K.R. & A.I., Appendix XII, part 16B.

2. The names of candidates who are qualified and recommended by their Commanding Officers are to be forwarded to the Admiralty (Director of Aircraft Maintenance and Repair) not later than 1st January, 1945, those of candidates on foreign stations being reported by signal.

3. The qualifications for taking the examination are laid down in A.F.O. 1177/44.

4. The 1946 examination will be held in February of that year.

(A.F.O. 1177/44.)

**5393.—Gunners' Mates and R.M. Gunnery Instructors—Length of Qualifying Courses**

(N/G.D. 03298/44.—12 Oct. 1944.)

The length of the qualifying courses for Gunners' Mates and Royal Marine Gunnery Instructors is to be increased to 200 days and 180½ days respectively.

2. Amendments to the Gunnery Training Manual giving details of the revised syllabus will be issued in due course.

**5394.—Radar Ratings**

(N. 19630/44.—12 Oct. 1944.)

The following instructions supersede all previous instructions regarding the qualification, advancement and drafting of ratings employed on Radar-operating duties (excepting Patrol Service ratings and those specially trained for service in D.E.M.S.), and regarding the transfer of Seaman (Radar) ratings to Seaman rating.

Part I deals with Seaman (Radar) R.C. and Seaman (Radar) R.P. substantive ratings. These ratings are obsolescent.

Part II deals with arrangements for the transfer to Seaman rating from the obsolete Seaman (Radar) branch and from the obsolescent Seaman (Radar) R.C. and Seaman (Radar) R.P. branches.

Part III deals with the new and permanent Radar Control and Radar Plot non-substantive ratings.

Part IV deals with drafting and complements.

**Part I.—Seaman (Radar) R.C. and Seaman (Radar) R.P. Substantive Ratings.**

The Seaman (Radar) Branch was abolished on 1st March, 1944. From that date all ratings previously in that branch, excepting those who transferred direct to the Seaman Branch, *vide* Part II, were re-allocated to two new Branches, Seaman (Radar) R.C. or Seaman (Radar) R.P. in one or other of the following ratings:—

Chief Petty Officer (Radar) R.C. (P)  
 Petty Officer (Radar) R.C. (P)  
 Leading Seaman (Radar) R.C. (P)  
 Able Seaman (Radar) R.C. (P)  
 Ordinary Seaman (Radar) R.C. (P)  
 Chief Petty Officer (Radar) R.P. (P)  
 Petty Officer (Radar) R.P. (P)  
 Leading Seaman (Radar) R.P. (P)  
 Able Seaman (Radar) R.P. (P)  
 Ordinary Seaman (Radar) R.P. (P).

The suffix (P), meaning "Provisional," indicates that while fully qualified in Radar the men concerned have not yet attained the additional Control or Plotting qualifications required for their new rating. For complement and qualifying service purposes these provisional ratings count the same as the equivalent fully qualified ratings, but in some cases rates of pay are different. The additional instruction required for full qualification should be given at the first opportunity. Any rating who fails to qualify will retain his provisional status and may not be recommended for further course until 12 months after the date of failure.

In general, those Seaman (Radar) ratings who were qualified in W.C. or gunnery sets became Seaman (Radar) R.C. ratings and those qualified in W.A. or W.S. sets became Seaman (Radar) R.P. ratings. Exceptions could, however, be made by Commanding Officers in cases in which a rating's experience or special aptitude made him more suitable for the opposite branch to that indicated by his qualifying course. Service documents of all ratings concerned should be scrutinized to ensure that the necessary alterations have been made.

2. The standard of knowledge required and the duties are laid down in Table F. The Seaman (Radar) R.C. and Seaman (Radar) R.P. branches are obsolescent. They were instituted only as a temporary measure to provide for Radar/Control and Radar/Plotting duties which will gradually be taken over by R.C. and R.P. non-substantive ratings (see Part III).

3. Rates of substantive pay and qualifications required are shown in Tables A and B. Advancement to the leading and petty officer rating is on an acting basis in the first instance as in the Seaman branch.

4. Except for C.P.O. (Radar) R.C. and C.P.O. (Radar) R.P., roster advancement was abolished on 1st March, 1944. Recommendations for C.P.O. (Radar) R.C. and C.P.O. (Radar) R.P. should be forwarded to the Commodore of the man's depot on Form S.507.

5. The following special arrangements apply to men who were recommended for P.O. (Radar) before 7th September, 1943, but who had not been rated before 1st March, 1944, owing to lack of opportunity to pass the qualifying course. On successfully completing the full course for P.O. (Radar) R.C. or P.O. (Radar) R.P. such men are to be advanced by the Commodore of the Depot to P.O. (Radar) as from the date of recommendation, or from the completion of 12 months service as L.S. (Radar), whichever is the later. They will become P.O. (Radar) R.C. (P) or P.O. (Radar) R.P. (P) from 1st March 1944, and P.O. (Radar) R.C. or P.O. (Radar) R.P. from the date of completion of the course, or when they have the necessary qualifying service if this is later. The names of any of these ratings who have changed their port division from Portsmouth to Devonport or Chatham are to be reported by the Commodore, R.N. Barracks, Portsmouth to the Commodore concerned stating the date of recommendation.

6. Recommendations for courses should be forwarded on Form S.1303 as for R.C. and R.P. non-substantive ratings (see Part III, paragraph 15 below).

7. Ratings who fail to pass the examination for higher rating are not eligible for recommendation for a further course until a period of 12 months has elapsed since the date of failure.

TABLE A  
Seaman (Radar) R.C. Ratings—Pay and Professional Qualifications Required for Substantive Advancement.

Substantive Rating.	Open to	Special Qualifications.	Where Course Carried Out.	Authority to Give Rating.	Examining Officers.	Pay per diem (See Note 1)	Substantive Pay	Allowance
Chief Petty Officer (Radar) R.C.	P.O. (Radar) R.C.	(a) Recommended by C.O. (b) 5 years' service as P.O. (Radar) R.C. or L.S. (Radar) R.C. passed for P.O. (Radar) R.C. (see Note 2).	—	Commodore of Port Division.	—	C.P.O. (Radar) R.C. C.P.O. (Radar) R.C.(P).	<i>s. d.</i> 7 6 7 6	<i>s. d.</i> 1 0 0 3
Petty Officer (Radar), R.C. (See Note 3).	L.S. (Radar) R.C.	(a) Recommended by C.O. (b) One year's service as L.S. (Radar) R.C. ashore or afloat. (c) A total of 1 year's service must have been served as L.S.(Radar) R.C. and A.B. (Radar) R.C. afloat (see Note 2).	(a) Radar School. (b) Gunnery School	C.O. of Gunnery School on completion of course.	Officers of Gunnery School.	P.O. (Radar) R.C. P.O. (Radar) R.C.(P).	6 0 6 0	1 0 0 3
Leading Seaman (Radar) R.C.	Able Seamen (Radar) R.C.	(a) Recommended by C.O. (b) Six months' service as A.B. (Radar) R.C. (see Note 2).	(a) Radar School. (b) Gunnery School	C.O. of Gunnery School on completion of course.	Officers of Gunnery School.	L.S. (Radar) R.C. L.S. (Radar) R.C. (P).	4 4 4 4	0 6 0 3
Able Seaman (Radar) R.C.	Ordinary Seamen (Radar) R.C.	(a) Recommended by C.O. (b) Nine to 12 months' service, including New Entry training time.	—	Commanding Officer.	—	A.B. (Radar) R.C. A.B. (Radar) R.C.(P). Ordinary Seaman (Radar) R.C. Ordinary Seaman (Radar) R.C.(P).	3 0 3 0 2 0 2 0	0 3 0 3 0 3 0 3

Note 1.—Only basic rates of pay are shown. Progressive pay is payable as for Seaman Ratings (see K.R. & A.I. Appendix XVII, Part I).  
 Note 2.—Time served in a Seaman (Radar) rating and "Provisional" time count as qualifying service in the equivalent Seaman (Radar) R.C. rating.  
 Note 3.—Petty Officers (Radar) R.C. should carry out a re-qualifying course in the gunnery school after 12 months, experience as such because they are unlikely on first qualifying to achieve the full standard required owing to their lack of gunnery experience.

TABLE B  
Seaman (Radar) R.P. Ratings—Pay and Professional Qualifications Required for Substantive Advancement

Substantive Rating.	Open to	Special Qualifications.	Where Course Carried Out.	Authority to Give Rating.	Examining Officers.	Pay per diem (See Note 1).	Substantive Pay.	Allowance.
Chief Petty Officer (Radar) R.P.	P.O. (Radar) R.P.	(a) Recommended by C.O. ... (b) 5 years' service as P.O. (Radar) R.P. or L.S. (Radar) R.P. Passed for P.O. (Radar) R.P. (see Note 2).	—	Commodore of Port Division.	—	C.P.O. (Radar) R.P. C.P.O. (Radar) R.P. (P).	<i>s. d.</i> 7 6 7 6	<i>s. d.</i> 1 0 0 3
Petty Officer (Radar), R.P.	L.S. (Radar) R.P.	(a) Recommended by C.O. ... (b) One year's service as L.S. (Radar) R.P. ashore or afloat. (c) A total of 1 year's service must have been served as L.S. (Radar) R.P. and A.B. (Radar) R.P. afloat (see Note 2).	(a) Radar School. (b) Plotting School.	C.O. of Plotting School on completion of course.	Officers of Plotting School.	P.O. (Radar) R.P. P.O. (Radar) R.P. (P).	6 0 6 0	1 0 0 3
Leading Seaman (Radar) R.P.	Able Seamen (Radar) R.P.	(a) Recommended by C.O. (b) Six months' service as A.B. (Radar) R.P. (see Note 2).	(a) Radar School. (b) Plotting School.	C.O. of F.D.C. on completion of course.	Officers of Plotting School.	L.S. (Radar) R.P. L.S. (Radar) R.P. (P).	4 4 4 4	0 6 0 3
Able Seaman (Radar) R.P.	Ordinary Seamen (Radar) R.P.	(a) Recommended by C.O. (b) Nine to 12 months' service including New Entry training time.	—	Commanding Officer.	—	A.B. (Radar) R.P. A.B. (Radar) R.P. (P). Ordinary Seaman (Radar) R.P. Ordinary Seaman (Radar) R.P. (P).	3 0 3 0 2 0 2 0	0 3 0 3 0 3 0 3

Note 1.—Only basic rates of pay are shown. Progressive pay is payable as for Seaman ratings (see K.R. & A.I., Appendix XVII, Part I).  
 Note 2.—Time served in a Seaman (Radar) rating and "Provisional" time count as qualifying service in the equivalent Seaman (Radar) R.P. rating.

## Part II. Transfers.

8. From 1st March, 1944, all Seaman (Radar) R.C. and Seaman (Radar) R.P. ratings are required to transfer to their equivalent seaman rating as soon as they are qualified professionally and provided they are medically and visually fit. Men who have defective colour vision, or who wear glasses, are eligible for transfer if their vision is not below Standard 3.

9. To allow for their technical qualifications these ratings, on transfer, are granted an appropriate R.C. or R.P. non-substantive rating.

10. Table C shows the titles and rates of pay of men transferring to the seaman branch from the Seaman (Radar) R.C. and Seaman (Radar) R.P. branches.

As soon as ratings are qualified professionally transfers are to be authorized by Commanding Officers and reported on Form S.161.

11. In no case is any rating to suffer a decrease in pay solely due to the new conditions of service.

TABLE C

Arrangements for transfers from the Seaman (Radar) R.C. and Seaman (Radar) R.P. Branches to equivalent Seaman ratings. Men who transferred direct from the old Seaman (Radar) Branch on 1st March, 1944, are treated as though they were Seaman (Radar) R.C. (P) or Seaman (Radar) R.P. (P) ratings.

Substantive rating held before transfer	Substantive rating to which transfer is made	Non-substantive rating to be granted on date of transfer	Remarks
<i>If not yet qualified in gunnery :-</i>			
C.P.O. (Radar) R.C. (P)	C.P.O. (Tempy.) ...	R.C.1 (P) ...	See Note 1
P.O. (Radar) R.C. (P) ...	Act. P.O. (Tempy.)	R.C.1 (P) ...	See Note 2
L.S. (Radar) R.C. (P) ...	Act. L.S. (Tempy.)	R.C.2 (P) ...	See Note 3
A.B. (Radar) R.C. (P) ...	A.B. or Act. A.B.	R.C.3 (P) ...	See Note 4
Ord.Sea. (Radar) R.C. (P)	Ord. Sea. ...	Act. R.C.3 (P)	See Note 5
<i>If fully qualified in gunnery :-</i>			
C.P.O. (Radar) R.C. ...	C.P.O. (Tempy.)	R.C.1 ...	See Note 1
P.O. (Radar) R.C. ...	Act. P.O. (Tempy.)	R.C.1 ...	See Note 2
L.S. (Radar) R.C. ...	Act. L.S. (Tempy.)	R.C.2 ...	See Note 3
A.B. (Radar) R.C. ...	A.B. or Act. A.B.	R.C.3 ...	See Note 4
Ord. Sea. (Radar) R.C.	Ord. Sea. ...	Act. R.C.3 ...	See Note 5
<i>If not yet qualified in plotting :-</i>			
C.P.O. (Radar) R.P. (P)	C.P.O. (Tempy.)	R.P.1 (P) ...	See Note 1
P.O. (Radar) R.P. (P)	Act. P.O. (Tempy.)	R.P.1 (P) ..	See Note 2
L.S. (Radar) R.P. (P) ...	Act. L.S. (Tempy.)	R.P.2 (P) ..	See Note 3
A.B. (Radar) R.P. (P)	A.B. or Act. A.B.	R.P.3 (P) ...	See Note 4
Ord.Sea. (Radar) R.P. (P)	Ord. Sea. ...	Act. R.P. 3 (P)	See Note 5
<i>If fully qualified in plotting :-</i>			
C.P.O. (Radar) R.P. ...	C.P.O. (Tempy.) ...	R.P.1 ...	See Note 1
P.O. (Radar) R.P. ...	Act. P.O. (Tempy.)	R.P.1 ...	See Note 2
L.S. (Radar) R.P. ...	Act. L.S. (Tempy.)	R.P.2 ...	See Note 3
A.B. (Radar) R.P. ...	A.B. or Act. A.B.	R.P.3 ...	See Note 4
Ord. Sea. (Radar) R.P.	Ord. Sea. ...	Act. R.P.3 ...	See Note 5

## Notes

The following amplifying notes apply only to ratings who are medically and visually fit for transfer. Those who are permanently unfit will remain in the Seaman (Radar) R.C. or Seaman (Radar) R.P. Branch.

*Note 1.*—In order to transfer to C.P.O. it is necessary to qualify professionally for P.O. Three years after the basic date of so qualifying, a man will be eligible to be placed on the roster for C.P.O. provided he has one year's seagoing service since that date. Transfer will not take place until the man becomes due for advancement to C.P.O. from the roster.

*Note 2.*—When qualified professionally for Petty Officer, he may be transferred as from the basic date of so qualifying and seniority as Petty Officer will be reckoned from this date or from 1st March, 1944, whichever is the later. Ratings transferred will not be required to change from Class III uniform to Class II. If reverted during their acting time they will revert to Petty Officer (Radar) R.C., R.C. (P), R.P. or R.P. (P), as appropriate. If reverted after confirmation as Petty Officer, or if disrated at any time, they will be reverted or disrated to Leading Seaman or Able Seaman.

*Note 3 (a).*—When qualified professionally for Leading Seaman may be transferred as from the basic date of so qualifying and seniority as Leading Seaman will be reckoned from this date or from 1st March, 1944, whichever is the later. If reverted during their acting time they will revert to Leading Seaman (Radar) R.C., R.C. (P), R.P. or R.P. (P), as appropriate. If reverted after confirmation as Leading Seaman, or if disrated at any time, they will be reverted or disrated to Able Seaman.

(b) If any of these ratings were recommended for P.O. (Radar) before 7th September, 1943, they should not be transferred to Leading Seaman. Special instructions for back-dating their advancement to P.O. (Radar) are given in paragraph 5. They should be given the opportunity of this advancement first, and will then be eligible for transfer to Acting Petty Officer (Temporary) in accordance with Note 2 above.

*Note 4 (a).*—The majority of these ratings have already completed the training required of Ordinary Seamen. In these cases, provided they have four months sea-going service, have completed the five days' torpedo course (i.e. qualified "Tr") and are considered satisfactory by the Commanding Officer, they may be transferred to Able Seaman. Ratings who are not fully qualified because they have not completed the necessary sea-going service or the torpedo course may be transferred to Acting Able Seaman in accordance with the normal rules for advancement from Ordinary Seaman to Acting Able Seaman.

(b) Some ratings, who entered the Radar branch before December, 1942, or who transferred to it from a branch other than the Seaman branch, may not have received any professional instruction for Able Seaman. These men should be given the necessary instruction on board, and transferred to Able Seaman or Acting Able Seaman (as appropriate) as soon as practicable. Seniority as Able Seaman will be reckoned from the date of being rated Able Seaman (Radar).

*Note 5.*—The majority of these ratings have already completed the training required of Ordinary Seamen and should be transferred forthwith. Those who have not been so trained should be given the necessary instruction on board and transferred as soon as practicable.

On transfer to Ordinary Seaman, these men are entitled only to an Acting non-substantive rating, but, in order that they should not suffer a consequent decrease in pay, they are to be paid 3d. per diem non-substantive pay continuously until rated Able Seaman.

Service as Ordinary Seaman (Radar) counts as Service as Ordinary Seaman.

*Part III. R.C. and R.P. non-substantive ratings.*

12 (a). The following non-substantive ratings were instituted on 1st March, 1944, and are open to seaman ratings only :—

Radar Control Rating, 1st class	...	...	...	R.C.1.
Radar Control Rating, 2nd class	...	...	...	R.C.2.
Radar Control Rating, 3rd class	...	...	...	R.C.3.
Radar Plot Rating, 1st class	...	...	...	R.P.1.
Radar Plot Rating, 2nd class	...	...	...	R.P.2.
Radar Plot Rating, 3rd class	...	...	...	R.P.3.

(b) R.C. ratings, 1st and 2nd class, are eligible for selection for Gunner's Mate under the conditions laid down for gunnery non-substantive ratings in A.F.O. 627/42.

R.P. ratings, 1st and 2nd class are eligible for selection for Plotting and Radar Instructor (P.R.I.) with a rate of pay of 2s. 0d. per diem. Further instructions will be issued defining the precise duties of the P.R.I. and the syllabus for the qualifying course.

13. Certain men who transfer from the Seaman Radar Branches (*see* Table C), and who have not yet had the opportunity of completing qualification in Control or Plotting may hold the non-substantive ratings in paragraph 12 (a) on a "Provisional" basis, in which case the suffix (P) is added, thus :

R.C. 1 (P).	R.P. 1 (P).
R.C. 2 (P).	R.P. 2 (P).
R.C. 3 (P).	R.P. 3 (P).

See also the special case in Note 3 to Table E.

For complement, qualifying service and pay purposes, the "Provisional" rating counts the same as the equivalent fully-qualified rating. The additional instruction required for full qualification should be given at the first opportunity. Any rating who fails to qualify fully after this instruction will revert to the next lower non-substantive rating from the date of failure and may not be recommended for further course until 12 months after the date of failure. This lower rating may be "provisional" or "fully-qualified" at the discretion of the "Authority to give rating." R.C.3(P) and R.P.3(P) who fail to qualify should, however, retain their provisional 3rd class rating, but their names are to be reported to the Admiralty.

14. The standards of knowledge required and duties are shown in Table F.

15. Recommendations for courses should be forwarded on Form S.1303 to the Commodore of the man's depot, for R.C. ratings through the Captain, Radar Training, and the Captain of the appropriate Gunnery School, and for R.P. ratings through the Captain, Radar Training, and the Commanding Officer, F.D.C., Yeovilton.

16. Rates of non-substantive pay and qualifications required are shown in Tables D and E.

TABLE D  
Radar Control Ratings—Rates of Non-Substantive Pay and Qualifications Required for Selection for Courses.

Non-Substantive Rating	Open to	Special Qualifications	Where Course Carried Out	Authority to Give Rating	Examining Officers	Rate per diem	Remarks
R.C.1 (Radar Control Rating 1st Class).	C.P.O., P.O., L.S., R.C.2.	(a) Recommended by C.O. (b) One year's service as R.C.2 ashore or afloat. (c) A total of one year's service as R.C.3 and/or R.C.2 must have been served afloat.	(a) Radar School. (b) Gunnery School	Captain of Gunnery School on completion of both courses.	Officers of Radar and Gunnery Schools.	1s. 6d.	Not payable with any other non-substantive rating except Diver. (See Notes 1, 4 and 6.)
R.C.2 (Radar Control Rating 2nd Class).	L.S. and A.B., R.C.3, C.P.O., and P.O., except R.C.3.	(a) Recommended by C.O. (b) Six months' service as R.C.3 afloat or ashore. Service ashore will only count as qualifying time during the period of the present hostilities. Recommended by C.O.	(a) Radar School. (b) Gunnery School	Captain of Gunnery School on completion of both courses.	Officers of Radar and Gunnery Schools.	P Os. 6d. L.S. or A.B. 9d.	Not payable with any other non-substantive rating except Diver. (See Notes 1, 2 and 3.)
R.C.3 (Radar Control Rating 3rd Class).	L.S., A.B. or Ordinary Seaman.	Recommended by C.O.	At sea or in Radar and "G" Schools.	C.O. of ship or Captain of Gunnery School.	Qualified Radar and Gunnery Officers at sea, or Officers of Radar and Gunnery Schools.	3d.	Not payable with any other non-substantive rating except Diver or P.R.I.I. Ordinary Seaman can only hold the Acting rating of R.C.3 and will only be paid when actually filling a vacancy in complement. (See Notes 2 and 5.)

Note 1.—Time served in the equivalent Seaman (Radar) rating or "Provisional" rating counts as qualifying service for the purposes of Columns 2 and 3.

Note 2.—Leading Seamen and Able Seamen who successfully completed a course for R.C.3 before 1st March, 1944, may be rated R.C.3 from that date, but seniority counts from the date of completing the course. Ordinary Seamen in similar circumstances may be rated Acting R.C.3, but seniority counts from the date of as R.C.3.

Note 3.—As a temporary measure, Leading Seamen and selected Able Seamen with 6 months' sea-going service may qualify as R.C.2 immediately after qualifying as R.C.3.

Note 4.—Petty Officers, R.C.1, transferred from P.O. (Radar), R.C., should carry out a re-qualifying course in the gunnery school after 12 months' combined experience as R.C.1 and P.O. (Radar), R.C., because they are unlikely on first qualifying to achieve the full standard required owing to their lack of gunnery experience.

Note 5.—Special pay arrangements for Ordinary Seamen, Acting R.C.3, who transferred from Ordinary Seamen (Radar) are given in Note 5 to Table C.  
Note 6.—The rating of R.C.1 is also open to C.P.O., P.O. and L.S. passed for P.O., without qualifying service as R.C.2 or R.C.3, but who have had considerable experience in fire control, e.g. senior rating in an H.A./L.A.T.S., Rate Officer, etc., and who have a high standard of intelligence.



TABLE E  
Radar Plot Ratings—Rates of Non-Substantive Pay and Qualifications Required for Selection for Courses

Non-Substantive Rating	Open to	Special Qualifications	Where Course Carried Out	Authority to Give Rating	Examining Officers	Rate per diem	Remarks
P.R.1 (Plotting and Radar Instructor).	C.P.O., and R.P.1 and R.P.2.	Recommended by C.O.	(a) Radar School. (b) Plotting School.	Captain of Plotting School.	Officers of Radar and Plotting Schools.	2s. 0d.	Not payable with any other non-substantive rating except Diver.
R.P.1 (Radar Plot Rating 1st Class).	C.P.O., and R.P.2.	(a) Recommended by C.O. (b) One year's service as R.P.2 ashore or afloat. (c) A total of one year's service as R.P.3 and/or R.P.2 must have been served afloat.	(a) Radar School. (b) Plotting School.	Captain of Plotting School on completion of both courses.	Officers of Radar and Plotting Schools.	1s. 6d.	Not payable with any other non-substantive rating except Diver. (See Notes 1 and 3.)
R.P.2 (Radar Plot Rating 2nd Class).	C.P.O., P.O., R.P.3, and R.P.3.	(a) Recommended by C.O. (b) Six months' service as R.P.3 afloat or ashore. Service ashore will only count as qualifying time during the period of the present hostilities.	(a) Radar School. (b) Plotting School.	Captain of Plotting School on completion of both courses.	Officers of Radar and Plotting Schools.	P.Os. 6d., L.S. or A.B. 9d.	Not payable with any other non-substantive rating except Diver. (See Notes 1, 2 and 3.)
R.P.3 (Radar Plot Rating 3rd Class).	L.S., Ordinary Seamen.	Recommended by C.O.	At sea or in Radar and Plotting Schools.	C.O. of ship or Captain of Plotting School.	Qualified Radar Officers at sea, or Officers of Radar and Plotting Schools.	3d.	Not payable with any other non-substantive rating except Diver or P.R.T.I. Ordinary Seamen can only hold the acting rating of R.P.3, and will only be paid when actually filling a vacancy in complement. (See Notes 2, 3 and 4.)

Note 1.—Time served in the equivalent Seamen (Radar) rating or "Provisional" rating counts as qualifying service for the purposes of Column 3.

Note 2.—Leading Seamen and Able Seamen who successfully completed a course for R.P.3 before 1st March, 1944, may be rated R.P.3 from that date, but seniority as such counts from the date of completing the course. Ordinary Seamen in similar circumstances may be rated Acting R.P.3, but seniority counts from the date of completing the course.

Note 3.—Any men not trained in Radar but who qualified in plotting at the F.D.C., Yeovilton, before 1st March, 1944, may be granted a "Provisional" rating as follows:—If on 1st March he was a Leading Seaman he may be rated R.P.2 (P), if an Able Seaman he may be rated R.P.3 (P) and if an Ordinary Seaman he may be rated Acting R.P.3 (P), in each case as from 1st March (with pay), but seniority as such counts from the date of completing the course.

Note 4.—Special pay arrangements for Ordinary Seamen, Acting R.P.3, who transferred from Ordinary Seamen (Radar) are given in Note 5 to Table C.

#### Part IV.—Drafting and Complements.

17. The number of Radar operators required in ships and establishments depends on the equipment fitted.

Except in certain shore establishments the numbers allowed are not therefore shown in schemes of complement at present, but are laid down in C.A.F.Os. 1158/44 and 2180/44.

18. Instructions are given in C.A.F.O. 1909/44 for reporting the equipment fitted and the operators allowed and borne.

On receipt of this report ratings required will be provided by drafting authorities subject to the Temporary Manning Standard in force.

19. Seaman (Radar) R.C. and Seaman (Radar) R.P. ratings may be drafted in lieu of seamen holding R.C. and R.P. non-substantive ratings, and will be borne as shown below:—

#### Substantively

- (a) C.P.O. (Radar) R.C. or R.P. and P.O. (Radar) R.C. or R.P. may be borne in lieu of a similar number of Petty Officers allowed as "Substantive Additions" by C.A.F.O. 1158/44, paragraph 8 and Appendix B, but not in lieu of C.P.Os. or P.Os. allowed by the normal scheme of complement of the ship.
- (b) L.S. (Radar) R.C. or R.P. may similarly be borne in lieu of Leading Seamen allowed as "Substantive Additions," but not in lieu of Leading Seamen allowed by normal scheme of complement.
- (c) Seaman (Radar) R.C. or R.P. ratings of A.B. or Ord. Sea. grade (and any higher ratings in excess of the "Substantive Additions" in (a) and (b) above) should be borne in lieu of A.Bs. or Ordinary Seamen.

#### Non-substantively

C.P.O.	...	...	(Radar) R.C. are borne in lieu of R.C.1
P.O.	...	...	(Radar) R.C. are borne in lieu of R.C.1
L.S.	...	...	(Radar) R.C. are borne in lieu of R.C.2
A.B.	...	...	(Radar) R.C. are borne in lieu of R.C.3
Ord. Sea.	...	...	(Radar) R.C. are borne in lieu of R.C.3
C.P.O.	...	...	(Radar) R.P. are borne in lieu of R.P.1
P.O.	...	...	(Radar) R.P. are borne in lieu of R.P.1
L.S.	...	...	(Radar) R.P. are borne in lieu of R.P.2
A.B.	...	...	(Radar) R.P. are borne in lieu of R.P.3
Ord. Sea.	...	...	(Radar) R.P. are borne in lieu of R.P.3

20. Commanding Officers are authorized to grant acting R.C. and R.P. non-substantive ratings to suitable seamen trained on board to fill vacancies in complement. K.R. and A.I., Art. 428, is being amended accordingly.

21. Seaman (Radar) R.C. and Seaman (Radar) R.P. ratings filling vacancies in complement for higher ratings are not eligible for difference of pay in accordance with K.R. and A.I., Art. 1591.

22. Ratings of branches other than Seaman, Seaman (Radar) R.C. or Seaman (Radar) R.P. if employed as acting Radar operators, may be paid a special allowance of 3d. per diem.

TABLE F

## Standards of Knowledge and Duties of R.C. and R.P. Ratings

Rating	Knowledge Required	Duties to be Performed at Sea
R.C.3, A.B. (Radar) R.C. and Ord. Sea. (Radar) R.C.	<p><b>A.</b>—After four weeks training in a Radar school :</p> <p>(i) An elementary conception of the fundamentals of Radar and its operational application.</p> <p>(ii) A general knowledge of display technique, calibration and the use of the operators controls on a Radar set.</p> <p>(iii) A good knowledge of the operational and communication drill on a basic gunnery set.</p> <p>(iv) A good knowledge of sweeping, reporting and gyro and relative bearings.</p> <p>(v) An elementary knowledge of I.F.F. and Beaconry.</p> <p><b>B.</b>—After three weeks gunnery training.</p> <p>(i) Ability to drill in the ranks in squad, rifle and platoon drill.</p> <p>(ii) An elementary knowledge of the principles of L.A. Fire Control, terms used, the standardized method of passing orders and communication drill.</p> <p>(iii) A thorough knowledge of the duties of a deflection spotting operator, range spotting operator and tube operator.</p> <p>(iv) An elementary knowledge of the principles of H.A. Fire Control, the terms used and the standardized method of passing orders.</p> <p>(v) A thorough knowledge of the duties of an F.K.C. operator in regard to enemy course and speed, enemy travel unit, and deflection. A thorough knowledge of the duties of a deflection screen operator at the H.A.C.S.</p> <p>(vi) A general knowledge of the operation of Radar sets used in conjunction with Bofors and pom-pom directors.</p>	<p>Following a working-up period in his own ship, any one of the following :</p> <p>(i) Assistant operator of all gunnery and T.I. sets generally fitted.</p> <p>(ii) T.I.U. operator.</p> <p>(iii) Clock operator of A.F.C.C. or enemy course and speed operator of F.K.C.</p> <p>(iv) Deflection spotting handle operator at A.F.C.T.S.</p> <p>(v) Range spotting handle operator at A.F.C.T.S.</p> <p>(vi) F.K.C. enemy travel unit operator.</p> <p>(vii) F.C.B. operator, when no F.K.C. is fitted.</p> <p>(viii) H.A.C.S. deflection screen operator.</p> <p>(ix) F.K.C. deflection screen operator or A.F.C.C. deflection operator.</p>
R.C.2 and L.S. (Radar) R.C.	<p><b>A.</b>—After 6 weeks training in a Radar school :—</p> <p>(i) A good knowledge of the fundamentals of Radar and its operational application with particular reference to its use in fire control and for target indication.</p> <p>(ii) A good knowledge of display technique as applied to sets used for gunnery purposes, including P. P. I. presentation.</p> <p>(iii) A good knowledge of the operational and communication drill on all gunnery sets in common use in the Service.</p>	<p>Following a working-up period in his own ship, any one of the following :—</p> <p>(i) Action operator of any type of gunnery or T.I. set in current use in the Service.</p> <p>(ii) Senior rating of T.I. room in destroyers and below.</p> <p>(iii) Speed across plot operator of A.F.C.T.</p>

Rating	Knowledge Required	Duties to be Performed at Sea
R.C.1, P.O. (Radar) R.C. and C.P.O. Radar) R.C.	<p>(iv) A general knowledge of I.F.F. and beaconry, R.C.M. and jamming, Radar policies, anti-D/F measures.</p> <p><b>B.</b>—After 5 weeks gunnery training :—</p> <p>(i) Ability to take charge of a squad in rifle and platoon drill.</p> <p>(ii) A good knowledge of the L.A. fire control problem.</p> <p>(iii) A good knowledge of the lay-out of a cruiser's fire control system.</p> <p>(iv) A thorough knowledge of drill at the A.F.C.T. with special reference to the duties of plot operator (other than spotting plot operator), clock unit operator and spotting plot operator at the A.F.C.C.</p> <p>(v) A thorough knowledge of the target indicating system and sets used for this purpose.</p> <p>(vi) A good knowledge of the H.A. control problem.</p> <p>(vii) A good knowledge of the H.A. control system as fitted in destroyers and cruisers.</p> <p>(viii) A good knowledge of all operators duties at the H.A.C.S. and F.K.C., and a thorough knowledge of the duties of plot operator and range operator.</p> <p>(ix) A good knowledge of the operation of Radar sets used in conjunction with Bofors and pom-pom directors.</p> <p><b>A.</b>—After 12 weeks training in a Radar School :—</p> <p>(i) A good knowledge of Radio Theory vide Admiralty Handbook of Wireless Telegraphy, Vol. I, Chapters, 1, 2, 3, 5, 7 and Vol. II, Section B, paras. 1-26, Section D, paras. 1-16, Section H, paras. 1-10, Section F, paras. 1-17.</p> <p>(ii) A fair knowledge of Radar theory and of standard Radar circuits in simplified form.</p> <p>(iii) A good knowledge of the simple care and maintenance of the gunnery sets generally fitted. Ability to use the fault-finding chart, to locate common faults and make minor adjustments.</p> <p>(iv) A thorough knowledge of operating procedure on all types of gunnery and T.I. sets generally fitted and ability to take charge of a watch on such sets.</p> <p>(v) A general knowledge of special types of Gunnery and Target Indication Radar.</p> <p><b>B.</b>—After 8½ weeks Gunnery Training :—</p> <p>(i) Ability to take charge of a squad in rifle and platoon drill.</p>	<p>(iv) Enemy rate plot operator of A.F.C.T.</p> <p>(v) Clock unit operator of A.F.C.T.</p> <p>(vi) H.A.C.S. plot operator and/or spotting plot operator for A.F.C.C.</p> <p>(vii) F.K.C. range operator and/or spotting plot operator for A.F.C.C.</p> <p>Following a working-up period in his own ship any one of the following :—</p> <p>(i) To act as Senior Rating in a Main Armament T.S., H.A.C.P. or T.I.R. and to take charge when no officer is allowed.</p> <p>(ii) To carry out any of the duties specified for an R.C.2 or R.C.3.</p> <p>(iii) To take charge of and drill a watch in the main types of T.I., G.A., G.S. and G.C. sets in service.</p>

Rating	Knowledge Required	Duties to be Performed at Sea
	<p>(ii) A good knowledge of the L.A. Fire Control problem and the L.A. Fire Control arrangements in a modern 6-in. cruiser.</p> <p>(iii) A good knowledge of the Control Procedure in a 6-in. cruiser, including blind fire, bombardment and concentration. Ability to carry out the duties of and instruct any number at the A.F.C.T., Mark VI or A.F.C.C., Mark VI, including Radar panels.</p> <p>(iv) A good knowledge of the H.A. Fire Control problem and of the H.A. Fire Control arrangements in a modern 6-in. cruiser.</p> <p>(v) A thorough knowledge of the drill at H.A.C.S., Mark IV, and Transit system and the control procedure for all forms of air attack. Ability to take charge of a H.A.C.P. and to carry out the duties of and instruct any number.</p> <p>(vi) A good knowledge of the layout of the Target Indicating Room and the drill at the T.I.U. Ability to take charge of a T.I.R. and to carry out the duties of any operator.</p> <p>(vii) A general knowledge of a cruiser's organization for all degrees of readiness, allocation of Gunnery ratings, damage control organization, divisional drill and training.</p> <p>(viii) A general knowledge of the director system, sights, firing circuits and transmission systems.</p> <p>(ix) A knowledge of the use of trigonometrical ratios, circular measure, etc. Ability to solve simple problems in relative motion.</p>	
R.P.3, A.B. (Radar) R.P. and Ord. Sea. (Radar) R.P.	<p><b>A.</b>—After 4 weeks training in a Radar School :—</p> <p>As for R.C.3 except that operational and communication drill will be taught on a basic Warning set</p> <p><b>B.</b>—After 3 weeks Plotting Training :—</p> <p>(i) A general knowledge of the Action Information Organization.</p> <p>(ii) A good knowledge of Standard R/T procedure and Allied R/T Fighter Code. Standard method of tuning R.T. receivers. Ability to send and receive telephone messages without repetition.</p> <p>(iii) A good knowledge of plotting on Spider's Web diagrams. Standard colours, printing, marking and timing. Plotting symbols. Air and Surface Radar reporting codes.</p> <p>(iv) A good knowledge of practical logging.</p> <p>(v) A good knowledge of the special application of plotting to A/S operations including use of the Gladstone protractor.</p>	<p>Following a working-up period in his own ship, any one of the following :—</p> <p>(i) Assistant operator of all Warning sets generally fitted</p> <p>(ii) M.A.D.P. Plotter</p> <p>(iii) Interceptor Plotter</p> <p>(iv) Ops. Room Teller/Plotter</p> <p>(v) Bridge Plot Teller/Plotter</p> <p>(vi) R.T. Logger.</p>

Rating	Knowledge Required	Duties to be Performed at Sea
R.P.2, and L.S. (Radar) R.P.	<p><b>A.</b>—After 7 weeks' training in a Radar School :—</p> <p>(i) A good knowledge of the fundamentals of Radar and its operational applications to Warning sets.</p> <p>(ii) A good knowledge of display technique as applied to Warning sets, including P.P.I. and skiatron.</p> <p>(iii) A good knowledge of operational drill and communication on all Warning sets in common use in the service.</p> <p>(iv) A knowledge of polar diagrams, horizontal and vertical.</p> <p>(v) A general knowledge of I.F.F. and beaconry, R.C.M. and jamming, interrogators, Radar policy and anti-D.F. measures.</p> <p>(vi) A good knowledge of fighter direction/plotting organization.</p> <p><b>B.</b>—After 6 weeks' plotting training :—</p> <p>(i) A thorough knowledge of the R.P.3 syllabus.</p> <p>(ii) A good knowledge of elementary chartwork, gyro and magnetic courses and bearings, application of variation.</p> <p>(iii) A good knowledge of plotting instruments, including Craig Computer, use of air speed conversion graph, A.R.L. tables.</p> <p>(iv) Ability to plot all forms of reports and keep a track, to act as assistant filterer, and to act as teller (but not to give an appreciation).</p> <p>(v) A good knowledge of R/T channels and their use, together with the ability to operate any R.T. channel.</p> <p>(vi) A good knowledge of enemy reporting, to be able to encode and decode enemy reports.</p> <p>(vii) A good knowledge of A.I.O. internal communication channels, an elementary knowledge of aircraft direction technique, the organization of the Fleet, Convoy Escorts and Triphibious operations.</p> <p>(viii) A good knowledge of search schemes applicable to A/S operations contained in C.B.4097(4), C.B.4097 (A.S.F.) and C.B.04234 (2).</p>	<p>Following a working-up period in his own ship any one of the following :—</p> <p>(i) Action operator of all Warning sets generally fitted.</p> <p>(ii) Senior rating of a watch of Warning set operators.</p> <p>(iii) Senior rating of a watch of Plotters or Loggers.</p> <p>(iv) Air/Surface Plotter/Teller.</p> <p>(v) Height filterer.</p> <p>(vi) F.D.Os. assistnt.</p> <p>(vii) Senior rating. in A/S ships other than S.Os. of groups.</p> <p>(viii) Working of Craig Computer, C.S.C. and I.C.A.N.</p>
R.P.1, P.O. (Radar) R.P. and C.P.O. (Radar) R.P.	<p><b>A.</b>—After 12 weeks' training in a Radar School :—</p> <p>(i) A good knowledge of Radio theory vide Admiralty Handbook of Wireless Telegraphy, Vol. I, Chapters 1, 2, 3, 5, 7. Vol. II, Section B, paras. 1-26, Section D, paras. 1-16, Section H, paras. 1-10, Section F, paras. 1-17.</p> <p>(ii) A fair knowledge of Radar theory and standard Radar circuits in simplified form.</p>	<p>(i) To take charge of and drill a watch on the principal types of W.A., W.C. and W.C.H. sets in current use in the Service.</p> <p>(ii) To act as :—</p> <ol style="list-style-type: none"> <li>Senior Rating of R.D.R.</li> <li>Senior Rating of Ops. Room and Bridge plot.</li> </ol>

Rating	Knowledge Required	Duties to be Performed at Sea
	<p>(iii) A good knowledge of the Radar sets used in the Fighter Direction/Plotting Organization and their use in relation to the A.I.C. and plotting positions.</p> <p>(iv) A general knowledge of specialised types of Warning and Navigational Radar.</p> <p>(v) A good knowledge of the simple care and maintenance of the Warning sets generally fitted. Ability to use the faultfinding chart, to locate common faults and make minor adjustments.</p> <p>(vi) A thorough knowledge of operating procedure on all Warning sets in current use in the Service.</p> <p>(vii) A general knowledge of A.I. organization.</p> <p><b>B.—After 6 weeks in a Plotting School :—</b></p> <p>(i) A thorough knowledge of and ability in R.P.2 syllabus less Section (vii).</p> <p>(ii) A good knowledge of speed triangles and their application to Plotting, ability to carry out all forms of D.R. plotting. Ability to carry out the duties of Telling and Filtering.</p> <p>(iii) A good knowledge of Conduct of the Fleet, Chapter XVII and all forms of enemy reporting.</p> <p>(iv) A good knowledge of R.P.2 syllabus, Section (vii). Simple interception, organization of Fleet communication, methods of conducting Plotting Exercises.</p>	<p>3. Senior Rating of R.D.R.</p> <p>4. Senior Rating in charge of all Warning set operators.</p>

(K.R. & A.I. Article 428 and 430, Appendix XVII, Part I.)

(C.A.F.Os. 1158/44, 1909/44 and 2180/44.)

(A.F.Os. 627/42 and 4468/44.)

(C.A.F.Os. 2270/42, 2651/42, 251/43, 702/43, 759/43, 921/43, 1238/43, 1521/43, 2366/43 and 2470/43 and A.F.Os. 4496/42, 5129/42, 6115/42, 6258/42, 573/43, 909/43, 2933/43, 3264/43, 3383/43, 5195/43, 797/44, 2443/44 and 2727/44 are cancelled.)

#### 5395.—Volunteers for Service in Submarines—Procedure

(N. 23424/44.—12 Oct. 1944.)

Attention is drawn to the necessity of completing form S.538, and making the corresponding notation on Service Certificates in respect of volunteers for service in submarines in accordance with K.R. & A.I., Appendix XVII, Part 4, paragraphs 18 to 22.

(K.R. & A.I., App. XVII, Part 4, paragraphs 18–22.)

#### 5396.—Uniform for Acting Regulating Petty Officers

(V/17055/44.—12 Oct. 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 rating of a confirmed Petty Officer.

3. In accordance with K.R. & A.I. Article 1868, clause 4, on transfer to the Regulating Branch, ratings should be given a free issue of the items of kit necessary to complete their existing kits to the compulsory kits of their new rating, the articles of kit of the old rating no longer required as compulsory kit being withdrawn. Outfit gratuity is not payable.

(K.R. & A.I. Article 1868, Clause 4.)

(A.F.O. 3383/44 is cancelled.)

#### 5397.—Civilian Clothing for Naval Ratings Discharged or Released from the Service

See A.F.O. 5356/40.

" " 2096/45.

" " 2557/40.

(V./17186/44.—12 Oct. 1944.)

The following arrangements for the issue of civilian clothing to naval ratings on discharge or indefinite release will be brought into force as from Monday, 16th October, 1944, and will replace the procedure detailed in A.F.O. 5028/44. The arrangements for Royal Marines and W.R.N.S. are dealt with in separate Orders.

2. Ratings as detailed in paragraph 3 below will be entitled on discharge or release to an outfit of civilian clothing consisting of:—

- (1) A read-to-wear suit.
- (2) A raincoat.
- (3) 1 shirt with 2 collars (or, for men dressed as seamen, 2 shirts each with 2 collars) and a tie.
- (4) A pair of shoes.
- (5) A hat.
- (6) A pair of cuff links and 2 studs.
- (7) For men dressed as seamen only, a pair of braces.

Articles (1) to (5) in the above list will be obtainable by the ratings from retail shops in exchange for clothing vouchers and clothing coupons which will be issued to them on discharge. Articles (6) and (7) will be issued in kind. Payment of plain clothes gratuity under K.R. & A.I., Article 1602 will be discontinued.

3. *Entitlement.*—Naval ratings (other than those on T.124 agreement or variants, on cable ship agreement, or naval canteen ratings) will be entitled to the outfit of civilian clothing on discharge unless:—

- (i) they are discharged at their own request within three months of entry,
- (ii) they are discharged for misconduct or fraudulent entry,
- (iii) they are discharged within one month of entry into the service,
- (iv) they have re-entered the service after a break of less than six months and have previously received a plain clothes gratuity or civilian clothing in lieu.

Ratings granted indefinite release to the Reserve List and pensioners released with indefinite exemption from service on industrial or compassionate grounds are entitled to the outfit of clothing on release subject to the exceptions at (iii) and (iv) above. Ratings released from service for a specified period are not entitled to this benefit.

4. *Issue and Use of Clothing Vouchers and Clothing Coupons.*—Each rating entitled to the civilian outfit is to be given on discharge (a) one book of clothing vouchers, (b) clothing coupons to the number shown in paragraph 11, (c) a pair of cuff links and 2 studs and, if he is dressed as a seaman, a pair of naval pattern braces.

5. The vouchers will be in the form of a booklet (Admiralty Form S.1073) comprising a front cover and five vouchers. The vouchers will be valid at any retail shop; when the goods are supplied the appropriate voucher and the correct number of clothing coupons must be surrendered to the retailer who will later claim payment from the Director of Navy Accounts. Detailed instructions for use are printed on the cover and on the vouchers, for the information of the holder and the retailers.

6. The attention of ratings to whom vouchers are issued should be specially drawn to the following points:—

- (i) vouchers will be valid at any retail shop and different vouchers may be used at different shops;
- (ii) ratings may select garments from within the ranges described on the vouchers;
- (iii) payment for the articles supplied in accordance with the vouchers, including any alterations to suits to provide a proper fit, will be made by the Admiralty. No payment should be made by the rating.

7. Initial supplies of books of vouchers (Forms S.1073) will be sent without demand to R.N. Hospitals and certain other establishments as detailed in Appendix A. Any other ships and establishments requiring the Forms should demand them from Superintending Naval Store Officer, R.N. Store Depot, 307 Elveden Road, Park Royal, N.W.10.

8. When Forms S.1073 are issued, the name, rank or rating and official number of the person to whom it is issued are to be inserted by the Issuing Officer or a responsible officer detailed by him on the front cover, which is to be signed by the Commanding Officer and date stamped. Each individual voucher is also to be date stamped, and on the voucher for shirt, collar and tie the Issuing Officer is to indicate, by deleting one of the lines marked with an asterisk, whether the holder is entitled to one shirt and two collars or two shirts and four collars. In the case of issues by seagoing ships care is to be taken that the ship's name does not appear.

9. Forms S.1073 are numbered serially. They should be kept in safe custody by Accountant Officers, and a careful record maintained of the names, etc., of the persons to whom they have been issued. Forms remaining unused on paying off should be returned by registered post to the Royal Naval Store Depot, Park Royal (address above). Forms S.1073 supersede Form S.1074, and unused copies of the latter should be destroyed.

10. A note of the issue of Form S.1073 is to be made on page 1 of ratings' Service Certificates.

11. Emergency clothing coupons will be issued as follows:—

To men dressed as seamen ... ..	66
To men not dressed as seamen ... ..	59

12. Coupons should be demanded from The Chief Accountant, Board of Trade, Control Section, Northgate, Prince Albert Road, London, N.W.8, but the Board of Trade will furnish the establishments shown in Appendix A with an initial supply of coupons without demand.

13. A note of the number of coupons issued for this purpose is to be shown separately on the monthly statement rendered to the Board of Trade in accordance with A.F.O. 5817/43, paragraph 22.

14. *Articles Issued in Kind.*—Ratings entitled to the outfit are to be given, in addition to the voucher and coupons, one pair of cuff links, one back stud and one front stud, and men dressed as seamen are also to be given one pair of service braces. Small initial supplies of these articles will be sent to the hospitals, etc., listed in Appendix A without demand: demands for further requirements from these establishments and demands from other ships and establishments, should be sent to the nearest victualling yard.

15. *Withdrawal of Service Clothing from Ratings.*—Two blue and two white uniform suits which form part of the standard war kit of R.N. ratings, are to be withdrawn from ratings to whom a book of clothing vouchers is issued. Men who are unable to return two blue and two white suits are to be charged half the value of the articles deficient. (*Note.*—Certain men (e.g., patrol service ratings who have not served abroad) have not been supplied with white uniform suits; these men will accordingly only be required to return or pay for two blue suits). Men may be allowed if necessary to proceed to their homes wearing one of the uniform suits which they are required to surrender. The suit is to be charged for as set out above but the men are to be informed that, if the suit is returned to the Accountant Officer (S) of their depot within 30 days, the charge will be refunded by that officer. In order to facilitate the return of uniform to the Accountant Officer (S) ratings are to be directed to return the suit by letter\* post to the establishment from which they were discharged. Such ratings are to be provided for this purpose with a yellow "Official Paid" label, Form S.518B, on which the address of the depot or

establishment and the words "Letter post" have been inserted. The man's name, rating and official number should also be inserted on the bottom left-hand corner of the label before it is handed to him, and he should be instructed to attach it to the parcel containing the clothing. The parcel should be handed in at the nearest post office.

\* *Note.*—With reference to the printed note at the foot of Form S.518B, it is explained that although the package will be in the form of a parcel it will be accepted and despatched by the G.P.O. as a "letter".

16. Arrangements should be made by Naval hospitals for the withdrawal from R.N. ratings invalidated of the two blue and two white uniform suits before the ratings are sent to their homes. The man's accounting base and the Accountant Officer (S) of his depot are to be informed when this has been done, and the suits withdrawn are to be sent to the Accountant Officer (S) of the depot who will take them on charge in his clothing account. The Accountant Officer (S) of the depot is also to be informed when men have been allowed to go home wearing a uniform suit under the arrangement set out in paragraph 15. In the case of boys received from H.M.S. "St. George" the suits withdrawn should be sent to the Accountant Officer of that establishment, who should be informed when boys received from that establishment are allowed to go home wearing uniform which should be returned.

17. Men in R.N. hospitals who, prior to discharge, are sent on leave pending the satisfactory fitment of an artificial limb are to be supplied with a book of vouchers and coupons under the conditions detailed above, when they are sent on such leave.

18. The issue of the book of vouchers and coupons is not to be withheld pending settlement of questions arising out of withdrawal of uniform.

19. Any man discharged direct from E.M.S. hospitals will be provided with an outfit of civilian clothing by the Military authorities who will also withdraw uniform clothing for return to the man's depot. Depot Accountant Officers should arrange for appropriate charges to be made against the man's account for deficiencies.

#### Appendix A

Royal Naval Hospital, Chatham.  
 Royal Naval Hospital, Haslar, Gosport.  
 Royal Naval Hospital, Plymouth.  
 Royal Naval Hospital, Port Edgar.  
 Royal Naval Auxiliary Hospital, Newton Abbot.  
 Royal Naval Auxiliary Hospital, Barrow Gurney.  
 Royal Naval Auxiliary Hospital, Kingseat.  
 Royal Naval Auxiliary Hospital, Invergordon.  
 Royal Naval Auxiliary Hospital, Seaforth.  
 Royal Naval Auxiliary Hospital, Woolton.  
 Royal Naval Auxiliary Hospital, Mintern Magna.  
 Royal Naval Auxiliary Hospital, Kilmacol.  
 Royal Naval Auxiliary Hospital, Sherborne.  
 Royal Naval Auxiliary Hospital, Durdham Downs.  
 Royal Naval Auxiliary Hospital, Rainhill.  
 Royal Naval Auxiliary Hospital, Southport.  
 Royal Naval Auxiliary Hospital, Knowle.  
 Royal Naval Sick Quarters, Shotley.  
 Royal Naval Sick Quarters, Liverpool.  
 Royal Naval Sick Quarters, Cullercoats.  
 H.M.S. "Royal Arthur."  
 H.M.S. "Duke."  
 Royal Naval Barracks, Portsmouth.  
 Royal Naval Barracks, Chatham.  
 Royal Naval Barracks, Devonport.  
 Royal Naval Barracks, Lee-on-Solent.  
 Royal Naval Patrol Service Central Depot, Lowestoft.

(K.R. & A.I. Articles 1602 and 1879.)

(A.F.O. 5817/43.)

(A.F.Os. 5457/43, 3283/44, 4233/44 and 5028/44 are cancelled.)

892/45

5398.—W.R.N.S., Married Officers and Ratings—Release of

(C.W. 45631/44.—12 Oct. 1944.)

The Government Plan for Re-Allocation of Manpower provides that married women are to be given priority of release, if they so desire, before other women, provided they are not required for Service reasons.

2. For release purposes a married woman is defined as a woman who has been married and whose marriage has not been dissolved or annulled by death or legal process or rendered ineffective by judicial separation.

3. As it may be necessary to establish priority between the married women in any particular rank, rating or category, it has been decided that this priority should be on the basis of their family responsibilities, as determined by D.W.R.N.S.

4. It will be necessary, therefore, that the status and family responsibilities of all married W.R.N.S. personnel shall be known to D.W.R.N.S., and for this purpose a questionnaire in the form given in this A.F.O. is to be filled in by every officer and rating who uses the prefix "Mrs.". The questionnaires when completed are to be forwarded by W.R.N.S. Unit Officers to Command Superintendents for onward transmission to D.W.R.N.S., Admiralty.

5. Priority will be assessed as follows :—

- (1) High priority.
(2) Low priority.
(3) No priority.
(4) To be treated as a single woman.

6. W.R.N.S. Officers and ratings assessed in priority number (4) will include those who use the prefix "Mrs." but who do not come within the definition in paragraph 2, and also those who elect to be released in their age and service groups.

7. After the priorities have been assessed, D.W.R.N.S. will forward to each Command Superintendent lists, set out in order of establishments, of all the officers and ratings in her Command who use the prefix "Mrs.", showing against each name the priority number for release.

From these lists, Command Superintendents are to forward to each Commanding Officer a list of the names and priority numbers of the W.R.N.S. officers and ratings under his orders who use the prefix "Mrs."

The Service Certificates of ratings in priority numbers (1) to (3) are to be endorsed "M.P." (Marriage Priority) as laid down in B.R. 1081.

Those of ratings in priority number (4) are to be endorsed with the number of their age and service groups.

The necessary amendment to B.R. 1081 will be issued in due course.

8. Any W.R.N.S. officer or rating who changes her marital state after the issue of this Order through death of her husband, marriage, etc., is to fill in a further questionnaire to be forwarded as directed above.

9. Any married W.R.N.S. officer or rating whose family responsibilities change materially after completing the questionnaire may fill in another to be forwarded as directed above.

10. This questionnaire is confidential and will not be used for any other purpose than to decide priority of release.

11. Completed questionnaires are to be rendered forthwith.

CONFIDENTIAL

Release of Married W.R.N.S. Questionnaire

Form with fields: Surname (in capitals), Christian names, Rank or rating, Branch or category, Official No., Ship and/or Establishment, Command.

Has your marriage been dissolved or annulled by death or legal process or rendered ineffective by judicial separation? (If the answer to this question is "Yes", answers to the remaining questions are not required.)

Present address of husband (if known)

Present address of children

Ages and sexes of own children

Ages and sexes of stepchildren

Ages and sexes of adopted children

If you want early release to set up a home, state particulars briefly

Is there any particular reason why you should be granted early release before other married women? If so, state briefly.

Are you willing to renounce your priority rights as a married women? (If so you will be released with your Age and Service Group, or can volunteer for further service.)

Signature

Date

Signature of W.R.N.S. Unit Officer

(Admiralty General Message Home and Abroad 654A.)

(A.F.Os. 5106/44 and 5124/44.)

5399.—W.R.N.S.—Advancement to Petty Officer Cinema Operators

(N. 24695/44.—12 Oct. 1944.)

With reference to paragraph 91 of A.F.O. 5377/44, the following are the regulations for the advancement of Leading Wren Cinema Operators to Petty Officer rate in the Cinema Branch.

2. Leading Wren Cinema Operators will be required to pass the following test at the Cinema Operators' School, attached to R.N. Barracks, Chatham :—

- (a) Handling, repair, storage and distribution of films.
(b) Equipment.—Operation of 35 mm. projectors, Arc and Incandescent. 16 mm. projectors, G.B. and Ampro., Dome Teachers. Knowledge of ordering spares and of maintenance organization.
(c) General.—Knowledge of all A.F.O.s affecting W.R.N.S. Cinema Operators. Organization of film programmes.

The test may be taken at any time after completing six months service as Leading Wren Cinema Operator and on recommendation by Commanding Officers.

Ratings who fail to pass the test will be ineligible for a further attempt until after the expiry of six months from the date of the previous failure.

Recommendations should not be withheld because ratings cannot readily be spared or because replacements are not immediately available.

3. The roster for advancement to Petty Officer Wren Cinema Operator will be based on date of passing and will be maintained by Superintendent, W.R.N.S., The Nore, who will authorise advancement from the roster as vacancies occur. For ratings who pass at the first attempt, the date of passing is to be antedated

to the date of qualifying by service and this will be their basic date for roster purposes. The date of passing (and roster date) of those who fail at the first attempt is to be the actual date on which they subsequently pass the test.

4. After advancement to Petty Officer Wren Cinema Operator, ratings will undergo the period of training at the Cinema School at Chatham and at a Film Library, and will be drafted for this course as required. (This does not apply to those Petty Officers selected for appointment as instructor. (See paragraph 5 below.)

5. Suitable Petty Officer Wren Cinema Operators will be selected by the Admiralty for duty as instructor; such ratings will be trained for 10 weeks at the Cinema School at Chatham as required.

6. Petty Officer Wren Cinema Operators will be allowed in complement as follows:—

(a) Any Film Libraries (as listed in A.F.O. 5377/44, paragraph 107), and for any libraries which may be formed subsequently—1 Petty Officer assistant to the C.I.F.O.

Any Sub-Command Film Libraries within these Commands—1 Petty Officer Wren in charge, who should be responsible to the C.I.F.O. of the Command concerned.

(b) Pools of W.R.N.S. Cinema Operators where there are six or more Leading Wren and Wren Cinema Operators—1 Petty Officer Wren to be in charge (this is only if the Pool is not attached to one of the above-mentioned Libraries or Sub-libraries).

(c) In Cinema Maintenance Depots (as listed in A.F.O. 5377/44, paragraph 59), and in any which may be formed subsequently—1 Petty Officer Wren Cinema Operator assistant to the C.C.M.O.

(d) Two Petty Officer Wren Instructors at the R.N. School of Cinema Operators, Chatham.

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

*See AFO 3008/44*  
**5400.—W.R.N.S.—Register for Relief Work Abroad**

(N. 24491/44.—12 Oct. 1944.)

A.F.O. 3508/44 is to be amended as follows:

Paragraph 7. *Delete last two sentences and substitute*

“Volunteers for work with field teams should normally be between 25 and 50 years of age.”

(A.F.O. 3508/44.)

**5401.—W.R.N.S. Stewards and Cooks—Description**

(N./D.P.S. 734/44/M.—12 Oct. 1944.)

W.R.N.S. ratings employed on domestic duties belong to the following categories, and a brief description of their duties is shown against each:—

- (a) Mess Caterer ... Catering and keeping accounts in an officers' mess.
- (b) Steward (O) ... (i) Mess stewards in officers' messes, e.g., waiting at table, cleaning public rooms. (Also includes wine steward, i.e., a steward (O) rating having full charge of the wine and spirits of an officers' mess and the accounts thereof.)  
(ii) Ward room attendants (W.R.As.), e.g. cleaning cabins, valeting, waiting at table.
- (c) Steward (G) ... (i) General cleaning duties, etc., in W.R.N.S. quarters (A.F.O. 3801a/43 refers).  
(ii) General cleaning duties in Naval establishments.  
(iii) As P.Os.' messmen, i.e., for mess duties in C.P.Os.' and P.Os.' messes, e.g. cleaning of mess and pantry, serving, etc.  
(iv) Dining hall attendants in certain ships' companies' messes.
- (d) Cook (O) ... Cooks for officers' messes.
- (e) Cook (S) ... Cooks for men's messes and W.R.N.S. ratings' quarters.

2. These ratings are allowed by the scales shown in A.F.O. 678/44 as amended by A.F.Os. 2852/44 and 3284/44.

(A.F.Os. 2128/43, 3801a/43, 678/44, 2738/44, 2852/44 and 3284/44.)

(A.F.Os. 2593/41 and 347/42 are cancelled.)

*AFO 6144/44* **5402.—W.R.N.S.—Plain Clothes Gratuity**  
(V/1/7184/44.—12 Oct. 1944.)

The arrangements for the payment of plain clothes gratuity for W.R.N.S. ratings leaving the Service have been modified, and as from Monday, 16th October, 1944, the following arrangements will operate:—

(a) *Mobile ratings* will be given a plain clothes gratuity of £12 10s. 0d. on discharge unless:—

(i) they are discharged at their own request within six months of entry;

(ii) they are discharged for misconduct or fraudulent entry;

(iii) they are discharged within one month of entry into the Service;

(iv) they have re-entered the Service after a break of less than six months and have previously received a plain clothes gratuity.

(b) *Immobile ratings* will be given a plain clothes gratuity of £12 10s. 0d. on discharge provided they have served at least 12 months, and subject to the exceptions at (ii) and (iv) above.

2. The following articles will be withdrawn from the service kit of ratings to whom the grant of £12 10s. 0d. is paid:—

One overcoat

One raincoat

One uniform suit (jacket and skirt/or trousers)

One pair of shoes.

Retention by the rating of the remainder of the kit will be governed by the provisions of K.R. & A.I., Article 1879.

3. Ratings may if necessary be allowed to proceed to their homes wearing either the raincoat or overcoat which they are required to surrender. The rating's account is to be debited with the sum of £1 10s. 0d. and the rating informed that if the raincoat or overcoat is returned to the Accountant Officer (S) of her Depot within 30 days the charge will be refunded by that officer. In order to facilitate the return of uniform to the Accountant Officer (S) ratings are to be directed to return the garment by letter\* post to the establishment from which they were discharged. Such ratings are to be provided for this purpose with a yellow "Official Paid" label, Form S.518B, on which the address of the depot or establishment and the words "Letter post" have been inserted. The name and official number should also be inserted on the bottom left-hand corner of the label before it is handed to her, and she should be instructed to attach it to the parcel containing the clothing. The parcel should be handed in at the nearest post office.

\**Note.*—With reference to the printed note at the foot of Form S.518B, it is explained that although the package will be in the form of a parcel it will be accepted and despatched by the G.P.O. as a "letter".

4. Payment of the plain clothes gratuity is to be made prior to discharge: it is not to be withheld or delayed pending settlement of questions connected with the withdrawal of uniform, and the gratuity is not to be applied towards the liquidation of debts to the Crown. A note of the payment is to be made on the rating's service certificate.

(K.R. & A.I., Article 1879.)

(A.F.O. 1666/44.)

(A.F.O. 921/43 is cancelled.)

**\*5403.—Shorthand Typist—Increases in Numbers and Revised Qualifications**

(N. 12661/44.—12 Oct. 1944.)

In order to improve shorthand facilities in the Fleet and Shore Establishments it has been decided to make a substantial increase in the establishment numbers of this non-substantive rating. Detailed instructions are being issued to the Home Ports.

2. It has further been decided, pending further instructions, to remove the limitation in K.R. & A.I., Volume II, Appendix XVII, Part 3, No. 75, which confines this speciality to Writer ratings holding the leading rate or above or of not less than three years service as Writer (including service as Writer Probationer), and it is now thrown open to all Writer ratings.

3. The K.R. & A.I. will be amended in due course.

(K.R. & A.I., Volume II, Appendix XVII, Part 3, No. 75.)

#### 5404.—Mersey Tunnel—Government Warrants

(D.N.A. 30094/44.—12 Oct. 1944.)

The Mersey Tunnel Joint Committee has agreed to periodical Warrants "A/cs. Gen. 28" (the availability of which was extended, without endorsement, from the 31st December, 1943, to the 31st December, 1944) being still further extended, without endorsement, to the 31st December, 1945.

2. Any new issue on and after the 1st December next is to bear a similar date of expiry, i.e. 31st December, 1945.

3. No further extension of existing periodical warrants beyond the 31st December, 1945, will be granted, and new warrants will be required as from the 1st January, 1946.

(A.F.O. 3843/42.)

(A.F.O. 6103/43 is cancelled.)

#### 5405.—Loss of Effects—War Risks Insurance—Revised Premiums

(N.L. 15506/43.—12 Oct. 1944.)

Notice is given that as from 11 a.m. on Monday, 25th September, 1944, the current schedule of rates for the insurance of cargoes to or from the United Kingdom will be withdrawn when the rates indicated below will be substituted:—

United Kingdom, to or from:—

(1) Canada (Atlantic) and/or United States (Atlantic) not south of Cape Hatteras	10s.
(2) United States (Atlantic) south of Cape Hatteras and/or United States Gulf	10s.
(3) West Indies (including British and Dutch Guiana, Venezuela, North Coast of Columbia, Central America (Atlantic) and Mexico (Atlantic))	10s.
(4) Azores—direct	10s.
(5) Canada and/or U.S. and/or Central America (Pacific)	15s.
(6) South America, Atlantic or Pacific	30s.
(7) Portugal and Spain (Atlantic) and Gibraltar	15s.
(8) Spanish Mediterranean Ports	30s.
(9) Africa, West Coast not south of River Congo	25s.
(10) Africa, West Coast, south of River Congo and ports in South Africa not north of Delagoa Bay	30s.
(11) Africa, East Coast (south of Red Sea and north of Delagoa Bay) including Madagascar and Mauritius	50s.
(12) North African Mediterranean ports in Morocco, Algeria and Tunisia including Malta	30s.
(13) Other North African Mediterranean ports and ports in Egypt and Palestine	40s.
(14) Cyprus, Syria and Turkey (ex Black Sea), including transshipment at a Mediterranean port, if incurred	60s.
(15) Red Sea ports	40s.
(16) Aden	40s.
(17) Australia, New Zealand and Tasmania	40s.
(18) Ports in the east, east of Aden but not east of India	70s.

(19) United Kingdom to United Kingdom and/or Eire	5s.
(20) West Coast United Kingdom to West Coast United Kingdom and/or Eire	10s.
(21) Iceland	10s.
(22) Faroe Islands	10s.

Shipments to or from the following for which no rates are indicated above, if protected by Open Cover, are held covered at rates of premium to be agreed; if not protected by Open Cover rates will be quoted on application.

Ports in Sweden not east of Malmo.

Black Sea.

White Sea and Murmansk.

Ports in Australasia and the East—so far as not included in the above Schedule.

Liberated ports as and when liberated.

(A.F.O. 2024/43.)

(A.F.O. 3274/44 is cancelled.)

#### 5406.—Admiralty Surgeons and Agents

(C.E. 16732/44.—12 Oct. 1944.)

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

Place	Name	Address	Remarks
Aldermaston, Berks.	Mr. L. S. Holmwood, M.R.C.S., L.R.C.P.	Aldermaston, nr. Reading, Berks. Telephone— Woolhampton 13.	—
Cressage, Salop	Mr. H. C. Miller, M.B., Ch.B.	The Mount, Cressage, Salop. Telephone— Cressage 18.	—
London District No. 17 (Islington, Highbury, Stoke Newington, Bethnal Green, Clapton, Hackney, Homerton).	Mr. F. M. Lehmann, M.D.	61 Highbury Hill, London, N.5 Telephone— Canonbury 1507.	Vice Mr. L. J. Souter, deceased.
Ilkeston	Mr. S. P. S. Durai, L.R.C.P. & S.	Orchard House, Nottingham Rd., Ilkeston. Telephone— Ilkeston 29.	Vice Mr. P. Hughes, deceased.
Abingdon, Berks.	Mr. J. H. Fisher, M.B., B.Ch.	52 Bath St., Abingdon, Berks. Telephone— Abingdon 333.	—

See AFO 6005/44  
See AFO 4082/43  
5407.—Yellow Fever—Protective Inoculation and Vaccination for Personnel  
Proceeding Abroad  
See AFO 1963/43.

(M.D.G. 41140/44.—12 Oct. 1944.)

All personnel proceeding abroad to areas where yellow fever is endemic are to be inoculated against the disease. Personnel proceeding to shore establishments in West Africa or to ships based on West Africa and all personnel joining the Eastern Fleet by air by whatever route must be inoculated against yellow fever before leaving the United Kingdom. Personnel flying from the west to the east coast of Africa and from any endemic area to Gibraltar should invariably be inoculated and carry a certificate to that effect in order to avoid quarantine restrictions.

2. Immunity develops in about ten days after inoculation and whenever possible this period should elapse before sailing from the United Kingdom.

In order to comply with quarantine regulations of India, personnel proceeding to that country or to Ceylon by air, must be inoculated at least fourteen days prior to departure.

3. Inoculation against yellow fever should precede vaccination against small-pox if possible, and there should be an interval of not less than five days between the two.



4. Inoculations against plague, cholera, typhus or inoculation with T.A.B.(T) can, if necessary, be given at the same time as inoculation against yellow fever.

5. In cases where delay cannot be accepted the procedure laid down in paragraph 3 should not be followed, and inoculations against yellow fever and vaccination against small-pox must be done at the same time.

6. While there is no scientific evidence to indicate that the taking of alcohol immediately before or immediately after yellow fever inoculation has a deleterious effect, it is certainly desirable that persons should not take alcohol for a period of twenty-four hours before and after inoculation.

7. Inoculation against yellow fever can be carried out in London by arrangement with the Medical Department, Admiralty, or at any Naval establishment provided notice is given so that the vaccine may be obtained.

8. The attention of medical officers is drawn to the rapidity with which this vaccine becomes inert if not stored at a temperature of 4 deg. C. or under. For this reason vaccination should be carried out wherever possible at the Hospital or Sick Quarters at which the vaccine is stored. When this is not done the vaccine, if practicable, should be collected from the storage depot on the day on which it is required.

9. Deterioration even under optimum storage conditions is rapid. Two months after date of manufacture, the dosage on the label should be marked down to one-half (i.e. 10 dose ampoules counting as a 5 dose ampoule). After three months' storage the vaccine should be discarded.

10. Stocks of yellow fever vaccine are held at the following establishments, replenishments for which are obtainable by application to Medical Director-General :

Royal Naval Barracks, Portsmouth.

Royal Naval Hospital, Haslar.

Royal Naval Hospital, Chatham.

Royal Naval Hospital, Plymouth.

Royal Naval Auxiliary Hospital, Barrow Gurney, near Bristol.

Royal Naval Auxiliary Hospital, Kingseat, Aberdeen.

Royal Naval Sick Quarters, St. Paul's Eye Hospital, Old Hall Street, Liverpool.

Royal Naval Sick Quarters, Victoria Road, Swansea.

Naval Offices, St. Enoch Hotel, Glasgow.

H.M. Naval Base, North Shields.

Royal Naval Medical Depot, Dunfermline.

H.M. Naval Base, Londonderry.

R.N. Sick Quarters, 24, Cathedral Road, Cardiff.

H.M. Dockyard, Gibraltar.

H.M. Naval Base, Algiers.

11. When the vaccine is required it should be demanded from the most convenient place, specifying the exact quantities of vaccine and distilled water (if necessary) required. The smallest ampoule of dried vaccine requires the addition of 1.5 c.cs. of distilled water and is sufficient for three inoculations. Ampoules containing 5, 10 and 20 doses are also available.

12. It is most important that notation be made in pay books as well as on medical history sheets. The notation made in pay books should be restricted to "Inoculation in accordance with C.A.F.O. 515/42".

The medical officer giving the inoculation will also keep a record of each certificate granted. This should be initialled by the officer or rating concerned as evidence that he has received the certificate.

Certificates are valid for 4 years which is the estimated duration of immunity

13. Details of methods of preserving the vaccine, and the technique of injection, which should be rigidly adhered to, is described in Article 7 of R.N. Medical Bulletin No. 1.

(C.A.F.O. 515/42.)

(A.F.Os. 3917/43, 4421/43 and 491/44 are cancelled.)

\*5408.—Seventh Victory Loan—Canada—Instructions for Canadian Personnel

(N. 23630/44.—12 Oct. 1944.)

Canada's Seventh Victory Loan campaign will be conducted overseas during the period 12th October, 1944 to 26th October, 1944. All Canadian officers and ratings are to be given the opportunity to invest in these bonds.

2. The loan consists of an issue of 3 per cent. Government bonds offered at par, dated 1st November, 1944 and maturing on the 1st February, 1962. Interest payable semi-annually on the 1st February and 1st August. Bonds are either bearer or registered, and will be held by the Department of Finance for safe keeping or delivered to any address in Canada. Where special forms are not available, ordinary forms of allotment in favour of "Receiver General of Canada, Seventh Victory Loan" may be used with a memorandum setting forth the purchaser's instructions regarding delivery.

3. Outright purchases must be accompanied by cheque or remittance payable to "Receiver General of Canada Seventh Victory Loan" and forwarded to the Accountant Officer, H.M.C.S. "Niobe." Sterling cheques and remittances require a certificate signed by the purchaser, stating that the amount represents Canadian Naval pay and allowances. Foreign exchange requirements will be arranged by the Accountant Officer, H.M.C.S. "Niobe."

4. Bonds are available in the following denominations:—

Bond in dollars	Sterling Equivalent	Monthly allotment	
		30th November, 1944 to 30th April, 1945, inclusive	
\$	£ s. d.	\$	£ s. d.
50.00	11 3 9	8.40	1 17 7
100.00	22 7 5	16.80	3 15 2
500.00	111 17 2	84.00	18 15 10
1,000.00	223 14 3	168.00	37 11 8

5. All applications and declarations of allotments are to be forwarded to the Accountant Officer, H.M.C.S. "Niobe," c/o C.F.M.O., 45, Renfield Street, Glasgow, C.2.

(a) Applications for outright purchases are to be forwarded in duplicate.

(b) Applications for purchase by allotment are to be forwarded in triplicate.

6. Inquiries should be addressed to the Accountant Officer, H.M.C.S. "Niobe," copy to the Secretary, Canadian Naval Mission Overseas, 10, Haymarket, London, S.W.1.

7. When nominal accounts only are held for personnel borne in the books of an R.C.N. establishment, the application forms are to be forwarded to that establishment for necessary ledger action.

8. Allotments for the purchase of the Sixth Victory Loan Bonds, terms of which are the same as above (paragraph 4) are to be stopped paid on the 31st October, 1944, quoting this order as authority.

9. The time required for Application Forms to be forwarded from a theatre of operations outside Canada for recording and then despatch to the Bank of Canada or Department of Finance, Ottawa, is necessarily long and uncertain but every endeavour is being made to eliminate delays. Normally Outright Purchasers should not expect delivery earlier than four months from date of application, while Instalment Purchasers should not expect to receive delivery in less than three months after completion of the sixth and final payment. This time factor should be clearly understood as it is possible that another loan campaign may be in progress before the Instalment Purchasers are in receipt of delivery advices of the previous one.

## 5409.—War Record Films Produced by Special Services of the U.S. Forces

See AFO 1667/45

(N.T. 5211/44.—12 Oct. 1944.)

With reference to A.F.Os. 5299/43 and 1200/44, film number six in the series of War Record Films produced by the Special Services Branch of the U.S. Forces, entitled "The Battle of China" (serial number G.605), is now available and copies will be issued without demand, as follows:—

	No. of copies	
	35-mm.	16-mm.
Lyness Library ... ..	2	2
Rosyth Library ... ..	2	2
Greenock Library ... ..	2	2
Liverpool Library ... ..	2	2
Chatham Library ... ..	2	2
Devonport Library ... ..	2	2
Portsmouth Library ... ..	2	2
London Library ... ..	1	1
Londonderry Library ... ..	1	1
Colombo Library ... ..	2	2
Trincomalee Library ... ..	2	2
Malta Library ... ..	1	1
F.O.G.M.A. ... ..	1	1
C.-in-C., South Atlantic ... ..	1	1
F.O.C., West Africa ... ..	1	1
F.O.C.R.I.N. ... ..	2	2
F.O.L.E.M. ... ..	1	1
F.O., East Africa ... ..	1	1

2. Application for copies of this film should be made in accordance with A.F.O. 5377/44, but copies should not be retained by any one authority longer than is necessary, so that circulation of copies can be completed as quickly as possible.

(A.F.Os. 5299/43, 1200/44 and 5377/44.)

## 5410.—Slide Strips—Use of in Still Projectors

(D.N.T.—12 Oct. 1944.)

The attention of Commanding Officers, Training Authorities, and V.T.Os., is drawn to an additional use to which still projectors may be put.

2. Hitherto the use of the still projector has been directed entirely towards the showing of instructional film strips of the two types recognised by B.R. 873:—

- the type which summarises a motion film,
- the type which is independent of a film, but is a carefully constructed and self contained teaching aid, with captions provided as a basis for notes.

*Slide Strips for Diagrams or Photographs.*

3. D.N.T. has been aware, however, that the still projector can be used for showing reproductions of isolated diagrams or photographs which will help the instructor.

4. D.N.T. has received requests to undertake the production of this type of "film strip". It has therefore been decided to recognise the use of the still projector for this purpose and the following is a description of the wall diagram and lecture slide strip:—

- it is the type of teaching aid which can be used in lieu of a wall diagram, when—very often—two or three diagrams will serve for a whole period of instruction.
- it is a type of teaching aid which can be of use in some forms of introductory training; for example, very often photographs of new equipment are available before the equipment itself arrives.

*Slide Strips.*

5. The new term "slide strip" will in future be used to indicate this type of film strip.

*Methods of Producing Slide Strips.*

6. Since existing drawings or photographs will be used, it should be possible to produce slide strips with considerably less delay in scripting, drawing, photographing and retouching, than that which is at present unavoidable in the production of film strips.

7. The procedure for the production of such strips is as follows:—

- Photographs, drawings or "copy-photographs" of drawings should be made 12-in. × 9-in. (landscape shape).
- A strip negative should be made on 35-mm. perforated film of the pictures and drawings in the desired order, each frame of the negative to be "cine frame" size, i.e., 24-mm. × 18-mm.
- Projection prints can then be made from the master negative.

*Note.*—Should training Authorities not possess any of the necessary facilities to carry out procedure indicated above these can be supplied by D.N.T., Admiralty. D.N.T. can also arrange general distribution of prints through film libraries if this is required and can arrange for notification of such distribution to be made by A.F.O.

(A.F.Os. 6279/43, 792/44, 1941/44, 2975/44 and 5377/44.)

See AFO 7525/45

## \*5411.—Correspondence Courses—City and Guilds of London Institute—Electrical Engineering Practice

See AFO 4080/45

Cancelled by AFO 4929/46

(N. 22502/44.—12 Oct. 1944.)

Tuition by correspondence for the Intermediate and Final Grade of the above subject is now available from H.M.S. "Vernon (R)."

2. By the Institute's regulations, courses are open to the following:—

Officers ... ..	Lieutenants (T), Cd. Gunners and Gunners (T), Cd. and Wt. Electricians, Schoolmasters.
Ratings ... ..	Electrical Artificers, Electrical Mechanics, Torpedo Gunners Mates, Leading Torpedomen.

Experience has shown that a mathematical standard equivalent to H.E.T. is necessary for Intermediate D.C. and A.C. Education Officers must not forward applications for the courses until they are satisfied that candidates fulfil the above conditions. In cases of doubt an instructor or schoolmaster officer should be consulted.

3. The courses are:—

C.52 A. ... ..	Intermediate Grade D.C.
C.52 B. ... ..	Intermediate Grade A.C.
C.52 C. ... ..	Final Grade Part I. (Advanced Electrical Technology)
C.52 D. ... ..	Final Grade Part II. (Distribution and Utilization of Electrical Energy).

The courses should be taken in the above order, and candidates are advised not to take more than one section at a time.

Detailed syllabuses can be obtained on application to the Headmaster, H.M.S. "Vernon (R)", Roedean, Brighton.

4. *Fees and Examinations.*—Tuition fees will not be charged for the courses, but the examination fees demanded by the Institute should be forwarded with the entry form to the Headmaster, H.M.S. "Vernon (R)", who will make arrangements for the despatch of examination papers and instructions for the conduct of the examination to Commanding Officers.

Commanding Officers will be responsible for the conduct of examinations and for the transmission of worked papers to the Institute.

The examination fees are

C.52 A. 5s. 0d.	C.52 B 5s. 0d.
C.52 C. 6s. 0d.	C.52 D 6s. 0d.

5. *Text Books*.—Candidates are expected to provide themselves with the appropriate text books which are :—

C.52 A	} Electrical Technology by H. Cotton—Pitman & Sons, Ltd. 15s. 0d.
C.52 B	
C.52 C	
C.52 D	} Utilization of Electric Energy by E. Q. Taylor—English Universities Press, Ltd. ... .. 21s. 0d.

6. *Conduct of Course*.—Notes and test papers will be supplied in sections. Candidates are expected to return solutions to the test papers without undue delay, and candidates will not be entered for examinations unless there is evidence of reasonable chance of success. If a candidate needs advice he should consult his Education Officer.

Candidates should inform Headmaster, H.M.S. "Vernon (R)", immediately of any change of address.

7. *Exemption from Professional Examinations*.—Success in the Final Grade obtains exemption from the Electrical Sections of the Associate Membership Examinations of the Institute of Electrical Engineers.

8. *Specimen Entry Form* :—

Official Number.....Name..... Rating.....  
 Ship or Establishment with Full Postal Address.....  
 .....  
 Service Examinations taken, with dates and results obtained.....  
 .....  
 Previous non-Service examination success, if any.....  
 .....  
 Course desired..... Fee forwarded..... shillings  
 Approved by..... Education Officer.

\*5411a.—Broadcast Talk by Admiral Sir James Somerville, G.C.B., K.C.B., D.S.O.  
 (D.P.S. 888/44.—12 Oct. 1944.)

(Included in Notice Boards Issue only.)

\*5412.—R.N. Air Stations, Nairobi and Tanga—Canteen Funds—Disposal  
 (N. 21747/44.—12 Oct. 1944.)

(Included in Notice Boards Issue only.)

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

5413.—Aircraft—Guns—Hispano, 20 mm.—Rods, Cleaning, Chamber  
 (A.S. 1707/44.—12 Oct. 1944.)

A.F.O. 4604/44 introduced cleaning tools for chamber of Hispano 20 mm. guns. The nomenclature of this item and its components has been amended and is as follows :—

2. Rods, cleaning, chamber :—

Brushes, wire, chamber ... ..	R.A.F. Ref. No. 8D/2622
Brushes, wire, chamber neck ... ..	R.A.F. Ref. No. 8D/2620
Mops, chamber ... ..	R.A.F. Ref. No. 8D/2621
Stems, handle and crosspiece assembly ... ..	R.A.F. Ref. No. 8D/2619

3. Allowances to H.M. ships and R.N. air stations will be in the following proportions. Allowance for squadrons as mobile equipment will be promulgated separately.

Service	Brushes 8D/2622	Brushes 8D/2620	Mops 8D/2621	Stems 8D/2619
(1)	(2)	(3)	(4)	(5)
Carrier with one squadron of 2 or 4 cannon aircraft.	8	2	8	4
Carrier with two squadrons of 2 or 4 cannon aircraft.	12	4	12	6
Carrier with three squadrons of 2 or 4 cannon aircraft.	16	6	16	8
R.N. Air Stations with following allowance of Hispano tools and spares as in advance extracts of C.B.(R) 4252/42 :—				
" V " ... ..	8	4	8	4
" W " ... ..	4	2	4	2
" X " ... ..	4	2	4	2
" Y " ... ..	12	4	12	6
H.M.S. " Unicorn " ... ..	12	4	12	6

4. Ships and stations at home should demand on the appropriate R.N. Armament Depot.

5. Quantities of the items are being sent to R.N. Armament Depot at Colombo and ships and air stations in the East n Theatre should demand on that depot.

(A.F.O. 4604/44 is cancelled.)

5414.—Aircraft—Guns, Machine, Browning, 0.50 in.—Control Trigger, Electric  
 (G. 017488/43.—12 Oct. 1944.)

It is possible that, owing to incorrect positioning of the rear mounting lug, which is too near the centre of the unit, some controls, trigger, electric, 12 volt (U.S. Stock No. 1-C.5462) and 12 volt (U.S. Stock No. 1-C.5462/5), referred to in A.P. 1641N, Vols. I and II, as Type G.9, electric firing unit, cannot be assembled securely to the gun side plate, particularly if the slots in the side plate are worn.

2. Units bearing the letter " R " stamped on the forward shoulder next to the adjusting cap have been either correctly manufactured or checked by gauging. These should be correct.

3. All spare units held are to be examined and tested on a selection of guns, and if it is found that they cannot be properly assembled they are to be returned to the appropriate Naval armament depot, quoting the number of this Order. A similar number of new units are to be drawn in replacement.

(A.P. 1641N, Vols. I and II.)

5415.—Ammunition—Fuzes, Primers and Tubes—Primers No. 26, Lots 70 and 78—R.L. Manufacture Required for Examination  
 (A.S./C.I.N.O. 3946/44/B89.—12 Oct. 1944.)

With reference to A.F.O. 4103/44 the primers required have now been obtained and no further action to set aside cartridges containing primers of these lots, nor loose primers, need be taken.

(A.F.O. 4103/44 is cancelled.)

**5416.—Ammunition—Fuzes, Primers and Tubes—Primers, Percussion, No. 26, R.L. Manufacture, Lots 79 and 80, Filled B.R. 10/41—REPORTS**

(A.S. 11640/44/B89.—12 Oct. 1944.)

All primers, percussion, No. 26, Lots 79 and 80, R.L. filled B.R. 10/41, are to be withdrawn from the service. These primers may be found in Q.F. 12-pdr. or Q.F. 4.7-in., Mark V, gun cartridges. Commanding Officers of H.M. ships concerned are to arrange for primers on board, both loose and in ammunition, to be examined at the first opportunity, and any ammunition containing these primers, with any loose ones on board, are to be landed at the nearest naval armament depot and replacement ammunition demanded.

2. These primers are regarded as coming under category (b) C.A.F.O. 991/42.

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

4. R.N.A. depots at home and abroad should examine stocks as soon as possible, and arrange for any cartridges containing primers of this description to be re-primed, and the displaced primers set aside, together with loose primers in store and any landed by H.M. ships. The number set aside is to be reported to Director of Armament Supply (B.89), Bath, on 15th November, 1944.

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

**5417.—Ammunition—Miscellaneous A.A.D. Weapons—Apparatus A.D., Type D. (P.A.C.) and Snowflake Rockets—Weathering**

(A.S./G. 010325/44.—12 Oct. 1944.)

Failures or explosions of the above rockets may possibly be experienced if the rockets have been exposed to the weather for a considerable time. Rockets which have been on board for four months during which period they have been exposed to the weather should be dumped and fresh rockets drawn from the nearest R.N. Armament Depot, in replacement if required.

2. Where it is not possible for these rockets to be lowered into deep water they should be landed. Arrangements for their disposal will then be made by local Armament Supply Officer.

(A.F.O. 5159/41 is cancelled.)

**5418.—Ammunition—20-mm. Oerlikon—Clearing Charges—One-Round Magazine for Use With—Introduction**

(G. 3398/44.—12 Oct. 1944.)

To facilitate the use of clearing charges in Oerlikon guns, a one-round magazine will shortly be available for issue to ships in the proportion of one per Oerlikon gun. The magazine is suitable for use on any mark of gun.

2. Ships should demand their requirements of these magazines from the nearest N.A. depot. Supplies will be sent to all N.A. depots as soon as received from manufacture.

Naval Proportion Book will be amended.

3. *Description.*—The upper part of the magazine has a cover which forms a hand grip.

The lower part of the one-round magazine is similar to the mouthpiece of the ordinary magazine, so that it will fit in place of the latter, and is shipped in precisely the same manner.

Within the magazine is a pusher plate, supported by two helical springs. One end of the pusher plate is shaped to engage the magazine interlock lever when the clearing charge has left the magazine.

4. *Stowage.*—Ready use lockers will be fitted with a container in one corner to hold the one-round magazine, which should be kept stowed with a clearing charge ready in position. A rack holding 6 clearing charges stowed base up will also be provided in the locker. For modifications to the existing lockers see A.F.O. 4735/44.

5. *To load the magazine.*—Place the magazine on its back, press down on the centre of the pusher plate and insert a clearing charge with the base toward the magazine interlock projection, the clearing charge having been previously lightly greased

6. *Greasing of clearing charges.*—Clearing charges stowed in the R.U. locker, whether contained in the one-round magazine or in the rack to be provided, are to be ready greased. In greasing, it is important that only a light coat of grease be applied, and that neither the neck of the case, nor the base, be greased.

7. *Method of use.*—(a) If the gun has been heated by firing more than 240 rounds, 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," and second, thoroughly cool the rear end of the barrel with water. Then cock the gun.

(b) Remove any propellant or foreign matter in the chamber or body of the gun.

(c) Cock the magazine catch lever, set safety catch to "safe," and ship the magazine, engaging the trunnions first, and then press hard down on the rear to trip the catch.

(d) Lay the gun on a safe bearing and elevation, put the safety catch to "fire," and press the trigger.

(e) The charge will clear the bore, but may or may not re-cock the gun, depending on the position of the separated shell in the bore.

(f) If the gun is in the cocked position, remove the one-round magazine, ship a full magazine and continue firing.

(g) If the gun requires re-cocking, re-cock, and inspect the bore before shipping a new magazine.

*Note.*—Mark II clearing charges are suitable for all barrels.

Mark I clearing charges are suitable for British Marks II, III, III\* barrels only.

(On issue of the one-round magazine, paragraphs 2, 3 and 4 of A.F.O. 3399/44 are automatically cancelled.)

(A.F.Os. 3399/44 and 4735/44)

(A.F.O. 4734/44 is cancelled.)

**5419.—Ammunition—Mortars—Bombs, 10-lb., H.E., for B.L., 4-in., Mortars, Mark I**

(AS/G. 03119/43.—12 Oct. 1944.)

With reference to A.F.O. 4245/44, it has been found that the safety cap of the fuze No. 152 or 152A is liable to become damaged and may be difficult to remove. This is being rectified as far as possible at the filling factory.

2. It has also been discovered that damage to augmenting cartridges is likely to occur during transport. Future supplies of bombs will not, therefore, be fitted with augmenting cartridges at the filling factory. Ten of these cartridges will be packed in two cardboard tubes in each box of five bombs. It will be necessary to fit two of these cartridges to each bomb before firing and remove the tie-on instruction label. Should bombs be fitted with cartridges and not subsequently fired the cartridges should be removed and repacked in the cardboard tubes before the bombs are landed and the tie-on instruction label re-secured to the tail fin.

3. It is understood that it is not always realized that cartridges, S.A., 0.303-in., rifle grenade, cordite H, Mark II, are stowed with the bombs. As stated in paragraph 2 of A.F.O. 4245/44, six cartridges are packed in each box of five bombs.

(A.F.O. 4245/44.)

**5420.—Anti-Ship Fire Control—Director Control Towers—Fitting of Weights to Balance Cross Levelling Units—As. and As.**

H.M. Ships "Warspite," "Renown," "Valiant," "Queen Elizabeth," "London," "Berwick," "Devonshire," "Sussex," "Suffolk," "Cumberland," H.M.A.S. "Australia" and "Shropshire," and H.M. Dockyards concerned

(G. 016424/42.—12 Oct. 1944.)

The installation of cross levelling gear involves, in some director control towers, the fitting of balance weights. Drawings have been prepared showing the work necessary and are reproduced in A.F.O. Diagrams Nos. 333/44 (1-4).

2. Ships concerned should insert an item Classification "A\*," in their current list of As. and As. to make and fit these balance weights in accordance with the relevant diagram.

3. The work is to be carried out by dockyards concurrently with the fitting of the cross levelling unit.

4. For H.M. ships "London," "Berwick," "Shropshire," "Devonshire," "Sussex," "Suffolk," "Cumberland," and H.M.A.S. "Australia" it will be necessary to provide compensation for all additional topweight involved. Ships concerned should, therefore, submit proposals for reducing topweight accordingly.

#### 5421.—Guns—Q.F., 2-pdr., Mark VIII W—Modification to Prevent Leakage

(A.S. 03159/44.—12 Oct. 1944.)

The following modification is approved :—

<i>Gun</i> ... ..	Q.F., 2-pdr., Mark VIII W.	
<i>Part affected</i> ... ..	Stuffing box.	
<i>Purpose</i> ... ..	To prevent leakage between stuffing box and cap water-jacket.	
<i>Nature of modification</i> ... ..	Split brass ring, 0·1 in. thick, to be sweated to undercut portion of stuffing box and joint made with a cord grummet.	
<i>Drawing</i> ... ..	A.F.O. Diagram 341/44.	
<i>New parts required</i> ... ..	1 split brass ring, 0·1 in. thick 1 cord grummet	} to be made locally.
<i>By whom to be done</i> ... ..	Staffs of H.M. ships, bases and R.N.A. depots.	
<i>Degree of urgency</i> ... ..	As necessary.	

#### 5422.—Guns—20-m.m Oerlikon—Barrel, Springs, Mark II and Barrel Spring Casing, Mark III—Introduction and Assembly

(A.S. 7986/44.—12 Oct. 1944.)

A new type of Oerlikon barrel spring (Mark II) of round section wire will shortly be introduced and will replace springs of existing type (Mark I), which are of square section wire, as the latter become unserviceable. The Mark II springs have longer life than the Mark I and give smoother functioning of the gun. The spare Mark I barrel spring available in ships or depots are to be used up first before Mark II barrel springs are used.

2. The Mark II barrel spring assembly consists of the following :—

- Spring, barrel, front, Mark II
- Spring, barrel, rear, Mark II
- Spacer, centre, barrel spring, Mark II
- Pilot, rear, barrel spring

and A.F.O. P. series diagram 14/43 (published with A.F.O. P.680/43) shows the difference between the Mark I and II barrel springs and the method of assembly. Mark II barrel springs of American manufacture have the first three coils at one end painted yellow. These springs can be assembled either way round, but must be in their correct relative positions, *i.e.*, front short spring and rear long spring. The Mark II spring pins for the breech bar bolts were introduced by A.F.O. 2705/44. The Mark III pin spring is introduced by A.F.O. 2605/44, and is not referred to in the P. series A.F.O. quoted.

A copy of the P. series diagram will be issued by R.N. Armament Depots with each Mark II barrel spring assembly.

It will usually be found necessary to have the gun secured in the mounting to assemble the Mark II barrel springs in order to get sufficient purchase on the springs to allow the cotter to be entered. If the cradle of the mounting has not been modified by A.F.O. 2705/44 it will not be possible to remove Mark I spring pins without dismantling the gun. Therefore, when fitting Mark II barrel spring it may be necessary to proceed as follows :—

Remove gun from mounting, dismantle Mark I spring pins, breech bars, barrel spring case and barrel spring assembly. Remount the gun, fit Mark II barrel spring assembly and then reassemble barrel spring case and breech bars with Mark II or Mark III spring pins.

3. All concerned should carefully note the following when assembling Mark II barrel springs, particularly when changing Mark I barrel springs for Mark II :—

Mark II barrel springs *must*—

- (a) *not* be mixed with Mark I springs on the same gun
- (b) *not* be assembled with the short spring to the rear
- (c) *not* be assembled with the centre barrel spring sleeve. This is suitable only for Mark I barrel springs.
- (d) *not* be assembled without the centre spacer and rear pilot in position as shown in the diagram.

#### Supply

4. Initially all ships carrying Oerlikon guns will be supplied with spare Mark II barrel springs and associated items as follows, irrespective of whether any spare Mark I barrel springs are on board or not :—

Spring, barrel, front, Mark II	... ..	1	} Per six or less guns mounted
Spring, barrel, rear, Mark II	... ..	1	
Spacer	... ..	1	
Pilot	... ..	1	
Pins, spring bolt securing case, barrel spring and cotter, Mark II or Mark III	... ..	2	

ships should demand from nearest R.N. Armament Depot. Depots will issue these six items wired together in sets.

5. Later, when supplies permit, a further A.F.O. will be issued authorizing ships to complete to the full allowance of one spare set of barrel springs, etc., per gun

6. So that ships will have no difficulty when replacing defective barrel springs, depots must ensure :—

(a) When issuing new outfits of spare parts—

- (i) that the outfits contain either two Mark I springs (*i.e.*, front and rear) and a centre sleeve or two Mark II springs (*i.e.*, front and rear), a spacer and a pilot.
- (ii) that the spare spring pins in the outfits are Mark II or Mark III Pattern (Mark III for guns in Mark V and VC mountings *vide* A.F.O. 2605/44), when Mark II barrel springs are included in the outfit.

(b) When meeting ships' demands.

- (i) that a complete set as in paragraph 4 is supplied in satisfaction of any demand where doubt exists as to exactly what is required.

7. *Replacing Barrel Springs.*—(a) *Mark I Barrel Springs (Square Section).*—If it is found that there is no initial compression on the barrel springs when the gun is in the fired position (recoiling parts fully forward) ; a complete new set of Mark I springs should be fitted if available, otherwise Mark II.

(b) Broken Mark I springs should be replaced with the appropriate Mark I spring if available ; if not, a complete set of Mark II springs should be fitted.

(c) *Broken Mark II Springs.*—If one Mark II barrel spring on a gun fractures both (*i.e.*, F and R) springs should be replaced to prevent overstressing the partly used spring.

8. Barrel springs, other than broken springs, exchanged under paragraph 7, should be mutilated (*e.g.* by chisel) and returned as unserviceable. This is necessary to enable R.N. Armament Depots to distinguish springs which are unfit for further use from those which can be used again.

9. R.N. Armament Depots should comply with the rules in paragraph 7 when guns are in hand for overhaul. It is not at present possible to specify more precise limits of serviceability for Oerlikon barrel springs, and springs returned from service are to be accepted as serviceable on visual examination provided they are not mutilated as in paragraph 8 or are not deformed or otherwise damaged.

10. A barrel spring casing, Mark III, has been introduced for Oerlikon guns and is similar to U.S. casing O.E. 1105. A front barrel spring sleeve must not be fitted when Mark I or Mark II barrel springs are assembled with O.E. 1105 or Mark III barrel spring casings, as these casings are shaped at the front end to simulate the front sleeve. This method of assembly is shown in A.F.O. P. series Diagram 14/43, published with A.F.O. P.680/43.

(A.F.Os. 2605/44, 2705/44, and A.F.O. P.680/43.)

(A.F.O. 2606/44 is cancelled.)

**5423.—Guns—20-mm. Oerlikon—Shoulder Rests, Mark III—Restricted Use**

(A.S./G. 4724/44.—12 Oct. 1944.)

When Type VI or Mark XIV gyro sights are fitted to 20-mm. Oerlikon guns with Mark III shoulder rests, the sight bracket fouls the pintle of the shoulder rest.

2. Pending further instructions, R.N.A. depots should supply Mark I shoulder rests and handgrips for guns being fitted with gyro sights.

**5424.—Gun Mountings—Quotation of Full Particulars in Demands on Defect Lists for Mountings or Spares***Ships, Dockyards, Repair Authorities and Overseers concerned*

(G. 4801/44.—12 Oct. 1944.)

Difficulty is frequently experienced and delay caused in meeting demands for gun mounting parts due to insufficient or incorrect information being supplied.

It is essential that demands quote the fullest particulars of the size and mark of the mounting and where available the drawing and item number of the part concerned. If it will assist in recognition, reference should be made to the handbook of the equipment or to B.R. 226—Establishment of Spare Parts, Tools and Accessories for Transferable Gun Mountings.

2. It is important that the mark of the gun is not confused with that of the mounting. An example of the possible confusion that may be caused by misquotation—

O.Q.F. 4-in., *Mark XIX gun* on *Mark XXIII mounting*.

O.Q.F., 4-in., *Mark XVI gun* on *Mark XIX mounting*.

3. Demands for Vote 9 gun, gun mechanism parts or ancillaries are to be forwarded to the nearest Naval Armament Depot and not to M.E.D. or refitting authorities.

(B.R. 226.)

**5425.—Gun Mountings—4-in., Twin, Mark XIX—Sight and Elevation Receiver Drive Pinions***Ships, Dockyards and Repair Establishments concerned*

(G. 4870/44.—12 Oct. 1944.)

With reference to A.F.O. 2882/42 authorizing the fitting of stiffening to the above mountings, paragraph 6 (a) states that the depth of mesh of the sight and elevation receiver drive pinion is to be examined at the same time, and if necessary oversize pinions are to be made and fitted.

2. To overcome the difficulty of manufacturing these pinions in localities where suitable facilities are not available, arrangements have been made to keep a stock of oversize sight and elevation receiver drive pinions of selected sizes at the Admiralty Gun Mounting Store, Coventry.

3. The oversize pinions, in pairs, have been manufactured to cater for increases in distance between the centre line of gun trunnions and centre line of pinion shaft of 0.1 in., 0.08 in., 0.06 in., 0.04 in., 0.02 in. and 0.01 in., the original plan

dimension being 18.375 in. The following identification lettering has been adopted to differentiate between the various sizes:—

- 0.1 in. increase of distance between C/Ls. pinions marked A.
- 0.08 in. increase of distance between C/Ls. pinions marked B.
- 0.06 in. increase of distance between C/Ls. pinions marked C.
- 0.04 in. increase of distance between C/Ls. pinions marked D.
- 0.02 in. increase of distance between C/Ls. pinions marked E.
- 0.01 in. increase of distance between C/Ls. pinions marked F.

4. The table indicates the size of oversize pinion required to meet selected possible carriage distortions:—

Distance between C/L Trunnion and C/L Sight Pinion	Clearance between tip of pinion teeth and bottom of rack	Oversize Pinion required	Overall diameter of oversize Pinion
in.	in.		in.
18.475	0.110	A	2.075
18.455	0.090	B	2.035
18.435	0.070	C	1.995
18.415	0.050	D	1.955
18.395	0.030	E	1.915
18.385	0.020	F	1.895
18.375	0.010	Normal	1.875

5. When it is considered necessary to fit an oversize pinion for either sight or elevation receiver drive in accordance with paragraph 6 (a) of A.F.O. 2882/42, the repair establishment concerned should demand an oversize pinion of the nearest stock size from the A.G.M.O., Gun Mounting Store, Wharf Road, Smith Street, Coventry, quoting the registered number of the mounting for which it is required.

6. It should be noted that when considering the oversize pinion required, it is preferable to measure the distance between centres, where this can be arranged, than to rely on "leads" of the clearance at the bottom of the rack teeth in view of the possibility of the teeth having been damaged.

7. It must be clearly understood that a certain amount of fitting work will be necessary when the oversize pinions are received, as they have been designed to meet specific cases only and are not intended to be suitable for immediate installation and use.

8. With a view to reducing the number of local purchase orders being placed with the sight manufacturers, arrangements have also been made to keep a small stock of the following items of sight details for these mountings at the Gun Mounting Store, Coventry, in addition to the oversize pinions:—

- (a) Normal standard sight pinions (N.10939/2 and 3).
- (b) Sight arcs (N.5265).
- (c) Sight pinion shafts (N.10939/1).
- (d) Ball bearings for sight pinion shaft (N.10939/4).
- (e) Worm wheel segments (N.5259A/1).

9. Establishments requiring any of the above items for repair of sights should demand them direct from Coventry. It should be noted that the stocks of all the above items, including the oversize pinions, are not large and items should not be obtained unless actually required. Local stocks are not to be accumulated at the expense of Coventry.

10. When demanding any of the above items, the registered number of the mounting for which they are required should be stated.

(A.F.O. 2882/42.)

(A.F.O. 5892/42 is cancelled.)

**5426.—Rangefinders—Combined Air-disturbing, Desiccating and Window-cleaning Units, Types Q.G., Marks I, II and IV.—Supply of Lissapol Powder**

*Ships and bases concerned*

(N.S. 16537/44.—12 Oct. 1944.)

A small quantity of Lissapol powder, sufficient for approximately one year is supplied by Messrs. Barr & Stroud with each Q.G., Marks I, II and IV set for use in the Q.H.I. solution tank.

2. In order to meet demands from ships for replenishments, arrangements are being made to maintain a stock of twenty— $\frac{1}{2}$ -lb. tins of Lissapol powder at each of the following bases :—

Portsmouth, Chatham, Devonport, Rosyth, Gibraltar, Malta,  
Alexandria, Simonstown, Colombo and Sydney.

3. Purchase to meet this provision has been arranged under contract CP.4/89880/44, dated 16th August, 1944, Messrs. Barr & Stroud, Ltd.

4. This item will be dealt with under Subhead F, Item 1B and should be entered on page 23, Part III of the Demand Form D.162.

**5427.—Small Arms—Pistols, Revolver, 0·38-in.—Personal Issue to all Aircrews of First Line Operational Squadrons**

(A.S./A.W.D. 1461/43.—12 Oct. 1944.)

Approval is given for the personal issue of a pistol, revolver, 0·38-in., to air crews (officers and ratings) of First Line Operational Squadrons.

2. The allowance of ammunition will be 60 rounds per pistol.

3. No cleaning gear will be issued with these pistols. Carrier-borne squadrons should obtain from ship's allowances, and disembarked squadrons from station sources.

4. A thigh-strap attachment has been introduced for use with the holster issued with these pistols; the nomenclature of the attachment being—

Web equipment, Pattern 1937: Strap, thigh, pistol case, Naval.

5. The complete equipment for the pistol consists of the normal pistol case (holster), strap attachment and ammunition pouch, and is worn with the standard Pattern 1937 waist belt. The holster can be worn either in the usual position on the waist belt, or suspended on the straps from the belt and secured against the thigh.

6. Aircraft trials have shown the ability to carry the holster in two different positions to be a real advantage.

7. Pistol, holster, ammunition pouch, belt and thigh strap are to be charged as items of personal equipment (the procedure in A.F.O. 807/44 being followed), and are to be issued to existing members of air crews; or on appointment—

- (a) to operational squadrons at home or abroad; or  
(b) to a pool squadron abroad.

8. Pistols, ammunition, and web equipment should be demanded of the nearest R.N. Armament Depot.

(A.F.O. 807/44.)

**5428.—Small Arms—Allowances for Aircraft Carriers**

(A.S./G.D. 0520/44.—12 Oct. 1944.)

The allowance of rifles, Lanchester machine carbines, pistols, revolver, and guns, Lewis, 0·303-in., to F.A.A. squadrons, as part of the squadron mobile equipment for the defence of R.N. air stations, authorized by C.A.F.O. 1799/43, is cancelled.

2. In view of this decision, the allowances of small arms to aircraft carriers have been revised and will be standardized according to the class of carrier, as follows :—

Item	Class		
	Fleet Carriers	Light Fleet Carriers	Escort Carriers
Pistols, revolver, 0·38-in. ... ..	150	100	60
Rifles, No. 1 or No. 4 (with bayonets, scabbards, oil-bottles and pull-throughs).	120	80	60
Carbines, machine, Lanchester, 9 mm. (with bayonets No. 1, scabbards, oil-bottles and pull-throughs).	120	80	60
Guns, Lewis, 0·303-in., with mounts, field ... ..	20	12	10

The allowances of ammunition, magazines, spare parts and accessories for these weapons, and of web equipment, are revised proportionately.

The above quantities are ships' allowances and the pistols, revolver, are *not* to be utilized to equip air crews, to whom pistols are issued on a personal basis before embarkation.

3. Requirements for the defence of Naval airfields, established at short notice, will be met primarily by the formation of operational pools under the control of the appropriate Commander-in-Chief, or other authority, but, in addition, the whole of the carrier allowance of small arms should be made available for augmenting the shore defences as requisite.

4. Carrier-borne squadrons holding stores under C.A.F.O. 1799/43 should merge them with ships' outfits, which should then be adjusted accordingly, demands to complete to the revised allowances being passed to the nearest R.N. Armament Depot. Disembarked squadrons should return such stores to the nearest R.N. Armament Depot forthwith.

5. Proportion Book of Naval Armament Stores will be amended in due course.

(A.F.Os. 2854/43 and 2491/44 are amended accordingly.)

(C.A.F.O. 1799/43 is cancelled.)

**5429.—Training—Instructional Appliances—Battle Teachers—Improved Thunder-flashes and Chinese Crackers**

*Gunnery Schools, A.A. Ranges and Training Establishments fitted with Battle Teachers*  
(A.S./G. 06958/44.—12 Oct. 1944.)

Thunderflashes, large, Mark I, and Chinese Crackers are in course of introduction for use with A.A. and L.A. Battle Teachers and demands covering requirements should be made on nearest Royal Naval Armament Depot by Establishments concerned.

2. Approved annual allowance is 3,000 per battle teacher.

3. Training establishments in possession of loading teachers which are fitted up to conform to the general idea of battle teachers, may also demand these stores from nearest Naval Armament Depot. Demands should be restricted to cover actual requirements.

4. These stores will not be supplied to H.M. ships.

**5430.—Training—Instructional Appliances—Cinema Laying and Training Teacher**

(G.D. 0146/44.—12 Oct. 1944.)

A.F.O. 2750/44, Appendix I, is to be amended as follows :—

Delete "Captain S7 Rothesay  
H.M.S. 'Calliope'"

Add "H.M.A.S. 'Flinders' Naval Depot  
H.M.I.S. 'Himalaya', Karachi".

(A.F.O. 2750/44.)

**5431.—Torpedoes—22·4 U.S.A.—Exercise Heads, Mark 26—Air Releasing Mechanism, Mark 3**

(T.09202/44.—12 Oct. 1944.)

In order to increase the rate of air-flow into the exercise head upon operation of the air releasing mechanisms, it has been decided to set the mechanism to function at a pressure of at least 600 lbs. per sq. in., and to provide a larger diameter air passage.

2. These modifications will ensure that a large volume of air is available for the blowing of the exercise head should the latter have been damaged and become no longer airtight, and also provide that the head will be blown whilst the air from the airflask is still discharging through the combustion pot.

3. The procedure to be adopted in carrying out the necessary modifications is as follows:—

- (a) Disassemble the air releasing mechanism, Mark 3.
- (b) Enlarge the air passage hole shown on the attached diagram to 0·128 dia. using a No. 30 drill.
- (c) Remove burrs from the hole and clean the mechanism to remove all trace of dirt or drillings, etc.
- (d) Re-assemble the mechanism and set it to open at 600 lbs. per sq. in. pressure.

*Note.*—When enlarging the air passage hole, extreme care must be taken to ensure that the lapped bore of the valve guide is not distorted or damaged in any way as such distortion would result in leakage around the valve and destroy the self-cocking feature.

4. The work is to be carried out on all 22·4 U.S.A., Mark 26 exercise heads fitted with Mark 13 air releasing mechanism already issued to H.M. ships, etc., by ships' staff as opportunity offers. New heads will have the modification already carried out before issue.

**5432.—Torpedo Stores—Allowances**

*Coastal Force Craft*

(A.S. 11371/44.—12 Oct. 1944.)

It has been approved for the allowances of torpedo tools carried by M.T.Bs. to be standardized.

2. The following torpedo outfit stores will, therefore, be allowed to Coastal Force craft, as indicated, viz. :—

*C.F.—Craft armed with 21-in. Marks IV–V or VIII–VIII\*\* torpedoes :—*

Item.	Allowance.	Remarks.
Eyes, withdrawing torpedoes, St. No. T.303 ...	1 per boat	—
Bags, canvas, complete with adjusting tools, 21 in., Marks IV–V, VIII–VIII** (M.T.Bs.), containing :—	1 per boat	—
Spanners, box, air stop valve, St. No. 29A	2*	* These items will be accounted for as part of the contents of the bag, but on service one of each item is to be stowed in the M.T.B's tube tool box.
Tools, operating depth setting gear, St. No. T.88.	2*	
Spanners, box, adjusting reducer valve, St. No. 161B.	1	
Spanners, box, adjusting range wheels, etc., St. No. 25A.	1	
Spanners, box, stuffing gland air stop valve, St. No. 1286B.	1	
Spanners, claw, for pistols, T.78 type, St. No. 35.	1	

*C.F. Craft, armed with 18-in., Mks. XII and XV Torpedoes*

Item.	Allowance.	Remarks.
Bags, canvas, complete with adjusting tools, 18 in., Mks. XII and XV, M.T.B.T., containing :—	1 per boat	—
Spanners, box, air stop valve, St. No. 29A	2*	* These items will be accounted for as part of the contents of the bag, but on each service one of each item is to be stowed in the M.T.B's tube tool box.
Spanners, box, adjusting range wheels, etc., St. No. 25A.	1	
Spanners, box, stuffing gland air stop valve, St. No. 1286B.	1	
Tools, operating depth setting gear, St. No. T.88.	2*	
Tools, extending cocking springs, starting and delay valves, St. No. 1396.	1	

3. The following items will in future be allowed to Coastal Force bases in the proportions shown, viz. :—

Item.	Allowance.
Clamps, St. No. 353B ... ..	2 for each 21 in., Marks IV–V torpedo maintained.
Clamps, St. No. 8203 ... ..	2 for each 21 in., Mark VIII type torpedo maintained.
Clamps, St. No. 680A ... ..	2 for each 18 in., Marks XII and XV type torpedo maintained.
Bars, launching-in, torpedoes, 21 in., Marks IV–IV*, M.T.B.T., V.M.T.B.T. and Mark VIII**, St. No. T.260C.	<i>C.F. bases at home with torpedo facilities—</i> 4 of each item.
Bars, launching-in, torpedoes, 18 in., Marks XII and XV, St. No. T.397.	<i>C.F. bases abroad—</i> 6 of each item.
Pieces, distance (bars, St. No. T.397), St. No. T.398.	
Sleeves, for bars (St. No. T.397), St. No. T.399	

4. Clamps, locking propellers, St. Nos. 353B, 8203 and 680A, have hitherto been supplied direct to individual M.T.Bs. Coastal Force bases are now to arrange for appropriate clamps to be issued on loan to individual M.T.Bs. as and when torpedoes are loaded. The clamps are to be retained on board the M.T.Bs. for such time as the torpedoes are carried.

5. Coastal Force craft and bases are to adjust to the revised allowances from the nearest torpedo depot.

6. Labels of bags and torpedo store accounts are to be amended as necessary. (*A.F.Os. 1823/43, 4722/43, 5493/43, 194/44 and 2880/44 are cancelled.*)

**5433.—Torpedo Stores—Boxes, tools and spare gear for Recorders D. and R., Mark III—Additions to contents**

(A.S. 13545/42.—12 Oct. 1944.)

The following items, viz. :—

Pawls, main winding ratchet, St. No. 1984, Screws, securing, St. No. 4227, will be added to the contents of "Boxes, tools and spare gear for Recorders D and R, Mark III, for Cruisers" and "Boxes, tools and spare gear for Recorders D. and R, Mark III, for Depot Ships, Aircraft Carriers, etc." in the proportion of 2 pawls per box and 12 screws per box.

2. Ships, etc., concerned are to complete boxes on board to the new allowances from the nearest torpedo depot.

3. Labels of boxes and torpedo store accounts are to be amended as necessary.

**5434.—Automatic Emergency Lanterns, American Type**

*Ships fitted with American Automatic Emergency Lanterns*

(T. 1423/44.—12 Oct. 1944.)

Experience has shown that American automatic emergency lanterns may fail to operate when required due to the plug at the base of the lantern becoming detached under shock.



2. Commanding Officers are to arrange for a suitable locking device to be fitted to all American automatic emergency lanterns. One method of accomplishing this is shown for guidance in A.F.O. Diagram 344/44. Other methods may be employed if equally satisfactory.

3. Where the work is beyond the capacity of ship's staff an item is to be inserted in the defect list to cover the work involved.

#### 5435.—Dorman 8 V.R.M. Engines Fitted in 30-ft. Fast Motor Boats—Modification to Heater Plug Circuits

(D. 14155/44.—12 Oct. 1944.)

On Dorman 8 V.R.M. engines in motor boat No. 4400 and later 30-ft. fast motor boats the heater plug circuit will be slightly different from that previously fitted by the engine makers.

2. The earlier and the revised circuits are shown in A.F.O. Diagram No. 334/44 as figures 1 and 2 respectively.

3. In service the heater plugs become carbonized and tracking from the heater element to the cylinder across the plug insulation may occur. If, with the circuit arrangement as figure 1, the tracking should take place across a plug connected in the positive lead and also across one connected in the negative lead, then the battery circuit is completed and a gradual discharge from the battery occurs.

4. With the circuit arrangement as figure 2 the solenoid switches are connected between the battery and the resistance. The plug circuit is, in consequence, isolated from the battery when the solenoid switch is "open".

5. On boats fitted as figure 1 the circuit is to be modified to conform with figure 2. The work is to be carried out by ship's staff.

6. The foregoing should not be regarded as superseding the need for periodic inspection and cleaning of the heater plugs.

#### 5436.—Safe Underwater Range for Divers in Flexible Self-contained Suits

(T. 1800/44.—12 Oct. 1944.)

A diver wearing the standard deep-sea diving gear and helmet, without special soft "crash helmet", is liable to head injuries if the peak pressure of an underwater explosion reaches 50 lb. per square inch. Experiments have shown, however, that individuals can tolerate a peak pressure up to 225 lb. per square inch, without injury, when wearing flexible self-contained diving gear which does not incorporate a rigid helmet.

2. A peak pressure of 225 lb. per square inch from a near-by underwater explosion may cause a moderate amount of discomfort to the individual, but he will not suffer any serious injury. If, in addition to the flexible diving gear, he also wears a kapok protective jacket he will not experience any pain.

3. The following table gives the safe distances from various charges in 20 to 30 ft. of water for a diver working in a flexible self-contained suit and wearing a kapok protective jacket:—

Weight of Charge	1 lb.	125 lb.	1,000 lb.	1 ton
	ft.	ft.	ft.	ft.
P.E.2 ... ..	60	300	600	785
T.N.T. ... ..				
Amatol ... ..				
P.B.G. ... ..				
Minol II ... ..	64	318	636	833
Torpex II ... ..	71	354	708	927
Hexanite ... ..				
R.D.X/T.N.T. ... ..				
	65	324	648	848

For depths greater than 30 ft. the above distances should be increased by not less than 20 per cent. for every 5 ft. over 30 ft.

#### 5437.—American Magnetic Compasses—Replacement of Defective Instruments

(C.D. 527/44.—12 Oct. 1944.)

A small stock of American magnetic compasses is maintained by N.S.O., Slough, for replacement of defective instruments. No stock of spare American binnacles is held and where binnacles are defective or where compasses are unobtainable the complete equipment should be replaced by British types. The following rules are given for the guidance of ships and yards—

- (a) U.S. Navy No. 1 compass outfits (7½-in. card) should be replaced, when the binnacle or the compass is defective and a new one cannot be obtained, by compass, Pattern 0195A in binnacle, Pattern 190, or, in those vessels which are not fitted with D.G. coils, in binnacle, Pattern 196Z (or —Z3), if available. The compass corrector coils are embodied as part of binnacle, Pattern 190, and can be controlled either by Admiralty resistance boxes, Pattern 866A or 866B, or by the American type of resistance box.
- (b) Where U.S. Navy No. 2 compass (6¼-in. card) is fitted in a dome-head binnacle on a plywood base as a steering compass, No. 3 compass (5-in. card) in domehead binnacle should be supplied and fitted in lieu on the same base. Plywood bases are also available at Slough if required. Should no compass be available the entire outfit should be exchanged for compass, Pattern 0195A, in binnacle, Pattern 196Z (or —Z3) or 190 as above, provided there is sufficient space in wheelhouse for this larger fitting.
- (c) When it is necessary to replace U.S. Navy No. 3 compasses (5-in. card) by British patterns, the pattern used should be compass, Pattern 0919, on baseboard, Pattern 917.
- (d) U.S. mounted compass (sometimes referred to as U.S. Navy No. 5 compass, Mark I), Pioneer and John Hand compasses fitted in landing craft should be replaced when defective by compasses, Pattern 01151A.
- (e) American type azimuth circles fitted to U.S. Navy No. 1 compasses can be replaced by Pattern 6703. To do this it is necessary to remove the retaining toes from the British circle and to accept the fact that the figures of the card will appear inverted in the prism.

2. The complete outfits quoted above consist of:—

(a) and (b)—

Compass, Pattern 0195A.

Binnacle, Pattern 196Z (or —Z3) or 190.

Azimuth circle, Pattern 1950, or steering prism, Pattern 1951.

Spheres, Pattern 404, 405, 406, 407, 408 as required. In general spheres fitted should be 1-in. diameter smaller than the American spheres previously fitted on the U.S. Navy No. 1 binnacle.

Flinders bar, Pattern 45.

Binnacle lamp, Pattern 12.

Electric light and dimmer fitting, Pattern 211, 212 or 213, according to whether voltage of supply to binnacle illumination is 20, 110 or 220 volts respectively.

Magnets, Pattern 58—7 in No.

Magnets, Pattern 59—15 in No.

Magnets, Pattern 60—4 in No.

(c)—

Compass, Pattern 0919.

Baseboard, Pattern 917.

Spheres, Pattern 404.

Electric light fitting, Pattern 1153B.

Corrector box, Pattern 1135.

Magnets, Pattern 64—4 in No.

Magnets, Pattern 67—9 in No.

Magnets, Pattern 68—4 in No.

(d)—

Compass, Pattern 01151A.  
 Corrector box, Pattern 1135.  
 Azimuth circle, Pattern 1152.  
 Electric light fitting, Pattern 1153B.  
 Magnets, Pattern 67—9 in No.  
 Magnets, Pattern 68—4 in No.

3. Where spheres of a different size are required for American No. 2 compasses, Pattern 175 or 176 may be issued in lieu except when sphere brackets are of the screwed type.

5438.—Cancelled.

## 5439.—Sextants—Allowance

U.S. Built Ships

(N.S. 27807/44.—12 Oct. 1944.)

The following classes of U.S. built ships are to be allowed one sextant of pattern as shown. The U.S. type sextants supplied in accordance with the U.S. Allowance Lists may be retained as spare and for instructional purposes:—

Escort Carriers	...	...	...	} Pattern 491M or V.
"Captain" Class Frigates	...	...	...	
"Colony" Class Frigates	...	...	...	
Repair Ships	...	...	...	
"Kil" Class A/S vessels (ex B.E.Cs.)	...	...	...	} Pattern 701V or M.
Minesweepers (except B.Y.M.S.)	...	...	...	
Rescue Tugs (Ocean going)	...	...	...	
L.S.T. (2)	...	...	...	
L.S.E.	...	...	...	
F.D.T. "13" and "217"	...	...	...	
L.S.D.	...	...	...	
Boom Defence Vessels	...	...	...	
Salvage Vessels	...	...	...	

2. Demands should be forwarded accordingly to storing yards or depots.

(Captain (D) Belfasts' 29 Apr. 1944, No. 1/406/110, paragraph 1.)

## 5440.—Boiler Tubes, etc.

H.M. ships "Loch Dunvegan", "Myngs", "Zephyr" and H.M.C. ships  
 "Petrolia" and "Tillsonburg".

(N.S./P.9399/44.—12 Oct. 1944.)

H.M.S. "Loch Dunvegan" (P.9399/44)

Type and No. of Boilers ... Admiralty Water Tube ... 2 No.  
 Total No. of Tubes fitted ... Generator ... 4160 No.

Row.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.D.G.	ft. in.		
A	1 1/2	116	9 3 1/2	188	} All tubes are bent.
B	1 1/2	116	9 2 1/4	184	
C	1 1/2	116	9 1 1/4	244	
D	1 1/2	116	9 0 3/4	240	
E	1 1/2	116	9 0 1/8	244	
F	1	104	9 3	280	
G	1	104	9 3 1/4	276	
H	1	104	9 3 1/8	280	
J	1	104	9 4 1/4	276	
K	1	104	9 6 1/2	280	
L	1	104	9 7 1/8	276	
M	1	104	9 9 3/8	280	
N	1	104	9 11 1/4	276	
O	1	104	10 1 3/8	280	
P	1	104	10 3 7/8	276	
Q	1	104	10 7	280	

H.M. Ships "Myngs" and "Zephyr" (P.13947/44)

Type and No. of Boilers ... Admiralty 3 drum fitted with 2 No. Melesco superheaters.

Total No. of Tubes fitted ... Generator ... 8996 No.  
 Melesco Superheater Tubes ... 1008 No.

Row.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.D.G.	ft. in.		
A	1 3/4	128	10 6 1/2	288	} All tubes are bent.
B	1 3/4	128	10 2 15/16	284	
C	1 1/2	116	10 0 1/2	444	
D	1 1/2	116	9 10 5/8	440	
E	1 1/2	116	9 9 1/4	444	
E.1	1 1/2	116	9 7 5/8	16	
F	1	104	9 6 3/8	500	
G	1	104	9 5 11/16	496	
H	1	104	9 5 7/16	492	
J	1	104	9 5 7/16	488	
K	1	104	9 5 7/16	484	
L	1	104	9 5 11/16	480	
M	1	104	9 6 2/16	476	
N	1	104	9 7 3/8	472	
O	1	104	9 8 7/16	468	
P	1	104	9 9 3/16	464	
Q	1	104	9 11	460	
R	1	104	10 0 7/16	456	
S	1	104	10 2 1/4	452	
T	1	104	10 4 7/16	448	
U	1	104	10 7	444	

## Melesco Superheater Tubes

Element (Flat) 17 and 19

Pipe.	Ext. Diam.	Thickness.	Ordered Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.G.	ft. in.		
1	1 1/2	10	15 8 1/2	80	} All tubes are bent.
2	1 1/2	10	14 11	80	
3	1 1/2	10	14 11	80	
4	1 1/2	10	15 8 1/2	80	
5	1 1/2	9	3 0	80	
6	1 1/2	9	2 10	80	

## Element (Flat) 18 and 20

Pipe.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.G.	ft. in.		
1	1 1/2	10	15 8 1/2	80	} All tubes are bent.
2	1 1/2	10	14 11	80	
3	1 1/2	10	14 11	80	
4	1 1/2	10	15 8 1/2	80	
5	1 1/2	9	2 8 1/2	80	
6	1 1/2	9	2 4 1/2	80	

## Element (Box) 21 and 23

Pipe.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.G.	ft. in.		
1	1 $\frac{1}{2}$	10	14 10 $\frac{1}{4}$	4	} All tubes are bent.
2	1 $\frac{1}{2}$	10	14 10 $\frac{1}{4}$	4	
3	1 $\frac{1}{2}$	10	15 7 $\frac{1}{4}$	4	
4	1 $\frac{1}{2}$	10	15 7 $\frac{1}{4}$	4	
5	1 $\frac{1}{2}$	9	3 9 $\frac{1}{2}$	4	
6	1 $\frac{1}{2}$	9	2 10 $\frac{1}{4}$	4	

## Element (Box) 22 and 24

Pipe.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.G.	ft. in.		
1	1 $\frac{3}{8}$	10	15 7 $\frac{1}{4}$	4	} All tubes are bent.
2	1 $\frac{3}{8}$	10	15 7 $\frac{1}{4}$	4	
3	1 $\frac{3}{8}$	10	14 10 $\frac{1}{4}$	4	
4	1 $\frac{3}{8}$	10	14 10 $\frac{1}{4}$	4	
5	1 $\frac{3}{8}$	9	2 9 $\frac{3}{4}$	4	
6	1 $\frac{3}{8}$	9	3 1 $\frac{1}{4}$	4	

## H.M.C.S. "Petrolia" (P.11859/44)

Type and No. of Boilers ... Admiralty 3 drum ... 2 No.  
Total No. of Tubes fitted ... Generator ... 2908 No.

Row.	Ext. Diam.	Thickness.	Fitted Length.	Total No. of Tubes fitted.	Remarks.
	in.	W.D.G.	ft. in.		
A	1 $\frac{1}{2}$	116	7 9 $\frac{11}{16}$	128	} All tubes are bent.
B	1 $\frac{1}{2}$	116	7 8 $\frac{3}{16}$	128	
C	1 $\frac{1}{2}$	116	7 6 $\frac{3}{16}$	172	
D	1 $\frac{1}{2}$	116	7 6 $\frac{7}{16}$	172	
E	1 $\frac{1}{2}$	116	7 6 $\frac{3}{8}$	172	
F	1	104	7 8 $\frac{15}{16}$	196	
G	1	104	7 9 $\frac{1}{2}$	192	
H	1	104	7 10 $\frac{1}{4}$	196	
J	1	104	7 11 $\frac{1}{4}$	192	
K	1	104	8 0 $\frac{3}{4}$	196	
L	1	104	8 2 $\frac{11}{16}$	192	
M	1	104	8 4 $\frac{1}{2}$	196	
N	1	104	8 6 $\frac{3}{8}$	192	
O	1	104	8 8 $\frac{1}{16}$	196	
P	1	104	8 11 $\frac{9}{16}$	192	
Q	1	104	9 2 $\frac{15}{16}$	196	

## H.M.C.S. "Tillsonburg" (P.13278/44)

The particulars of the boilers and tubes of the ship shown in column "A" are identical with those published in the A.F.O. quoted against those shown in column "B".

"A"	"B"	A.F.O.
"Tillsonburg"	"Dumbarton Castle" etc.	4388/44
Records affected—D.354 and D.682 (Standard Copy).		
(A.F.O. 4388/44.)		

(This Order will not be included in the A.F.O. Volume.)

## 5441.—Boiler Tube Cleaning Apparatus—Power-Driven—Steel Wire Brushes for

(N.S. 34309/43.—12 Oct. 1944.)

Reports received in accordance with A.F.O. 1689/44 show that in certain instances difficulty has been experienced in cleaning boiler tubes of 1-in. external diameter when using brushes, Pattern 4122. A steel wire Turk's Head brush similar to Pattern 4122 but of  $\frac{3}{8}$ -in. external diameter has been introduced for use of services that have experienced or may experience difficulty with brush, Pattern 4122. Pattern number 4124 has been assigned to the new brush.

2. Ships or services requiring brushes, Pattern 4124, should forward demands accordingly to their storing yards or depots.

3. 4,000 S.W. Brushes, Pattern 4124, have been requisitioned for purchase and for delivery as follows:—

Chatham, 400; Sheerness, 200; Portsmouth, 400; Devonport, 400; Rosyth, 400; Preston, 1,000; Severn, 1,000; Leeds, 100; Carfin, 100.

4. Supply to yards abroad will be made as follows:—

From Preston: Alexandria, 300; Malta, 300; Gibraltar, 100.

From Severn: Durban, 300; Ceylon, 300; Bermuda, 100; Simons-town, 100.

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

(A.F.O. 1689/44.)

## 5442.—"A" Bracket Lubrication—Modification to Oil Supply Pipes and Cover Plates

"Hunt" Class Destroyers

(D. 012522/44.—12 Oct. 1944.)

Frequent reports have been received of damage to, and loss of lubricating oil supply and delivery pipes and cover plates, fitted for "A" bracket lubrication in "Hunt" class destroyers.

2. The method of securing the pipes and cover plates is to be modified at the first opportunity in accordance with the details shown in A.F.O. Diagram No. 336/44, the work being treated as a defect.

3. Damage to fractured oil pipes and cover plates must be repaired as soon as possible, but where circumstances preclude docking for repairs and for the above-mentioned modifications to be made, examination of pipes and glands by a diver should be carried out while an oil pressure is applied. If the cover plates are found to be missing and a pipe is fractured, the pipe is to be cut off and the hole plugged with a steel taper plug driven in hard, the remaining pipe being used for oil supply.

(A.F.O. 1716/43 and diagram is cancelled.)

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

## 5443.—Hydrogen Cylinders—Increased Charging Pressure

(N.S. 28287/44.—12 Oct. 1944.)

For the duration of the war, all hydrogen cylinders will be charged to a pressure of 1,800 lb./in.<sup>2</sup> in lieu of the present pressure of 1,500 lb./in.<sup>2</sup>

2. In view of this increase, ships in tropical climates should take especial care that fully charged cylinders are not exposed to the direct rays of the sun.

(Portsmouth Yard Letter No. 4760, 14 Jul. 1944.)

(A.F.Os. 2854/38 and 2583/38 are cancelled.)

## 5444.—Refrigerators of U.S. Manufacture—Use of Methyl Chloride in

(D. 14293/44.—12 Oct. 1944.)

Defects have arisen in a refrigerator of U.S. manufacture fitted in one of H.M. ships while using methyl chloride as the refrigerant in place of Freon F.12 for which the refrigerator was designed. The refrigerator was constructed in part of aluminium or aluminium alloy. These materials are attacked by methyl chloride, especially in the presence of moisture.

2. Unless it is certain that refrigerators supplied by U.S.A. do not contain parts of aluminium alloy the use of methyl chloride in lieu of Freon in these machines should be discontinued forthwith. Before re-charging with Freon 12, the refrigerant system should be completely purged of methyl chloride.

3. Refrigerators of British manufacture designed for operation with Freon or methyl chloride contain no material liable to attack by methyl chloride, and in such machines methyl chloride may be used as the refrigerant instead of Freon 12, except in submarines, and in air conditioning plants where the refrigerant expands directly into the air cooling coils, in which instances Freon 12 should always be used.

4. The importance of keeping the refrigerant system free from moisture is strongly emphasized, and great care should be taken at all times to prevent its access to the circuit.

(*C.-in-C., Med., 31 Aug., 1944, No. 5531/Med. 821/36/52.*)

**5445.—Steam Reciprocating Electric Generating Engines—Rowan Type Piston Rings—As. and As.**

*Admiralty A/S, M/S Trawlers*

(D. 15777/44.—12 Oct. 1944.)

Instances have been reported of excessive wear and fracture of the Rowan type piston rings and springs, causing serious damage of the cylinder walls of steam reciprocating electric generator engines fitted in A/S, M/S trawlers of Admiralty design.

2. In some cases the Rowan rings have been replaced by :—

(a) A solid ring in pistons having a junk ring.

(b) Ramsbottom rings in solid pistons with no junk ring.

No objection is seen to this being done by base staffs in all future cases where this trouble occurs when the cylinders require reboring. The solid ring is to have sealing grooves cut in the working face.

3. Rowan rings should, however, be satisfactory if correctly fitted, and if care is taken to ensure that the steam pipe to the generator is well drained so that water is prevented from entering the cylinders.

4. If difficulty has been experienced in keeping the pipe drained, a "Spirax" or other approved type of steam trap is to be fitted to the lowest part of the steam pipe in close proximity to the generator engine.

5. The Commanding Officer, H.M.S. "Marshal Soult," is to insert an item, Classification "B," in the class list of As. and As. to cover the work involved.

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

**5446.—Communication—Wavemeter Outfits—Allowances**

(R.E. 12423/44.—12 Oct. 1944.)

A.F.O. 4512/44 is to be amended as follows :—

Paragraph 1, Clause II. *After* "Base W/T ships not fitted with a U.T.R." *insert* "LSH(L) and LSH(S)"

(*A.F.O. 4512/44.*)

**5447.—General Requirements for Fitting Internal Signal Communications**

(R.E. 12523/44.—12 Oct. 1944.)

A.S.E. Preliminary Specification No. B.492 has been prepared to show the method of fitting internal signal communications.

2. Copies of the specification have been forwarded to the Commanders-in-Chief, Eastern Fleet and Western Approaches ; to the Admirals Superintendent, Chatham, Devonport, Portsmouth, Orkneys, Kilindi, Ceylon and Rosyth ; to the Flag Officers-in-Charge, East Africa and West Africa ; to the Flag Officers-in-Charge, Milford Haven and Aden (for Radar officers) ; to the Commodore, Algiers ; to the Commodores Superintendent, Gibraltar, Malta and Simonstown ; to the Commodores-in-Charge, Sheerness and Halifax ; to the Commodore Commanding,

R.I.N., Bombay ; to the Captain-in-Charge, Bermuda ; to the Captains Superintendent, Alexandria and Durban ; to the Naval Officer-in-Charge, Londonderry ; to the Naval Headquarters, India ; to the Deputy Superintendent, Pembroke ; to the Naval Secretary, Wellington ; to the Naval Secretary, Melbourne ; for the officers concerned at Melbourne, Sydney and Fremantle ; to the Secretary, Naval Board (N.D.A.), Ottawa ; to the Chief Constructors-in-Charge, H.M. Naval Repair Bases, Corpach and Dunstaffnage ; to the B.A.M.R., Washington.

3. Copies of the specifications have also been forwarded to the Warship Production Superintendents, East Coast of Scotland, North-Western, Humber, Southern, London, South Wales, Belfast, Scottish and North-Eastern Areas ; and to the Warship Electrical Superintendents, Scottish, North-Western, North-Eastern, South Wales, London, South-Western and Northern Ireland Areas. The Principal (Ship) Overseers and Emergency Repair Overseers of all ships are, therefore, to apply to the Warship Production Superintendents of their areas for a copy of A.S.E. Specification No. B.492.

(*A.F.O. 790/40.*)

**5448.—Types CXFR and TDY—Failure of Magnetron Type ZP 579**

(R.E. 12659/44.—12 Oct. 1944.)

Reports have been received of failure of the magnetron type ZP 579 in types CXFR and TDY. These failures are being investigated but in the meantime it is recommended that the magnetron should be rested for a number of days after failure has occurred and then tried again when required for use.

(*A.G.M. 685A is cancelled.*)

**5449.—Radar, Type 291—Aerial Outfit A.T.R.—Defect in Wiring**

(R.E. 02850/44.—12 Oct. 1944.)

It has been found that certain A.T.R. aerials bearing aerial numbers between HH.150 and HH.300 may have the leads crossed. The effect produced is a split echo and a reduction in performance.

2. Commanding Officers of ships concerned and bases with A.T.R. aerials bearing the above serial numbers should arrange for the following polarity test to be carried out :—

With reference to A.F.O. Diagram No. 338/44 (A.S.E. drawing No. 40511) connect a galvanometer across dipole as shown and "flick" a battery across the remaining dipoles in turn. The deflection of the galvanometer needle should be in the same direction for each dipole.

3. A.T.R. aerials which do not pass this test should be replaced at the earliest opportunity, and the defective aerial returned to Messrs. Hutchinson & Hollinworth, Ltd., Dobbross Loom Works, Dobbross, Yorkshire, for repair.

**5450.—Radar, Types 271/2/3/X/P, Modulator—Failure of Pattern 5001 Condenser**

(R.E. 02919/44.—12 Oct. 1944.)

Numbers of reports have been received of failure of the 0.0044 mfd. condensers, Pattern 5001, in the modulator of types 271/2/3/X/P (H.374A, fig. 7, item 9). In all cases where details of the failure have been reported, this has been due to "tracking" across the insulating case of the condenser either between the terminals or between terminals and the modulator chassis (earth).

2. Scrupulous attention to the cleanliness and dryness of this condenser will prevent a larger number of such failures. Ships concerned are to ensure that particular attention is paid to the cleanliness and dryness of all radar equipment working at or situated adjacent to high voltages with especial emphasis on the Pattern 5001 condenser.

**5451.—Radar Types 286P and 291—Aerial Outfits ATQ/R—Retrospective Fitting of “M” Type Transmission to Pattern W.2429A Coupling Box**

(R.E. 64/44.—12 Oct. 1944.)

In order to transmit bearing of the ATQ/R aerial array to the Pattern W.5212 aerial and gyro repeater fitted in the Type 286P or Type 291 office, and to the D.N.O. interlinking unit in the Type 285 office (the latter in accordance with C.A.F.O. P.491/43), an “M” type transmission, Pattern 9527, is to be incorporated in the Pattern W.2429/A coupling box existing in ATQ/R flexible drive.

2. This “M” type transmitter is included in a Pattern W.9449 box of parts, which is used to convert Pattern W.2429/A coupling box to Pattern W.9448 as follows:—

- (i) With reference to A.F.O. Diagram No. 339/44(1), A.S.E. Drawing No. 37221, the two gland body units should be unscrewed and the unit dismantled by withdrawing the end section of the coupling box.
- (ii) The centre portion should be unbolted and replaced by the longer centre portion containing the “M” type transmitter provided with the box of parts.
- (iii) If necessary, the flexible shaft drive will have to be shortened and refitted as detailed on Drawing No. 30187A in Specification B.127/41 for outfit ATQ or Drawing No. 30188A in Specification B.134/42 for outfit ATR.

3. The wiring arrangement is shown on A.F.O. Diagram No. 339/44 (2), A.S.E. Drawing No. 40397.

4. Commanding Officers of ships concerned should arrange for this modification to be carried out by bases as convenient. Bases concerned should demand the necessary number of Pattern W.9449 boxes of parts and Pattern 4888 junction boxes from S.N.S.O. (Haslemere).

**5452.—Incorrect Use of Depth Charge Firing Buzzer**

(A/S.W. 879/44.—12 Oct. 1944.)

It has been learnt that in some ships the firing buzzer is used as a signal to bring the emergency pattern to the ready.

2. This practice can only lead to accidents and is to be discontinued; the firing buzzer must only be used as the executive order to fire.

**5453.—Aircraft—Helmets, Tropical, Type D, Wired, Naval Pattern—Introduction**

(A.E. 6341/44.—12 Oct. 1944.)

Flying helmet, tropical, Type D, wired, Naval pattern, is hereby introduced. This helmet will be available in the following sizes:—

N.101.	Size 1	...	...	...	...	...	6 $\frac{1}{2}$ –6 $\frac{3}{4}$
N.102.	Size 2	...	...	...	...	...	6 $\frac{3}{4}$ –7
N.103.	Size 3	...	...	...	...	...	7 $\frac{1}{4}$ –7 $\frac{3}{4}$
N.104.	Size 4	...	...	...	...	...	7 $\frac{3}{4}$ –7 $\frac{1}{2}$

2. This helmet supersedes N.101/104 helmet, flying, tropical, which is an unwired helmet. The latter is declared obsolescent, but is only to be replaced when it becomes unserviceable or under the circumstances mentioned in paragraph 4 below.

3. Helmet, tropical, Type D, wired, will be available either—

- (i) wired with connector, Type 2186, Ref. 10H/5229; or
- (ii) without any connector, in which case it is used as an unwired helmet. It may be distinguished from the latter by the provision for wiring at the back of the helmet.

4. Helmet, tropical, Type D, wired with connector as above, can only be used in aircraft which have been changed to low impedance radio system. Its issue will, for the time being, be limited to aircrews of such aircraft serving in first line squadrons and it will be supplied without demand as and when available, priority being given to squadrons in the Eastern theatre.

5: Helmet, tropical, Type D, without connectors, and helmet, flying, tropical (the existing tropical helmet), cannot be used by aircrews in aircraft which have been changed to low impedance radio system. Aircrews of such aircraft, until issued with helmet, tropical, Type D, wired with connector, Type 2186, must dispense with the use of a tropical helmet and use helmet, flying, Type C, wired, with connector 2186 (a leather helmet) on all occasions.

6. When all Naval aircraft have been changed to low impedance radio system, helmet, tropical, Type D, wired, will only be available with connector 2186 incorporated. The existing tropical helmet (referred to in paragraph 2 above) will then be obsolete.

**5454.—Aircraft Radio—A.Y.F. Radio Altimeters—Restriction of Range**

(N.A.R./A.C.R.D. 1667/44.—12 Oct. 1944.)

A.Y.F. pattern radio altimeters are now being supplied in lieu of A.Y.D. pattern. The A.Y.F. altimeters are intended to function on two ranges, 0–400 ft. and 0–4,000 ft., but for the time being they are to be used on the low range only, owing to the large inaccuracies which occur during the calibration of the higher range.

2. The following modifications are to be incorporated in all A.Y.F. transmitter receivers and altitude indicators forthwith.

3. The following equipment is required and is to be demanded from R.N. Store Depots in the normal way:—

Item	Nomenclature	Quantity	Stores Ref.
(i)	Tape, insulating, adhesive, tropical, $\frac{1}{2}$ -in. ...	As required	5F/1377
(ii)	Screws, metal, brass, round-head, 4 B.A. $\times$ $\frac{3}{8}$ -in.	1	28S/2407
(iii)	Resistance, type 887 (120K) ...	1	10W/749

4. The procedure is as follows:—

- (a) *T.R. Unit.*—(i) Remove the white/blue lead on pin C from socket J10,4 and tape the end of the lead for safety.
- (b) *Altitude Indicator.*—(i) Switch the meter to the low range.
- (ii) Remove the range control knob with the wrench provided in the lid of the transmitting unit. Securely wire knob to convenient point on set in order that it may be easily available if required.
- (iii) Viewing the meter from the rear and with the range control at the bottom, drill and tap 4 B.A. the control rod mounting bracket and dial actuating cam. The hole is to be located to the *RIGHT* of the control rod.

*Note.*—Both the bracket and cam are to be tapped.

- (iv) Insert from the rear a roundhead screw, 4 B.A.  $\times$   $\frac{3}{8}$ -in.
- (v) The meter is now locked in the low range position and should be checked to see that the dial reads 0–1–2–3–4.
- (vi) An adhesive label inscribed “MODIFIED—TO BE USED ON 400 FT. RANGE ONLY” and quoting this Order as the authority is to be fastened in the immediate vicinity of the indicating unit.

5. The method of setting up the low range of the A.Y.F. altimeter is in general similar to that described in A.P. 2533A for A.Y.D. The exceptions are as detailed below:—

- (a) *Balancing and Tuning the Detector Circuits.*—As for A.Y.D. (A.P. 2533A, paragraph 72, second edition; paragraph 63, first edition) except that when adjusting T.102 to eliminate overloading peaks the resistance, type 887 (120K), Stores Ref. 10W/749, must be inserted between the grid of the limiter valve, V.105, and earth. This reduces the gain of the audio amplifier to within that of A.Y.D. When the test is complete the resistance must be removed.
- (b) *Checking and Adjusting the Altitude Limit Indicator Circuits.*—The following procedure is to be used:—

*Note.*—The test lead from oscillator, type 141, to the grid of the first amplifier, V.103, should be removed.

- (i) With the plug P.108 (auto-pilot dummy plug) in position connect the delay unit and attenuator as for the sensitivity check (with attenuator fully closed). Short out the high range potentiometer R.119B by means of a short lead terminated with crocodile clips connected from the junction of R.119A and R.119B to earth.
- (ii) Adjust R.119A until the altitude indicator reads 300 ft. Set the altitude limit switch to 300 ft.
- (iii) Adjust the counter condenser C.137 until the green light glows.
- (iv) With the altitude limit switch set to 100 ft. adjust R.119A until the altitude meter reads 100 ft.
- (v) Adjust the altitude limit zero adjustment R.113A until the green light glows.
- (vi) By successive tests at 300 ft. and 100 ft. as in (ii) to (v), ensure that both conditions are obtaining.

6. *Test Gear*.—The following test equipment may be used :—

- (i) Test Kit ARI.5185, or Test Kit ARI.5284 (A.Y.F.) used on low range only.
- (ii) Test Kit ARI.5284 (American version using T.S.10/APN, T.S.16/APN. including test kit type 6 and oscilloscope type 11.

7. As A.Y.F. units may be provided in lieu of A.Y.D. for replacement purposes it should be noted that these units, when modified and set up in accordance with the foregoing instructions will be electrically interchangeable with corresponding A.Y.D. units. A.Y.F. altitude indicators are not physically interchangeable with A.Y.D. indicators because of the greater depth of the former, but the latter are interchangeable with A.Y.F.

(A.F.O. 5075/44 is cancelled.)

#### 5455.—Hellcat II A.S.I. Readings

(A.W.D./A.D.P. 3364/44.—12 Oct. 1924.)

Reports have been received which indicate that Modification 139 first introduced in Hellcat II J.V.222 causes bad position error corrections with erratic air speed readings near the stall.

2. The pitot static vent is being repositioned under Modification 175 on Hellcat II J.W.895 in an attempt to give more consistent readings at low speeds.

3. In the meantime, pending further investigations, all holders of Hellcat II aircraft J.V.222—J.W.895 are warned of possible erratic A.S.I. readings near the stall.

4. The above information was promulgated in Admiralty Message 435 R-B-3, which may be destroyed on receipt of this order.

#### 5456.—Outer Bottom Planking—Scoring of

105-ft. and 126-ft. Motor Minesweepers, and B.Y.M.S. and Y.M.S. Vessels fitted with S.A. Gear, Type "A," Mark IV

(D. 019230/44.—12 Oct. 1944.)

Reports have been received that the outer bottom planking in 105-ft. and 126-ft. motor minesweepers and B.Y.M.S. and Y.M.S. vessels fitted with S.A. gear, Type "A," Mark IV, has been scored and chafed by towing wire and towed box.

2. Administrative authorities are to arrange for the examination of the hulls of all vessels so fitted at the next occasion of docking for signs of this damage. Where scoring is apparent the planking and sides of vessels in way of the score are to be fitted with protection on the lines of A.F.O. Diagram No. 335/44.

3. The work is to be treated as a defect.

(C.-in-C., Med., 15 Aug., 1944, No. 5114/Med. 821/39/38.)

(A.F.O. 1855/44 is cancelled.)

(To be retained until complied with.)

#### 5457.—Depth Charge Rails and Minesweeping Gear and Davits—Revised Layout—As. and As.

Admiralty Design A/S-M/S Trawlers of "Tree," "Dance," "Shakespearean" and "Isles" Classes

(D. 13984/44.—12 Oct. 1944.)

A revised layout of depth charge rails and stowage of minesweeping gear and davits is to be adopted in the above-mentioned ships. The revised arrangements are shown on drawing D.N.C. 17/T/38.

2. An item, classification "A," has been included in the class list of As. and As. to these vessels to cover the work involved.

3. Copies of the drawing D.N.C. 17/T/38 have been distributed to dockyard and repair authorities for information and guidance in carrying out this work. Additional copies may be obtained from Admiralty, Bath.

(A.F.O. 4038/42 is cancelled.)

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

#### 5458.—Upper Deck—Reinforcement of —As. and As.

L.C.I. (L) 351 Class

(D/P. 13335/44.—12 Oct. 1944.)

Experience has shown the need for strengthening the upper deck plating of the above-mentioned vessels in the area between the troop hatch, frames 35-40, and the starboard bulwark. The doubling plate and angle stiffener shown in A.F.O. Diagram No. 340 should be fitted at the first opportunity.

2. The work is to be carried out as an item of As. and As., Classification "A."

(B.A.D., 21 Jul. 1944, No. S.R. 3530/44.)

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

#### 5459.—Living Conditions—Modifications to Effect Improvements—As. and As.

"Barricade" Class Boom Vessels fitted for Hot Weather Service

(D. 011817/44.—12 Oct. 1944.)

The following As. and As. have been approved for "Barricade" class Boom Vessels which have been fitted out for hot weather service :—

##### *Petty Officers' and Riggers' Mess*

The existing 2-in. blue block asbestos lagging, concealed behind plywood on the forward boiler room bulkhead to be extended to include the wing bulkheads which run forward from the boiler room and are adjacent to four of the bunks. Blue block asbestos lagging to be fitted to the ship's side, port and starboard, in the way of the petty officers' and riggers' messes. The existing 7½-in. supply fan to be replaced by a 12½-in. supply fan.

##### *After Cabins*

The existing blue block asbestos lagging on the after engine room bulkhead to be extended along the ship's side, port and starboard, in the way of the after cabins.

##### *Forward Awning*

The forward awning to be arranged in two pieces with the joint athwartships in the same fore and aft position as the forward end of the living accommodation.

##### *Boiler Room Ventilation*

A 12½-in. ventilation supply fan to be fitted in the boiler room.

2. These items are additional to those approved in A.F.O. 598/44 for "Barricade" class Boom Vessels which are allocated for hot weather service.

3. Items, classification "A", are to be included in the lists of As. and As. to the vessels concerned to cover the work involved.

(C.-in-C., E.F., 19 Jun. 1944, No. 1365/E.F./511/7.)

(F.O. Ceylon, 14 Apr. 1944, No. 95/C. 7804/8/3.)

(A.F.O. 598/44.)

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

**5460.—Air-driven Portable Pumps and Fans—Supply***Depot and Repair Ships carrying petrol in bulk*

(D. 020457/44.—12 Oct. 1944.)

With reference to A.F.O. 1981/44 and A.F.O. 1982/44, it has been decided to extend the supply of air-driven portable pumps and fans to those depot and repair ships which carry petrol in bulk, on a basis of 2 pumps and 2 fans per ship.

2. It is intended that the pumps and fans shall be operated from the L.P. air system and the necessary provisions should be made in accordance with paragraphs 5 and 6 of A.F.O. 1981/44.

(A.F.Os. 1981/44 and 1982/44.)

**5461.—Naval Store Accounting Procedure***Frigates and Corvettes*

(N.S. 13848/44.—12 Oct. 1944.)

The following is a re-issue of A.F.O. 3334/44 and embodies details of a modification of the naval store accounting procedure which it is hoped will assist Storekeeping Officers and Supply Ratings to control their stock and frame their demands for replenishment.

2. Owing to the shortage of experienced Supply Ratings a modified naval store accounting system has been instituted for frigates ("River" and later classes) and corvettes ("Flower" and later classes) (except as stated in paragraph 3). The procedure to be followed is contained in the Appendix to this Order. Naval Store Accounts for British-built ships are provided accordingly as directed in A.F.O. 3069/44. Naval Store Accounts for American-built ships are provided by Director of Stores, Washington. One Leading Supply Assistant is included in the scheme of complement for both victualling and naval storekeeping duties. In "Captain" class and maritime commission frigates, however, a Supply Assistant is allowed as well, on account of the larger numbers borne.

3. The following vessels, however, follow the normal B.R.4 accounting procedure and use the ordinary naval storekeeping ledgers; two Supply ratings have been included in their schemes of complement for victualling and naval storekeeping duties, and K.R. and A.I., Article 1464 (paragraph 7) will apply:—

"Deveron," "Itchen," "Kale," "Moyola," "Nith," "Spey," "Tay,"  
"Trent," "Exe," "Jed," "Lagan," "Ness," "Rother," "Swale," "Test,"  
"Teviot," "Waveney" and "Wear."

4. The Engineer Officer will normally be the Naval Storekeeping Officer of each vessel. If, however, an Engineer Officer is not borne, the Commanding Officer should delegate these duties to another officer.

**APPENDIX**

*H.M. frigates and corvettes (except vessels mentioned in paragraph 3 of this Order)—instructions as to the supply accounting, etc., for Naval Stores*

**Permanent Stores.**—Permanent stores are to be accounted for on Forms S.1099D (inside) enclosed in covers S.1099D (outside). Separate accounts for each department of the ship will be prepared (in triplicate) by the dockyard or store depot allocated, or for American-built ships by Director of Stores (Washington), and the three copies will be distributed as follows:—

- (i) Original—standard copy for the Naval Storekeeping Officer.
- (ii) Duplicate—to be retained by the dockyard or store depot and by Director of Stores, Admiralty (for American-built ships) as a record of the "First Outfit" supplied.
- (iii) Triplicate—copy for the use of the Departmental Officer concerned.

2. The triplicate copies supplied for the use of the Departmental Officers, as well as the original copies held by the Naval Storekeeping Officer, are to be completed in the "Remarks" column by the ship's staffs, with details of the permanent stores supplied to Departmental Officers on "permanent" loan. The signatures of the officers concerned should be obtained for these stores similarly to that required of the Naval Storekeeping Officer, on the inside of the cover S.1099D (outside) on assuming custody, and on change of Departmental Officer.

3. Replacements of permanent stores of the same pattern number which involve no change in the number on board are not required to be posted in the S.1099D account, and the quantity will remain unaltered. The only changes in the quantities shown in the S.1099D account, therefore, will be when an article is supplied in addition to those already on charge or when an article is returned or lost and is not replaced. Such changes are to be posted in the account as directed on the Form S.1099D (inside).

**Note** :—If the quantity on loan to the Departmental Officer is also changed, the amended details are to be initialled by the officer concerned in the original and triplicate copies of the S.1099D account.

4. **Consumable Stores.**—(i) Consumable stores in British-built ships are to be accounted for in an account F.A. 23X. This is F.A. 23 modified by pasting new headings over the headings as printed, thus:—

← Left →				← Right →			
Account of Receipt and Expenditure of Consumable Stores							
Where stowed	First supply	Stores received (entries to be made in ink)	Middle of page slip divides here	Total receipts (entries in pencil)	Stores issued (entries to be made in ink)	Total issues (entries in pencil)	Remains (entries in pencil)
4	5	6		7	8	9	10

**Note.**—Columns 1, 2 and 3 will remain as originally printed in F.A. 23.

(ii) Consumable stores in American-built ships are to be accounted for in an account F.A. 23AX. This is F.A. 23A modified by pasting new headings as shown below over the headings as printed in Part I, pages 1–84, for U.S. Stores. The British stores section of this account, pages 85–123, can be amended by the new headings shown above:—

← Right only →					
First supply	Stores received (entries to be made in ink)	Total receipts (entries in pencil)	Stores issued (entries to be made in ink)	Total issues (entries in pencil)	Remains (entries in pencil)

5. All frigates and corvettes commissioning in future will be supplied with either F.A. 23X or F.A. 23AX as appropriate, modified as described above. Vessels already in commission will be supplied with a stock of the new headings to be pasted into existing F.A. 23's or F.A. 23As. If, however, ships concerned prefer to commence new F.A. 23X or F.A. 23AX accounts, demands should be forwarded to the authorities indicated below for blank forms F.A. 23 or F.A. 23A, which should be converted on receipt into forms F.A. 23X or F.A. 23AX by means of the headings already provided:—

- |  |  |
|--|--|
| "River" class frigates   | Demand blank forms F.A. 23 from Superintending Naval Store Officer, Devonport.                             |
| "Loch" class frigates and "Castle" class corvettes.                            | Demand blank forms F.A. 23 from Director of Stores (N.S. 4B), Admiralty, London.                           |
| "Flower" class corvettes and "Captain" class and maritime commission frigates. | Demand blank forms F.A. 23 or F.A. 23A as appropriate from Superintending Naval Store Officer, Park Royal. |

6. Only one copy of the F.A. 23X or F.A. 23AX will be prepared by the dockyard or store depot allocated or by the Director of Stores (Washington) respectively, and will be supplied to and kept by the Naval Storekeeping Officer for the whole ship, who will also be responsible for demanding all consumable stores required to replenish stocks on board.

7. Particulars of quantities of stores received from the storing yard or depot are to be entered in ink in the receipt columns of F.A. 23X or F.A. 23AX.

All supply notes (triplicate copies of Forms S.134D) for consumable stores should be filed in chronological order and in the order of subhead and item, and retained with the account.

8. All issues of stores are to be recorded as they are made, using Counter Book S. 149A for this purpose, and signed by the officer or rating drawing the stores. On or about the 15th of each month the issues are to be summarized from the counter book by the Supply Rating, and he is to post the expenditure of stores in ink in the expenditure columns of F.A. 23X or F.A. 23AX.

9. For purposes of stocktaking and preparing demands for replenishment of stock, the totals to date of the receipt columns and of the expenditure columns are to be entered in pencil in the total receipt and total issues columns, and by subtracting the latter from the former, the figure for remains is found and is to be entered in pencil in the column provided.

10. On completion of stocktaking and preparation of demands the pencil figures, having fulfilled their purpose, are to be erased.

11. On change of the Naval Storekeeping Officer, the certificates "A" and "B" inside the cover of the account F.A. 23X or F.A. 23AX are to be completed.

12. Arisings, e.g. worn cordage, scrap metal of all kinds arising from work on board, old indiarubber, electric cable, copper wire, miscellaneous small tools and metal articles, etc., are to be collected and taken on charge under suitable headings in the consumable account F.A. 23X or F.A. 23AX and returned to the nearest dockyard or base as opportunity offers.

13. Consumable stores should be kept by the Naval Storekeeping Officer in the stowage provided and issued to departments as required. They should not be issued in bulk to departmental officers on receipt from the storing yard or depot.

14. The instructions contained in the Naval Storekeeping Manual (B.R. 4), except where modified by the foregoing instructions, are to be followed.

(A.F.O. 3069/44.)

(A.F.O. 3334/44 is cancelled.)

#### 5462.—Bomb Carriers, Pattern 5575—Allowances

Fleet and Light Fleet Carriers, principal Ship Overseers and Dockyards concerned  
(N.S. 020046/44.—12 Oct. 1944.)

In ships equipped with aircraft fitted out with the U.S. two-point type of bomb suspension, it may be advantageous to stow and to transport bombs with the American type lugs uppermost.

2. To enable bombs to be lifted in this position a suitable bomb carrier has been designed. This bomb carrier has been allocated Pattern No. 5575, and is being added to the Authorised List of Naval Stores under Subhead B, Item 8, Part I.

3. Bomb carriers, Pattern 5575, which will be dealt with as permanent Naval "sea" stores, will be allowed to the undermentioned ships on the basis shown:—

Fleet carriers—

"Implacable" class	...	...	...	} 12 per ship.
"Illustrious" class	...	...	...	
"Indomitable"	...	...	...	

Light fleet carriers:

"Colossus" class	...	...	...	6 per ship.
------------------	-----	-----	-----	-------------

4. Purchase of 156 bomb carriers, Pattern 5575, has been arranged under Contract No. C.P.78041/44, from Messrs Aldridge & Rankin, Ltd., Bath, for delivery as follows:—

N.S.O., Preston	S.N.S.O., Severn Area	S.N.S.O., Leeds
36	54	12
S.N.S.O., Rosyth	S.N.S.O., Devonport	
48	6	

5. Supply of 12 bomb carriers, Pattern 5575, is to be arranged without demand by S.N.S.Os., Severn Area and Rosyth, to each of H.M. ships as follows:—

S.N.S.O., Severn Area—

"Illustrious," "Victorious" and "Indomitable."

S.N.S.O., Rosyth—

"Indefatigable," "Implacable" and "Formidable."

6. When supply of bomb carriers, Pattern 5575, is required for ships of the "Colossus" class, Overseers or Dockyard Officers concerned should forward demands to the warrant yard in the normal manner. Warrant yards should arrange supply from the supplying yards or depots concerned.

7. B.R.323—Establishment of Naval Stores for Gunnery Purposes—will be amended.

#### 5463.—Chart Table in Chart House—New Design—As. and As.

Cancelled by (H. 0831/43.—12 Oct. 1944.)

Afo 5450/46

A chart table and stowage of new design is shown in A.F.O. Diagram No. 337/44.

2. Construction in steel will depend upon proximity to the compass. Where steel is unacceptable, fire-proofed wood or aluminium alloy (where available) should be used in lieu.

3. All new construction ships, where the state of work permits, are to be fitted with the new type of chart table and stowage. The minimum length is 3-ft. but this should be increased where space permits.

4. This type of chart table should also be fitted in commissioned ships when in hand for large refit.

5. An item, Classification "B" is to be included in lists of As. and As.

6. P.S.Os., P.E.R.Os. and Dockyard Officers are to arrange accordingly.

(A.F.O. 4152/44 is cancelled.)

#### 5464.—History Sheet of Moorings—Forms D.233 and D.233a—Modification

(D. 017517/44.—12 Oct. 1944.)

A case has occurred of a ship grounding consequent on the parting of the pendant of the mooring to which it was secured.

2. An investigation into the incident revealed that the pendant had parted at the joining link above the swivel and that the details of the test which are normally stamped on the pendant when manufactured, could not be found.

3. The broken link was not available for examination, but the joining link below the swivel has been metallurgically examined and tested.

This examination revealed faulty welding and the link broke at below the appropriate proof test load.

4. Care is to be taken to ensure that any welding carried out in connection with the repair or manufacture of mooring pendants is of the requisite high standard.

5. Particulars of the tests carried out on the pendants of moorings are to be inserted on the "Remarks" page of the relevant history sheets of existing moorings where this information is available, as well as on the history sheets of moorings when a pendant is repaired and tested, or when a pendant is manufactured for a new mooring.

Dockyard or Base Officers manufacturing pendants for moorings to be laid outside their area, are to forward to the administrative authority concerned particulars of the tests carried out on the pendants, in addition to the present normal practice of stamping this information on the pendant.



## 5465.—Photographic Reproduction of Plans, Drawings, etc.

(U.S.B. 969/44.—12 Oct. 1944.)

A system of reproduction of drawings by photographic means is now an established feature of Admiralty practice. Drawings 40 in. by 30 in. are reduced to half-plate films, and these sizes have been adopted as standard. Drawings larger than 40 in. by 30 in. are photographed in sections of that size with a 3-in. overlap. The sections are numbered so that when enlargements are made, they can readily be pieced together to produce the full size of drawing. In addition, each film bears a scale representing inches to enable accurate enlargements to be made should the standard Admiralty enlarger described later be not available.

2. The adoption of this system enables each ship to carry a full set of drawings applicable to the ship in a fraction of the space required for full-size drawings. Further, compactness and lightness of weight enable full use to be made of air mail facilities for transmission of drawings. In this connection, however, it must be appreciated that it will not be possible to differentiate on a film between original parts of the drawing, and modifications in colour. For this reason it may be necessary in certain cases to follow the despatch of a film by air by the despatch of a full-size coloured print by sea route.

3. As stated in paragraph 2, all H.M. ships carry on board a full set of drawings, usually in film form, for use in connection with the refit or repair of the ship at yards and bases abroad. Should the set in a ship about to come in hand abroad have been destroyed, the Admiralty should be informed and arrangements will be made for the despatch to the refitting port, by air if necessary, of the next nearest set of drawings, e.g. from England, a sister ship, etc. In addition, Admiralty drawings in connection with As. and As. may be sent to refitting authorities abroad in the form of films.

4. Special apparatus has been designed for the specific purpose of making enlargements from films, and such apparatus, known as the Admiralty (Bath) Enlarger, A.F.E., Mark II (see paragraph 10), has already been installed in the following establishments :—

Admiralty, Bath	H.M. Dockyard, Malta
Admiralty Undex Works, Rosyth	H.M. Dockyard, Alexandria
B.A.R.M., Washington	H.M. Dockyard, Simonstown
B.A.T.M., Ottawa	H.M. Dockyard, Durban
H.M. Dockyard, Portsmouth	H.M. Dockyard, Freetown
H.M. Dockyard, Devonport	H.M. Dockyard, Bermuda
H.M. Dockyard, Chatham	H.M. Dockyard, Bombay
H.M. Dockyard, Rosyth	H.M. Dockyard, Sydney
H.M. Dockyard, Gibraltar	H.M. Dockyard, Devonport (New Zealand).

5. Supply of apparatus to the following establishments will shortly be made :—  
F.O.I.C., Ceylon (to be installed at Colombo or Trincomalee as F.O.I.C. may decide).

H.M. Naval Establishment, Kilindini.

Torpedo Experiment and Design Establishment, R.N.T.F., Greenock.

Other establishments will be supplied as the need arises.

6. It may sometimes be desired to examine a film without necessarily making an enlargement, and a viewing cabinet has been designed for this purpose, mainly for use in drawing offices. These cabinets are made in two sizes—one to give a full-size enlargement, the other half-size. By their use drawings can be examined and read.

7. Because of the space required it would be impracticable to install enlargers of the necessary size to make full-size enlargements on board ship. There may, however, be times when a ship may not have access to enlargers but may require an enlargement of a film. A special cabinet has been designed for either viewing the films or making an enlargement, which will be approximately half the original size.

8. Supplies of printer viewer cabinets will be made to the following depot and repair ships in commission :—

“Adamant”, “Maidstone”, “Forth”, “Lucia”, “Bonaventure”, “Wolfe”, “Tyne”, “Woolwich”, “Greenwich”, “Philoctetes”, “Blenheim”, “Resource”, “Wayland”, “Ausonia”, “Artifex”, “Vindictive”, “Vienna”.

Fitment will be made by the ships' staff and, if practicable, the cabinets should be mounted on some form of shock-absorbing material. A developing cabinet will be supplied to ships not fitted with photographic dark rooms.

9. Some establishments may receive microfilms of specifications, drawings, etc., and to enable these to be read and, if necessary, copies taken, a printer viewer has been designed for use with such film : this printer viewer will take both 35 mm. and 16 mm. film.

10. The following is a brief description of the various pieces of apparatus designed especially for this purpose :—

*Admiralty (Bath) Enlarger, A.F.E., Mark II.*—This is a specially designed enlarger for making enlargements 40 in. by 30 in. from half-plate films. It gives good line reproduction and has auto-focus mechanism which makes it simple to operate. Unskilled staff can, therefore, be rapidly trained in its use. It has a high rate of output and, given the necessary staff to operate the enlarger as intended, it is capable of producing some 400 enlargements a day. It can equally well be operated by one individual. It needs a space of approximately 30 ft. by 10 ft. including the lamp chamber. If the processing is carried out in the same room the overall measurements should be approximately 30 ft. by 20 ft., an additional room being required for drying the prints, trimming, etc. The equipment includes the necessary arc lamp and drying machine, but not sinks. Advice as to these will be given when apparatus is installed.

*Admiralty (Bath) Camera, A.F.C., Mark III.*—This is a camera specially designed for making the half-plate films from drawings 40 in. by 30 in. or in sections of that size should the drawing be larger. These cameras are similar in design to the enlargers and incorporate auto-focus mechanism. They occupy the same amount of floor space.

*Admiralty (Bath) Viewer, Mark I.*—This cabinet gives a full-size enlargement of 40 in. by 30 in. from a half-plate film. It is supplied for drawing-office use only ; supply is limited. It stands 6 ft. high and occupies a floor space of 4 ft. 2 in. by 3 ft. 7 in. It uses a 500-watt pre-focus lamp. The film is inserted in a film holder in the front of the cabinet. The light is switched on and the image appears on an opaque glass screen. The image will be more distinct if natural light is subdued : absolute darkness is not necessary.

*Admiralty (Bath) Viewer, Mark II.*—This is a small edition of the Mark I, giving an enlargement of approximately half the original size (20 in. by 15 in.). It stands 4 ft. high and occupies a floor space of approximately 24 in. square. It is intended for subsidiary use in drawing offices and particularly where space is confined. Its lamp is similar to Mark I and the films are inserted in precisely the same way. Models of this size can more readily be supplied than the Mark I.

*Admiralty (Bath) Printer Viewer, Mark III.*—This is the same size, occupying the same amount of space as the viewer, Mark II. Whilst it can be used for reading films it also has an additional attachment enabling a print of the enlargement to be made. When used for printing, red light only is permissible. It uses a lamp similar to the Mark I. For taking a print, the film is reversed in the holder, the opaque glass screen is opened and a piece of bromide paper placed, emulsion side downwards, on the clear glass. Exposure is made by merely switching the light on and off as quickly as possible. The print is then processed in the usual way. This model is specially designed for use on board ship, in isolated establishments where there is no camera, or to establishments where the installation of an enlarger is not necessary or justified.

*Admiralty (Bath) Microfilm Printer Viewer, Mark IV.*—Whilst being of a somewhat different design, its principles are the same as for the printer viewer, Mark III. It will take either 16 mm. or 35 mm. film. The screen will give an image approximately 10 in. by 8 in. and prints of particular frames can be made in precisely the same way as prints with the Mark III model. The head is rotary through 360° so that the object-matter can be read either vertically or horizontally. It uses 100-watt pre-focus lamp.

*Admiralty (Bath) Processing Unit.*—This is provided for use in conjunction with the Mark III printer viewer where fitted dark room facilities do not exist. It is a cabinet occupying deck space of approximately 30 in. by 30 in. It has collapsible sides which, when opened up, provide table space for three processing dishes to take 20-in. paper. It contains storage space for bromide papers, chemicals, etc.

11. The paper used in making enlargements is specially selected to give good line reproduction and none other than approved papers should be used. These can be obtained in various weights. For exceptional use it is possible to supply a linen mounted paper and tracing cloth, but supplies are extremely limited and costly. Since it is often necessary to supply for workshop use a number of copies of one drawing, a sensitized tracing paper, known as Mastertrace, can be supplied. A master enlargement is made on this paper from which any number of dyeline copies can be produced economically and quickly.

12. Any questions arising in regard to the supply and use of the apparatus described above, and for supplies of approved paper and chemicals for use in connection therewith, should be addressed to the Under Secretary's Office, Admiralty, Bath.

#### 5466.—Off-Grade Pig-iron for Ballasting of Ships—Economy in Use of

*W.P.Ss., P.S.Os., and Dockyards*  
(D/C.P. 84057/44.—12 Oct. 1944.)

Owing to the deterioration in the supply position of pig-iron the attention of authorities concerned is directed to the necessity for adhering strictly to the instructions promulgated in A.F.O. 4423/42.

(A.F.O. 4423/42.)

#### *Cancelled* 5467.—Amplifier, Pattern 13316B, Spares—Introduction *by AFO 5560/44.*

(N.S. 21961/43.—12 Oct. 1944.)

The following items have been added to the Rate Book for Naval Stores under Subhead F, Item 1C, Part III :—

Pattern	Description
12531	Boxes for spares
12506	Resistances, 2,000-ohms, 20-watt (Code R8W)
12507	Resistances, 10,000-ohms, 20-watt (Code R9W)
12508	Resistances, 100-ohms, 10-watt (Code R10W)
12509	Resistances, 200-ohms, 10-watt (Code R11W)
12510	Volume control, 100,000-ohms (Code R12W)

2. These items are spares for amplifiers, Pattern 13316B. Each amplifier will be issued complete with a set of spares consisting of the following items, which, with the exception of the box, Pattern 12531, are "consumable" stores and should be replenished as any of the items are used :—

Pattern	Description	No.	Subhead
12531	Boxes	1	F.1C
12506	Resistances	2	F.1C
12507	Resistances	2	F.1C
12508	Resistances	2	F.1C
12509	Resistances	2	F.1C
12510	Volume control	2	F.1C
W6338	Condensers	2	F.1A
2025	Condensers	2	F.1A
W1344	Condensers	2	F.1A
CV1075	Valves, Marconi Osram VT75	4	F.4
CV1067	Valves, Marconi Osram 6J5G	2	F.4
CV1073	Valves, Marconi Osram VT73	2	F.4
CV1071	Valves, Brimar or Mullard 5U4G	2	F.4

3. A number of amplifiers produced before the stabilization of the present type were designated Patterns 13316 and 13316A, and these were issued without sets of spares. The spares detailed in paragraph 2 above are also suitable for these earlier types and should be demanded from the nearest Naval Store Depot if not already on board.

4. As a set of spares is issued with each amplifier, Pattern 13316B, separate action by warrant yards to arrange supply to ships concerned under construction is not required.

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

(A.F.Os. 2656/44 and 4955/44.)

#### 5468.—Aircraft—Refuelling Funnel, Type "B", Ref. 1A/4027

(N.S. Air. 8644/44.—12 Oct. 1944.)

The following item has been introduced in connection with the refuelling of aircraft on aircraft carriers, and will be allowed to ships in accordance with the scales shown. Reference 1A/4027 Funnel, Aircraft Refuelling, Type "B" :—

*Ships (B.R. 378)*

Fleet Carriers	...	...	...	18 No.
Light Fleet Carriers	...	...	...	12 No.
Escort Carriers	...	...	...	6 No.
M.A.C. Ships (Grain Ships and Tankers)	...	...	...	2 No.

2. This funnel, which will separate water from petrol, comprises a series of very fine wire gauze filters and a false bottom fitted with a Perspex window on which a danger-line is marked. Any water present in the petrol collects in the false bottom and, when it reaches the danger-line, fuelling should be stopped and the funnel emptied. At least a gallon of water can be collected before there is any danger of contamination, and the funnel will allow petrol to pass at the rate of 25 gallons per minute.

3. Ships should forward demands to complete to the allowances, to their normal source of supply of air stores, quoting this Order as authority for supply. Issues to new services will be made with their initial outfit of stores.

4. Supply of the item is difficult at present, and it is not yet known when deliveries from contractors are likely to commence. Supplies will, however, begin as soon as stocks become available.

5. Arrangements have been made for the necessary quantities to be despatched to yards abroad to cover requirements of ships attached to foreign stations. Details of the quantities being supplied are being forwarded direct to (S) Naval Store Officers concerned.

6. Aircraft Stores Establishments will be amended in due course.

(C.A.F.O. 1787/44.)

#### 5469.—Aircraft Carriers—Mobile Cranes and Vehicles—REPORTS *Cancelled* *by AFO 5486/44.*

(A.C.R.D. 1262/44.—12 Oct. 1944.)

Aircraft carriers are now supplied with some or all of the following, maintenance for which is the responsibility of the Air Engineer Officer.

- Mobile crane.
- Tractors.
- Fork lifting trucks.
- Jeeps.
- Trailers for jeeps.

2. It is emphasized that the above items are in short supply, and that careful maintenance is necessary. Routine inspections are to be laid down by the Air Engineer Officer in his departmental orders, taking into account local conditions.

3. Steps should be taken to see that they are properly looked after while the ships are in dockyard hands and that renovations are carried out whenever opportunity occurs.

4. Special attention should be given at all times to the protection and maintenance of the electrical equipment and engine.

5. The mobile crane is particularly liable to deteriorate, as its normal stowage, at sea, is on the flight deck. It should therefore be scraped and repainted as necessary to avoid corrosion.

6. Any embarkation or disembarkation is to be reported to Admiralty.

7. Spares for mobile cranes should be demanded by defect list, parts for the internal combustion engine being demanded in accordance with A.F.O. 3711/44 or C.A.F.O. 809/44 as appropriate.

8. Spares for all other vehicles should be demanded from the following authorities:—

Superintending Naval Store Officer, Clyde Area.  
Naval Store Officer, Simonstown.  
Superintending Naval Store Officer, Ceylon.

(C.A.F.O. 809/44 and A.F.O. 3711/44.)

#### 5470.—Aircraft Carriers—Tray for Embarking Aircraft Stores

(A.C.R.D. 578/43.—12 Oct. 1944.)

Approval has been given for aircraft carriers to be equipped with a tray approximately 6 ft. × 4 ft. for embarking air stores.

2. Some ships will already possess suitable trays, but those who do not should insert A. and A., classification "A", in their list.

3. In the case of new construction, P.S.Os. are to arrange for the manufacture and supply of the trays.

4. A suitable design of tray is shown in A.F.O. Diagram 343/44.

#### 5471.—Radio Interference Suppression Coil (Toroidal Dust Core)—Introduction

(N.S. 23774/44.—12 Oct. 1944.)

A new radio interference suppression coil having inductance of 50 microhenries and suitable for use in circuits up to 5 amps, has been developed.

2. The coil is at present confined to use for the internal suppression of Admiralty transmitting magnetic compass, Mark I, in which it will be incorporated prior to issue. It will not be supplied on demand and its use elsewhere is not authorized.

3. The coil has been added to the Authorized List of Naval Stores under Subhead F2B, Part IV, as follows:—

Pattern 19450—Radio interference suppression coil (toroidal dust core)—50 microhenries.

4. An initial purchase of 800 coils has been arranged from Messrs. Standard Telephones, Ltd., under contract C.P.4B/75930/44, for delivery to Admiralty Compass Observatory, Ditton Park, Slough.

#### 5472.—Radio Interference Suppression—Use of Condensers, Pattern Nos. 19436 and 19436A, for Requirements of Pattern Nos. 19437 and 19437A

(N.S./D.C.O.M. 02790/44.—12 Oct. 1944.)

Supplies of condensers, Pattern Nos. 19437 and 19437A, are no longer available, and whilst it is not advisable that these patterns should be regarded as obsolete, requirements should be met by the supply of condensers, Pattern Nos. 19436 and 19436A, respectively.

2. Pending further instructions, demands should be rendered accordingly.

3. The condenser, Pattern Nos. 19436 or 19436A, is to be connected between the dynamo terminal and earth in accordance with A.F.O. Diagram 342/44 (D.E.E. Drawing 10571).

(A.F.O. 3862/44 is cancelled.)

#### 5473.—Rangefinders, 80 c.m. or 1 m. Base—Allowance

"Captain" and "Colony" Class Frigates

(N.S. 012430/44.—12 Oct. 1944.)

"Captain" and "Colony" Class Frigates are allowed one 80 c.m. rangefinder (Pattern 10051, 4053/A or 5846/A), or a 1 m. base rangefinder, Pattern 10080, for A/S purposes.

2. Ships of the above classes not already supplied with a rangefinder of either of the patterns mentioned should forward demands to their storing yards or depots.

(A.M. 0047/8 Feb. addressed C.-in-C., Western Approaches.)

#### 5474.—Stocks and Dies—Introduction of New Patterns

(N.S. 15505/44.—12 Oct. 1944.)

Stocks and dies will in future be embodied in a new B.S.I. Specification and purchased to standard designs which will be common to all Government Departments.

2. Sizes up to approximately 1 in. diameter thread or equivalent will be covered by circular split type dies. Larger sizes will be covered by chaser type dies consisting of four jaws per die.

3. Three sizes of circular split type dies will be provided, as follows:—

(a)  $1\frac{1}{8}$  in. outside diameter ... For 0–11 B.A. sizes and for all B.S.W., B.S.F., A.N.C., A.N.F. and mm. sizes up to approximately  $\frac{1}{4}$  in. diameter thread or equivalent. This die fits directly into stock, type "X".

(b)  $1\frac{5}{16}$  in. outside diameter ... For  $\frac{1}{4}$  in. diameter thread to approximately  $\frac{1}{2}$  in. diameter thread or equivalent. This die fits into a collet and is used in stock, type "Y".

(c)  $2\frac{1}{4}$  in. outside diameter ... For  $\frac{3}{8}$  in. diameter thread up to approximately 1 in. diameter thread or equivalent. This die fits into a collet and is used in stock, type "Z".

4. Collets embodying a guide will be provided for the  $1\frac{5}{16}$  in. and  $2\frac{1}{4}$  in. diameter dies. Collets for the  $1\frac{5}{16}$  in. diameter dies are  $1\frac{1}{8}$  in. diameter and fit into stock "Y", those for  $2\frac{1}{4}$  in. diameter dies are  $2\frac{1}{4}$  in. diameter and fit into stock "Z". The dies and collets will be stocked separately as the collets will not require to be replaced as frequently as the dies.

5. Stocks for circular split type dies are as indicated in paragraphs 3 and 4. Stocks for chaser type dies are as follows:—

H/CF	...	...	For B.S.F. threads.
J/CAF	...	...	For Admiralty Special Fine threads.
H/CW	...	...	For B.S.W. threads.
H/CP	...	...	For B.S.P. threads from 1 in.–2 in.
M/CP	...	...	For B.S.P. threads from 2 in.–3 in.

These stocks embody a guide.

6. Screwdrivers, Pattern 3961, will not be required with the new types of stocks and dies.

7. Details of the pattern numbers allocated to these new stocks, dies and collets are shown in the Appendix to this Order.

8. All existing Admiralty patterns of stocks and dies are now obsolete.

9. The new patterns of stocks and dies are not interchangeable with the old, and ships and services when forwarding replenishment demands for the old patterns should indicate what new patterns will be required if the patterns demanded are not available, bearing in mind—

(a) If an old type stock demanded is not available a complete range of dies will be required with the new stock, as the dies on board will be useless;

(b) if old type dies demanded are not available a new pattern stock will be required to take those supplied in lieu, unless an appropriate new type stock is already held as a result of a previous demand.

10. The Authorized List of Naval Stores and Sea Store Establishments concerned will be amended.

APPENDIX

Tools, Screwcutting

British Association Thread

Dies, circular, split,  $\frac{13}{16}$  in. outside diameter

Pattern	Description	Pattern Superseded
Size	Dia. in.	Threads per in.
6500	0	25.4
6501	1	28.2
6502	2	31.4
6503	3	34.8
6504	4	38.5
6505	5	43.0
6506	6	47.9
6507	7	52.9
6508	8	59.1
6509	9	65.1
6510	10	72.6
6511	11	81.9

British Standard Whitworth Thread

Dies, circular, split

Pattern	Dia. in.	Threads per in.	Outside dia. in.	Pattern Superseded
6512	$\frac{1}{16}$	60	$\frac{13}{16}$	802, 3954
6513	$\frac{3}{32}$	48	$\frac{13}{16}$	803, 3955
6514	$\frac{1}{8}$	40	$\frac{13}{16}$	804, 3956
6515	$\frac{3}{32}$	32	$\frac{13}{16}$	805, 3957
6516	$\frac{3}{16}$	24	$\frac{13}{16}$	806, 3958
6517	$\frac{7}{32}$	24	$\frac{13}{16}$	807, 3959
6518	$\frac{1}{4}$	20	$\frac{13}{16}$	808, 3960
6519	$\frac{1}{4}$	20	$1\frac{5}{16}$	618A
6520	$\frac{5}{16}$	18	$1\frac{5}{16}$	618B
6521	$\frac{3}{8}$	16	$1\frac{5}{16}$	618C
6522	$\frac{7}{16}$	14	$1\frac{5}{16}$	618D
6523	$\frac{1}{2}$	12	$1\frac{5}{16}$	619A
6524	$\frac{5}{8}$	11	$2\frac{1}{4}$	619C
6525	$\frac{3}{4}$	10	$2\frac{1}{4}$	619E
6526	$\frac{7}{8}$	9	$2\frac{1}{4}$	620A
6527	1	8	$2\frac{1}{4}$	620B

Dies, chaser type, set of 4

6528	$1\frac{1}{8}$	7	To suit stock H/CW	620C
6529	$1\frac{1}{4}$	7		620D
	$1\frac{3}{8}$	6		621A
6530	$1\frac{1}{2}$	6		621B
	$1\frac{5}{8}$	5		621C
6531	$1\frac{3}{4}$	5		621D
	$1\frac{7}{8}$	$4\frac{1}{2}$	621E	

British Standard Fine Thread

Dies, circular, split

Pattern	Dia. in.	Threads per in.	Outside dia. in.	Pattern Superseded
6532	$\frac{1}{4}$	26	$1\frac{5}{16}$	685
6533	$\frac{3}{8}$	26	$1\frac{5}{16}$	685A
6534	$\frac{5}{16}$	22	$1\frac{5}{16}$	686
6535	$\frac{3}{8}$	20	$1\frac{5}{16}$	687
6536	$\frac{7}{16}$	18	$1\frac{5}{16}$	687A
6537	$\frac{1}{2}$	16	$1\frac{5}{16}$	688
6538	$\frac{3}{4}$	16	$2\frac{1}{4}$	688A
6539	$\frac{5}{8}$	14	$2\frac{1}{4}$	689
6540	$\frac{11}{16}$	14	$2\frac{1}{4}$	689A
6541	$\frac{3}{4}$	12	$2\frac{1}{4}$	690
6542	$\frac{13}{16}$	12	$2\frac{1}{4}$	691
6543	$\frac{7}{8}$	11	$2\frac{1}{4}$	692
6544	1	10	$2\frac{1}{4}$	693

Dies, chaser type, set of 4

Pattern	Dia. in.	Threads per in.	Pattern Superseded
6545	$1\frac{1}{8}$	9	To suit stock H/CF { 694 694A
	$1\frac{1}{4}$	9	

Admiralty Special Fine Thread

Dies, circular, split

Pattern	Description	Threads per in.	Outside dia. in.	Pattern Superseded
6546	$\frac{3}{8}$	24	$1\frac{5}{16}$	623
6547	$\frac{7}{16}$	24	$1\frac{5}{16}$	624
6548	$\frac{1}{2}$	20	$1\frac{5}{16}$	625
6549	$\frac{5}{16}$	20	$2\frac{1}{4}$	626
6550	$\frac{5}{8}$	20	$2\frac{1}{4}$	627
6551	$\frac{11}{16}$	20	$2\frac{1}{4}$	628
6552	$\frac{3}{4}$	14	$2\frac{1}{4}$	629
6553	$\frac{13}{16}$	14	$2\frac{1}{4}$	630
6554	$\frac{7}{8}$	14	$2\frac{1}{4}$	631
6555	$\frac{15}{16}$	14	$2\frac{1}{4}$	632
6556	1	12	$2\frac{1}{4}$	633

Dies, chaser type, set of 4

Pattern	Dia. in.	Threads per in.	Pattern Superseded
6557	$1\frac{1}{16}$	12	To suit stock J/CAF { 634 635 636 637
	$1\frac{3}{8}$	12	
6558	$1\frac{5}{8}$	12	J/CAF { 634 635 636 637
	$1\frac{1}{4}$	12	

British Standard Pipe Thread

Dies, circular, split, to cut parallel threads

Pattern	Nominal size in.	Threads per in.	Outside dia. in.	Pattern superseded
6559	$\frac{3}{8}$	19	$2\frac{1}{4}$	5324
6560	$\frac{1}{2}$	14	$2\frac{1}{4}$	5324A, 5326
6561	$\frac{3}{4}$	14	$2\frac{1}{4}$	5324A, 5326, 400B

Dies, chaser type, set of 4, to cut parallel threads

Pattern	Nominal size in.	Threads per in.	Pattern Superseded
6562	1	11	To suit stock H/CP { 5324B, 5326A, 400C, 400D
	$1\frac{1}{4}$	11	
6563	$1\frac{1}{2}$	11	To suit stock M/CP { 5325, 5327, 5326B 401B, 401C, 401D
	$1\frac{3}{4}$	11	
6564	2	11	To suit stock M/CP { 401D, 402B, 402C 5325A, 5327A
	2	11	
	$2\frac{1}{2}$	11	

Diastocks

For circular type dies fitting direct into stocks

Type	Outside dia. of die in.	Pattern Superseded
6565	X $\frac{13}{16}$	All existing Admiralty patterns are superseded.
For circular type dies fitting into collets		
Type	Outside dia. of die in.	
6566	Y $1\frac{5}{16}$	All existing Admiralty patterns are superseded.
6567	Z $2\frac{1}{4}$	
Plain pattern, for chaser type dies		
Type	Type of thread	
6568	H/CF B.S.F.	
6569	J/CAF Admiralty Fine	
6570	H/CW B.S.W.	
6571	H/CP B.S.P. up to 2 in.	
6572	M/CP B.S.P. above 2 in.	

## Collets

For use with one piece circular split dies of  $1\frac{5}{16}$  in. and  $2\frac{1}{4}$  in. outside diameter

Pattern	Collet No.	Outside dia. of die in.	Stock	Thread size in.
6573	Y1	$1\frac{5}{16}$	Y	$\frac{1}{4}$ B.S.F., B.S.W.
6574	Y2	$1\frac{5}{16}$	Y	$\frac{9}{32}$ B.S.F.
6575	Y3	$1\frac{5}{16}$	Y	$\frac{5}{16}$ B.S.F., B.S.W.
6577	Y5	$1\frac{5}{16}$	Y	B.S.F., B.S.W.
6579	Y7	$1\frac{5}{16}$	Y	$\frac{1}{8}$ B.S.P.
6580	Y8	$1\frac{5}{16}$	Y	$\frac{7}{16}$ B.S.F., B.S.W.
6582	Y10	$1\frac{5}{16}$	Y	$\frac{1}{2}$ B.S.F., B.S.W.
6583	Y11	$1\frac{5}{16}$	Y	$\frac{1}{4}$ B.S.P.
6585	Z2	$2\frac{1}{4}$	Z	$\frac{9}{16}$ B.S.F., B.S.W.
6586	Z3	$2\frac{1}{4}$	Z	$\frac{3}{8}$ B.S.F., B.S.W.
6588	Z5	$2\frac{1}{4}$	Z	$\frac{11}{16}$ B.S.F., $\frac{3}{8}$ B.S.P.
6590	Z7	$2\frac{1}{4}$	Z	$\frac{3}{4}$ B.S.F., B.S.W.
6592	Z9	$2\frac{1}{4}$	Z	$\frac{13}{16}$ B.S.F.
6593	Z10	$2\frac{1}{4}$	Z	B.S.P.
6595	Z12	$2\frac{1}{4}$	Z	B.S.F., B.S.W.
6596	Z13	$2\frac{1}{4}$	Z	$\frac{3}{8}$ B.S.F.
6598	Z15	$2\frac{1}{4}$	Z	1 B.S.F., B.S.W.
6601	Z18	$2\frac{1}{4}$	Z	$\frac{3}{4}$ B.S.P.

Note.—Admiralty Special Fine Thread dies fit the same collets as B.S.F. dies.

(A.L. dated 15 Feb. 1944, NS.15505/44/B.14113 to all Home Dockyards and R.N. Store Depots.)

## Section 4

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

#### 5475.—Barrels for Mess Gear—Return in a Complete State

(V.14/7250/44.—12 Oct. 1944.)

A considerable proportion of the barrels which have contained Victualling stores issued to H.M. ships are returned to the Victualling Yards without the heading pieces. This involves the expenditure of timber and skilled labour in making the articles fit for further service—expenditure which, in the interests of economy, it is desired to avoid.

2. Particular care should be taken on opening up these barrels to ensure that the heading pieces are preserved, and, when empty, the barrels should be returned in a complete state so far as practicable.

3. If local facilities do not exist for heading-up the barrels after removal of contents, the heads or heading pieces should be securely tied in bundles, and returned with the barrels.

(A.F.O. 1714/42 is cancelled.)

#### 5476.—Dehydrated Soups

(V. 10/807/44.—12 Oct. 1944.)

As a result of trials recently carried out in H.M. ships, supplies of dehydrated meat and vegetable soup have been obtained for issue to destroyers, cruisers and larger ships in the Home Fleet and to vessels employed on long distance escort work which are based on Home Ports.

2. The arrangements for the use of dehydrated soup are as follows:—

(a) For Action Messing.—The quantity carried on board should be sufficient to provide four issues for action messing or other emergency purposes. Dehydrated soup, when used for action messing, is to be treated as an extra issue.

Supplies carried for this purpose are to be regularly turned over by withdrawal for general use (see sub-paragraph (b) below) and replacement by fresh stocks to avoid deterioration.

(b) For General Messing.—Dehydrated soup will be supplied for use in general messing and for issue to messes on victualling allowance on the basis of one issue per week.

Note.—Small supplies of dehydrated cream of tomato soup have also been obtained and while stocks last this variety may be demanded and used in the ratio of one issue of cream of tomato soup in every four issues.

If further supplies of dehydrated cream of tomato soup become available, information will be promulgated.

3. Demands for dehydrated soup should be made on the appropriate victualling yard or depot. The meat and vegetable soup will be supplied in 3 $\frac{3}{4}$ -lb. tins for action messing and for use in general messes, and in 15-oz. tins for repayment issue to messes on victualling allowance. Demands should specify the sizes of tins required. The cream of tomato soup will be supplied in 4-lb. tins only.

4. Dehydrated soup is to be demanded and accounted for in lbs., the 15-oz. tin being regarded as a nominal 1-lb. tin.

5. Instructions for preparation. (a) Meat and Vegetable Soup.—Add slowly to the required amount of hot water, stirring briskly with a fork all the time. The water must not be poured on to the powder. One pound of the powder is sufficient to make one gallon of soup (16 servings of about  $\frac{1}{2}$  pint each). Extra seasoning may be added if required.

(b) Cream of Tomato Soup.—Empty the contents of the tin into the required amount of water, bring to the boil, stirring constantly, and allow to simmer for two minutes. Each 4-lb. tin, with 26 pints of water added, is sufficient for 52 servings of about  $\frac{1}{2}$  pint each.

(c) Only enough soup should be made for immediate use. Any soup left over should be kept in a cool place and boiled before being served.

6. The prices for dehydrated soups are as follows:—

	Rate Book Price	Issuing Price
Meat and vegetable ... ..	2s. 8 $\frac{1}{2}$ d. per lb.	2s. 10d. per lb. or nominal 1-lb. tin.
Cream of tomato ... ..	3s. 6d. per lb.	3s. 8d. per lb.

#### See AFO 5223/46. 5477.—Edible Oils—Return of Empty Drums

(V. 14/7147/44.—12 Oct. 1944.)

The Admiralty contractors for edible oils have reported a serious shortage of returnable drums owing to the failure of some of H.M. ships and establishments to return all the drums supplied to them. As new drums are becoming increasingly difficult to obtain, the contractors are unable to meet demands for these oils without delay.

2. The contractors also report that drums are being returned without the screw stoppers.

3. It is essential that all empty edible oil drums should be returned to the contractors at the earliest opportunity complete with screw stoppers.

4. H.M. ships should return empty drums, complete with screw stoppers, to the nearest victualling yard or depot at every opportunity.

5. These drums are not to be used for other purposes.

6. When empty drums are returned to the contractors a label should be attached to each drum indicating the establishment from which despatched, and the number of drums in the consignment.

(A.F.Os. 1969/42 and 6078/42 are cancelled.)

**5478.—Margarine—Collection and Return of Empty Containers**

(V. 14/7146/44.—12 Oct. 1944.)

The Admiralty contractors for margarine have represented that, in view of the serious shortage of material for the manufacture of fibreboard, it is becoming increasingly important that containers should be returned to them when empty.

2. H.M. ships and Naval establishments at home should preserve all empty margarine containers and return them either to Messrs. Marcom, Ltd., direct, or to the nearest victualling yard, depot or Naval base, if supplies are drawn from these sources, whenever opportunity offers.

3. When deliveries of margarine are received by victualling yards and depots, and bases, from Messrs. Marcom, Ltd., the opportunity should be taken to return all available empty containers. For return the containers should be folded flat, placed in heaps, each heap consisting so far as possible of containers of the same size, and tied in bundles. A receipt should be obtained from the contractors for the number of containers returned.

4. Care should be taken in opening the containers, as it is hoped that it will be possible to utilize many of them a second time; but even if the containers are torn or broken on opening, they should still be returned as they have value for pulping.

(A.F.O. 2437/42 is cancelled.)

**5479.—W.R.N.S. Officers and Nursing Personnel—Loan Clothing**

(V/1/6521/44.—12 Oct. 1944.)

W.R.N.S. officers, members of Q.A.R.N.N.S. and Reserve, and V.A.Ds. proceeding to the British Assault Area may be supplied with the following articles of protective clothing on personal loan:—

- One pair boots, sea, rubber.
- Two pairs seaboot stockings.
- One oilskin suit and sou'wester.

2. The issue of this clothing is to be noted in the pay books of personnel concerned who will be responsible for losses or damage due to negligence.

3. Arrangements are to be made for the loan clothing to be withdrawn on completion of service in the British Assault Area.

(K.R. &amp; A.I., Article 1883.)

(A.F.O. 137/43.)

**5480.—Bristol Aero Engines—Establishment of Tools—Amendment**

(N.S. Air 8080/44.—12 Oct. 1944.)

The following amendments are made to A.F.O. 4985/44:—

Page	Ref. No.	Amendment
25	2156	"6" in column 11 to read "4".
	5373	"3" in column 11 to read "2".
31	73436	Delete "1" from column 12 and insert "1" in column 11.
	73438	Delete "1" from column 12 and insert "1" in column 11.
	120277	Delete "1" from column 12 and insert "1" in column 11.
	73440	Delete "1" from column 12 and insert "1" in column 11.
	73442	Delete "2" from column 12 and insert "2" in column 11.
	73444	Delete "1" from column 12 and insert "1" in column 11.

2. All reference to Repair Yards Class "A" and Repair Yards Class "B" throughout the Order should read "Repair Yards" and "Maintenance Yards" respectively.

(A.F.O. 4985/44.)

**5481.—Supplies to United States Warships and Armed Forces—Lend-Lease Stores Returned**

(W.G.F. 508/44.—12 Oct. 1944.)

With reference to A.F.O. 4553/42, reports are not required when Lend-Lease material, which is clearly identifiable as such, is returned to the Americans. The unpriced vouchers, however, should be clearly marked "Returned Lend-Lease Goods" and copies sent quarterly, except in respect of Vote 9, to the Head of the Admiralty Department concerned.

2. If, however, the returned material is not clearly identifiable as Lend-Lease, then it should be reported as reciprocal aid in accordance with A.F.O. 4553/42.

3. *Vote 8—Stores—Returns from Dockyards and Area Naval Store Bases with Expense Accounts Staff.*—No valuation or accounting action is required, but a copy of each relevant voucher is to be attached to the report forwarded quarterly to the Director of Expense Accounts, Bath.

*Returns from Supply Ships, Bases and Depots without Expense Accounts Staff.*—No action is required other than the clear marking of the vouchers, as directed in paragraph 1.

4. *Vote 9—Stores.*—When stores clearly identifiable as of Lend-Lease origin are returned to U.S. Services, the copies of the relevant unpriced vouchers forwarded in Monthly Schedule "H," in accordance with paragraph 6 of A.F.O. 4553/42, are to be clearly marked "Returned Lend-Lease Goods".

(A.F.O. 4553/42.)

**Section 5.—BOOKS, FORMS, RETURNS, CORRESPONDENCE****5482.—A.M.S.Is.**

(E.F.O.—12 Oct. 1944.)

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

(A.F.O. 5352/44.)

**5483.—Amendments to Books**

(E.F.O.—12 Oct. 1944.)

The undermentioned amendments (A.F.Os. P. 686-705/44) 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.686/44.—B.R. 377 (General) A.S.E.—Amendment No. 13.

\*P.687/44.—B.R. 377 (General) A.S.E.—Amendment No. 14.

\*P.688/44.—B.R. 377 (General) A.S.E.—Amendment No. 15.

P.689/44.—B.R. 1046—Landing Craft Technical Memoranda—Amendment No. 14.

P.690/44.—B.R. 233 (1942)—Drill for 12-pdr. 12-cwt. Gun on HA/LA, Marks VIII\* and IX Mountings—Amendment No. 4.

P.691/44.—O.U. 6292/37—Handbook of Minelayers Equipment and Mining Accessories—Amendment No. 6.

- A.F.O. P.692/44.—O.U. 6350—Manual of Minesweeping—Amendment No. 18.  
 P.693/44.—O.U. 6395—Handbook of Mark XIV, XV, XVII and XXII\* Mines, and Mark XV, XVII and XVII\* Sinkers—Amendment No. 18.  
 \*P.694/44.—B.R. 378 (General)—A.S.E.—Amendment No. 51.  
 \*P.695/44.—B.R. 378 (General)—A.S.E.—Amendment No. 52.  
 \*P.696/44.—B.R. 378 (General)—A.S.E.—Amendment No. 53.  
 \*P.697/44.—B.R. 378 (H)—Sea Hurricane—A.S.E.—Amendment No. 9.  
 P.698/44.—B.R. 213/1935—Drill for 3-in. Q.F., Mark I Guns on C.P.V. Mounting—Amendment No. 5.  
 P.699/44.—B.R. 317(1)—Mining Drill Book—General Instructions Buoyant Mines—Amendment No. 8.  
 P.700/44.—B.R. 317 (22)—Mining Drill Book, Minelaying arrangements, Coastal Force Craft—Amendment No. 3.  
 P.701/44.—B.R. 669—Instructions for the Conduct of Cash Duties—Amendment.  
 P.702/44.—B.R. 888/44—Handbook of the Royal Naval Sick Berth Staff—Amendment No. 1.  
 P.703/44.—B.R. 980 (W) (formerly O.U. 6090(W))—R.T., No. 322A, for 8-in. Guns—Amendment No. 1.  
 P.704/44.—B.R. 980 (Y) (formerly O.U. 6090 (Y))—R.T., No. 420, for 14-in. Guns—Amendment No. 1.  
 P.705/44.—B.R. 1078—Landing Craft and Barges Docking Information—Amendment No. 1.

\* Exceptionally A.F.Os. P.686-688 and 694-697 will be distributed without demand by the Superintending Naval Store Officer, R.N. Store Depot, 191a, Askew Road, Shepherds Bush, W., who holds the stock of the parent book.

(A.F.O. 5353/44.)

#### 5484.—Aircraft—Issue of O.U.5225 and O.U.5225A

R.N. Air Stations, R.N. Aircraft Repair Yards and R.N. Aircraft Maintenance Yards  
 (N.S. Air-7243/44.—12 Oct. 1944.)

Arrangements are being made for all R.N. air stations, R.N. aircraft repair yards and R.N. aircraft maintenance yards to be supplied on demand with one copy of O.U.5225 (Home Dockyard Regulations) together with Supplements. In addition, a foreign supplement (O.U.5225A) will be supplied on demand to these services abroad.

2. These books are to be held by Cashiers where borne and by the Accountant Officer at other establishments.

3. Demands for these publications are to be forwarded to Admiralty (D. of S.) through the appropriate administrative authority.

4. A.P.(N) 1 will be amended.

#### 5485.—Air Publications Distributed During May, 1944 and July, 1944

(N.S. Air 10847/44.—12 Oct. 1944.)

A.F.O. 4413/44 is to be amended as shown below:—

As printed—

“ A.P. 2380A and B, Vol. I, Model TBF-1 and TBM-1 (Avenger I and II), initial distribution ”.

Should read—

“ NAV-AER 01-85WA-2, Erection and Maintenance Instructions, Model TBF-1 and TBM-1 (Avenger I and II), initial distribution ”.

A.F.O. 4661/44 is to be amended as shown below:—

As printed—

“ A.P. 1526A, Vol. II, Pt. 2—Cheetah IX Engine—A/L.22 ”.

Should read—

“ A.P. 1526A, Vol. III, Pt. 1—Cheetah IX Engine A/L. 22 ”.

(A.F.Os. 4413/44 and 4661/44.)

#### 5486.—Air Publications—Distribution of Amendment Lists and Leaflets During August, 1944

(N.S.Air. 10849/44.—12 Oct. 1944.)

Any Service receiving more copies of any amendment list or leaflet than it needs, should return such surplus copies to the Superintending Naval Store Officer, 191A, Askew Road, Shepherds Bush, W.12, with a statement of the actual number of copies required.

2. Services which have not received copies of amendment lists or leaflets referred to in this Order, and which hold copies of the parent publication should demand the appropriate number of copies from the Superintending Naval Store Officer, Shepherds Bush.

#### Amendment Lists to Airframe and Aero-Engine Publications Volume I, Pilot's Notes and Ground Handling Notes

- | Air Publication No. | Description   |
|---------------------|---|
| 1526A, B and D.     | —Vol. I.—Cheetah IX, X and XII—Amendment Lists No. 1, 2, 3 and 4.   |
| 1564B, C and D.     | —Vol. I.—Hurricane IIA, IIB and IIC—Amendment List No. 43.  |
| 1656E.              | —Vol. I.—Spitfire VA, VB and VC—Amendment List No. 45. Slips for Amendment List No. 44.   |
| 1580B.              | —Pilots Notes, Beaufort II—Amendment List No. 6F.   |
| 1669B.              | —Vol. I.—Master II—Amendment List No. 22.   |
| 1721A, F and J.     | —Beaufighter I—Amendment List No. 38.   |
| 1721B.              | —Pilots Notes, Beaufighter II—Amendment List J.   |
| 2018A, B and C.     | —Pilots Notes, Barracuda I and II—Amendment List No. 4.   |
| 2031E.              | —Vol. I.—Wildcat V—Amendment List No. 2.  |
| 2102A and B.        | —Vol. I.—Firefly I and II—Amendment List No. 28, 29 and 30. Erection and Maintenance Instructions for Model TBF-1 and TBM-1 (Avenger I and II)—Slips quoting “ This is now NAV-AER 01-85WA-2 ”. |
| 6000.               | —Ground Handling Notes—General—Amendment List No. 7.  |
| 6012.               | —Ground Handling Notes—Halifax—Amendment List No. 4.  |
| 6020.               | —Ground Handling Notes—Stirling I and II—Amendment List No. 7.  |
| 6027.               | —Ground Handling Notes—Walrus—Amendment List No. 3.   |
| 6037.               | —Ground Handling Notes—Wildcat—Amendment List No. 3.  |
| 6063.               | —Ground Handling Notes—Sea Otter—Amendment List No. 3.  |
| 6068.               | —Ground Handling Notes—Argus—Amendment List No. 6.  |

#### Leaflets to Airframe and Aero-Engine Publications, Volume II, Part I

##### (i) Airframes

- 1515A.—Walrus I—Leaflet No. C.11.  
 1515B.—Walrus II—Leaflet Nos. M.7 (A/L. 1), Z.18.  
 1517.—Swordfish—Leaflet No. K.16.  
 1525.—Anson I—Leaflet Nos. Z.39 (A/L. 5), Z.68 (A/L. 1), Z.86 (A/L. 1), Z.90.  
 1526A.—Cheetah IX—Leaflet No. Z.31.  
 1564A.—Hurricane IA and IB and Sea Hurricane IA and IB—Leaflet Nos. C.18, M.27.  
 1564B.—Hurricane IIA, IIB and IIC—Leaflet No. M.13.  
 1578A.—Wellington I, IA and IC—Leaflet No. Z.83.  
 1578L to P.—Wellington—Leaflet Nos. Z.13 (A/L. 1), Z.26, Z.27.  
 1596A.—Oxford I and II—Leaflet No. Z.89.  
 1669A.—Master I—Leaflet No. M.22.  
 1669B.—Master II—Leaflet No. M.20.  
 1708A.—Proctor I and II—Leaflet No. P.11.  
 1760A.—Fulmar I and II—Leaflet Nos. B.10, F.6.  
 2018B.—Barracuda II—Leaflet Nos. A.14, C.22, H.5, M.21, P.8 (A/L. 2), P.16, Q.3 (A/L. 1), Q.10.  
 2018C.—Barracuda III—Leaflet Nos. A.1, B.2, H.1.  
 2023C.—Boston IIIA—Leaflet Nos. C.5, J.5, M.18, M.19, Q.6, P.4.  
 2031B.—Wildcat II—Leaflet Nos. C.4, H.3, P.3.  
 2031C.—Wildcat III—Leaflet No. P.2.  
 2031D.—Wildcat IV—Leaflet No. H.1.  
 2031E.—Wildcat V—Leaflet No. M.4.  
 2102A.—Firefly I—Leaflet Nos. B.3, J.3, M.4, M.7, M.8, M.10, Q.1, Z.9 (A/L. 2), Z.11 (A/L. 1), Z.14 (A/L. 1), Z.18.

*Leaflets to Airframe and Aero-Engine Publications, Volume II, Part I—contd.*(i) *Airframes—contd.*

<i>Air Publication No.</i>	<i>Description</i>
2102B.	Firefly II—Leaflet Nos. J.2, Z.1 and 2.
2209A.	Sea Otter I—Leaflet Nos. B.1, D.1, Z.14 (A/L. 1), Z.16.
2280A.	Seafire I—Leaflet Nos. Z.3 (A/L. 1), Z.10 (A/L. 1).
2280B.	Seafire II—Leaflet Nos. A.4, P.33, Z.33.
2281A.	Martinet I—Leaflet Nos. A.6 (A/L. 1), K.4.
2342A.	Seamew—Leaflet No. 2.
2351A.	Corsair I—Leaflet Nos. B.1, K.2, M.1, O.1, P.1, Q.1, Q.3.
2351B.	Corsair II—Leaflet Nos. B.1, C.1, K.2, M.2, P.1.
2380A.	Avenger I—Leaflet Nos. B.3, C.4, J.2, K.2, P.1, P.2.
2380B.	Avenger II—Leaflet No. J.1.
2382A.	Hellcat—Leaflet Nos. C.3, M.4, N.1.

(ii) *Aero-Engines*

<i>Air Publication No.</i>	<i>Description</i>
1526B.	Cheetah X—Leaflet No. Z.24.
1590B.	Merlin II, III and V—Leaflet No. C.20.
1590D and M.	Merlin VIII and XXX—Leaflet Nos. C.19, H.6.
1590E.	Merlin IV—Leaflet No. H.8.
1590G and N.	Merlin XX and XXX—Leaflet Nos. H.5, Z.13.
1593B.	Gipsy Queen II—Leaflet No. P.1.
1728B.	Hercules III, X and XI—Leaflet Nos. A.1–A.7 (inclusive).
1728D.	Hercules VI—Leaflet No. D.14 (A/L.2) D.44, J.6.

*Amendment Lists to Airframe and Aero-Engine Publications, Volume II*

<i>Air Publication No.</i>	<i>Description</i>
1590B to S.	Part 3—Merlin II, III and V—Amendment List No. 7.
1728A, B, D and E.	Part 3—Hercules—Amendment List No. 6.

*Amendment Lists to Airframe and Aero-Engine Publications, Volume III, Part I*

<i>Air Publication No.</i>	<i>Description</i>
1491B.	Mercury VIII and IX—Amendment List No. 21.
1491D.	Mercury XV and XX—Amendment List No. 13.
1580A and B.	Beaufort I and II—Amendment List No. 25.
1721A, B, F and J.	Beaufighter IC, IF, II, VIC and VIF.—Amendment List Nos. 12 and 13.
1810A.	Sabre I and II—Amendment List No. 11.
2018A and B.	Barraeuda I and II—Amendment List No. 18.
2046A.	Twin Wasp Junior B.4—Amendment List Nos. 10, 11 and 12.
2379A.	Cirrus Minor—Amendment List No. 3.

*Amendment Lists to Airframe and Aero-Engine Publications, Volume III**Part 2**Appendices "A"*

<i>Air Publication No.</i>	<i>Description</i>
App.(A) 1090.	Master II—Amendment List No. 79.
App.(A) 1233.	Spitfire (F), Mark IC—Amendment List Nos. 69 and 70.
App.(A) 1280.	Seafire IB—Amendment List Nos. 44, 45 and 46.
App.(A) 1308.	Seafire IIC—Amendment List Nos. 51, 53 and 54.
App.(A) 1324.	Martinet I—Amendment List No. 45.
App.(A) 1327.	Wellington II—Amendment List Nos. 164–171 (inclusive).
App.(A) 1345.	Sea Hurricane IA and IB—Amendment List Nos. 22–24.
App.(A) 1355.	Anson—Amendment Lists No. 16, 17 and 18.
App.(A) 1388.	Sea Hurricane IIB and IIC—Amendment List 13 and Slips for Amendment Lists No. 14, 15 and 16.
App.(A) 1390.	Sea Otter—Amendment Lists No. 29 and 32.
App.(A) 1394.	Firefly II—Amendment Lists No. 49, 51, 52, 53 and 54.
App.(A) 1415.	Wildcat—Amendment Lists No. 5, 6 and 7.
App.(A) 1418.	Hurricane—Amendment List No. 31.
App.(A) 1428.	Master I—Amendment List No. 14.
App.(A) 1438.	Proctor II—Amendment List No. 1.
App.(A) 1439.	Proctor III—Amendment List No. 3.
App.(A) 1446.	Corsair—Amendment List Nos. 4 and 5.
App.(A) 1460.	Seafire XV—Amendment List No. 10.

*Amendment Lists to Airframe and Aero-Engine Publications O.U. and B.R. Series.*

B.R. 377.	Photographic—Amendment List No. 2 (P.503/44); Amendment List No. 3 (P.504/44).
B.R. 377.	General—Amendment List No. 5 (P.476/44); Amendment List No. 6 (P.477/44).
B.R. 377B.	Barracuda—Amendment List No. 5 (P.433/44).
B.R. 378.	General A.S.E.—Amendment List No. 41 (P.480/44).
B.R. 378B.	Barracuda—Amendment List No. 25 (P.500/44).
B.R. 378J.	Seafire—Amendment List No. 14 (P.501/44).
B.R. 378Z.	Walrus—Amendment List No. 22 (P.491/44).
B.R. 380B.	Barracuda—Amendment List No. 7 (P.489/44); Amendment List No. 8 (P.508/44).
B.R. 380C.	Firefly—Amendment List No. 4 (P.446/44).
B.R. 380E.	Albacore—Amendment List No. 5 (P.490/44).
B.R. 863.	R.N. Air Station Magazine and Explosive Regulations—Amendment List No. 1 (P.298/44); Amendment List No. 2 (P.396/44).

*Technical Orders.*

<i>Technical Orders No.</i>	<i>Description</i>
TO-01-90CA-2.	Erection and Maintenance Instructions for C.43 (Traveller)—Slips quoting "Superseded by AN-90CC-2".
TO-02-10AB-3.	Overhaul Instructions for Pratt & Whitney R-985 Engine, Revised 5th Aug. 1943 (Expediter & Traveller).—Revision Sheets dated 15th Sept., 1943.
NAV-AER-01-25RA-1.	Pilot's Handbook of Instructions for SB2C-1, 1C, SB2C-3, SBF-1 and 2, SBW-1 and 2, Helldiver.—Revision Sheets dated June 1st, 1944.
NAV-AER-01-85WA-2.	Erections and Maintenance Manual for TBF-1 and TBM-1 (Avenger I and II).—Slips quoting "This publication covers Avenger I and II".

*Amendment Lists to Airframe and Aero-Engine Publications.*

Provisional Carrier Allowance Lists and Squadron Mobile Equipment Lists.
Provisional Carrier Allowance Lists for F6F-3 (Hellcat)—Amendment List No. 2.
Provisional Carrier Allowance Lists for FM2 (Wildcat VI)—Amendment List No. 1.
Squadron Mobile Equipment List, Part II, for FM2 (Wildcat VI)—Amendment List No. 1.
Squadron Mobile Equipment Lists, Part II, for F6F-3 (Hellcat)—Amendment List No. 4.

*Amendment Lists to Miscellaneous Publications.*

Provisional List of Stores for M.A.C. ships—Amendment List No. 9.
Navy Stock Catalogue, Binders I and II, Class 1-34, 35-76—N. Supplement, comprising Class 37, Section VI, Feb. 1944, and Addenda 21 to Section V, December 1943, and Addenda I to Section V, March, 1944.
Airframe Parts List for Hellcat—Revision Sheets dated 18th May, 1944 (1 set), 19th May, 1944 (1 set), 1st June, 1944 (1 set), 2nd June, 1944 (1 set). and Numerical list dated 10th May, 1944.

**5487.—Air Publications—Distribution of Amendment Lists and Leaflets during August, 1944, from the Naval Store Depot, Belfast**

(N.S. Air. 10849/44.—12 Oct. 1944.)

Any service receiving more copies of any amendment list or leaflet than it needs, should return such surplus copies to the Naval Store Officer, 6, Murray Street, Belfast, with a statement of the actual number of copies required.

2. Services which have not received copies of amendment lists or leaflets referred to in this Order, and which hold copies of the parent publication, should demand the appropriate number of copies from the Naval Store Officer, Belfast.



## General Publications

- Air Publication No.*                      *Description*
- 830.—Vol. III, Part E—R.A.F. Equipment Regulations—Miscellaneous—Amendment List No. 1.
- 837.—(War Edition)—Manual of Administration in the R.A.F.—Amendment List No. 6.
- 958.—King's Regulations and Air Council Instructions for the R.A.F.—Amendment List No. 132.
- 1086.—Part 4A—Price Vocabulary of R.A.F. Equipment, Camera and Photographic Stores—Amendment List No. 1.
- 1086B.—Part 4B—Gaseous Apparatus, Aircraft Personnel Equipment, Parachutes and Dropping Apparatus—Amendment List No. 2.
- 1086.—Part 11—Propellers, Cases, Radiators, Streamline Wires and Tie Rods—Amendment List No. 1.
- 1086.—Part 11B—Standard Ball and Roller Bearing (other than M/T)—Amendment List No. 3.
- 1086.—Part 11E—Aircraft Covers, Starters, Pumps, Relay Brake Controls, Gun-firing Buttons and Airborne Fire-fighting Equipment—Amendment List No. 4.
- 1095A.—Vol. I—Electrical Equipment Manual, General (Airborne)—Amendment List No. 44.
- 1095.—Vol. II, Part 1—Electrical Equipment Manual—Leaflet No. 26-W.
- 1182.—Vol. II, Part 1—Safety Equipment Manual—Leaflet Nos. B.42, C.30-W.
- 1186.—Vol. I—R.A.F. Signal Manual, Part IV—Amendment List No. 61.
- 1186.—Vol. II, Part 1—R.A.F. Signal Manual—Leaflet Nos. A.34/W, A.35/W, A.209, E.94, B.72.
- 1275.—Vol. I—Instrument Manual—Amendment List Nos. 13 and 14.
- 1275A.—Vol. I—Instrument Manual—General Instruments—Amendment List No. 28.
- 1275B.—Vol. I—Instrument Manual—Navigational Instruments—Amendment List Nos. 13 and 14.
- 1355D.—Vol. I—Cine-Camera and Accessories—Amendment List Nos. 5 and 6.
- 1374.—Vol. I—Aero-Engine Ignition Equipment—Amendment List Nos. 45, 46, 47, 48, 49, 50.
- 1374.—Vol. II, Part 1—Aero-Engine Magnetos—Leaflet Nos. H.26-W, Q.2-W, Q.3-W.
- 1374.—Vol. II, Part 2, Section C—Aero-Engine Ignition Equipment—Amendment List No. 11.
- 1480B.—Silhouettes of German Aircraft—Amendment List No. 42.
- 1480F.—Silhouettes of Japanese Aircraft—Amendment List No. 20.
- 1480X.—Recognition Handbook of British Experimental Aircraft—Amendment List No. 27.
- 1519.—Vol. II, Part 2—Schedule of Fits and Clearances—Air Pump Units—Amendment List No. 1.
- 1519.—Vol. II, Part 3—Schedule of Fits and Clearances—Air Pump Units—Amendment List No. 1.
- 1538C.—Vol. II, Part 1—Rotol V.P. Propellers—Leaflet No. 11-W.
- 1538D.—Vol. II, Part 1—De Havilland Hydromatic Propellers—Leaflet No. 44-W.
- 1538D.—Vol. II, Part 3—De Havilland Hydromatic Propellers—Amendment List No. 17.
- 1538E.—Vol. II, Part 1—Rotol External Cylinder Propellers—Leaflet No. 26-W.
- 1641F.—Vol. I—Hispano 20 mm. Shell Gun—Amendment List No. 10.
- 1661B.—Vol. I—Bombs—Amendment List Nos. 80 and 81.
- 1670.—Vol. III, Section 8—Schedule of Spare Parts, 3 kW. Landmark Beacon with Coventry Climax Engine, Type E—Amendment List No. 11.
- 1749.—Vol. III—Aircraft Cine-Cameras—Amendment List No. 1.
- 1927.—Air Force Code—Amendment List No. 30.
- 1982A.—Standard Technical Training Notes—Fitters, II (Airframe)—Amendment List No. 4.
- 2111A.—Vol. II, Part 3—Aircraft Depth Charges and Equipment—Amendment List No. 15.
- 2450.—Vol. I—Aircrew Clothing Manual—Amendment List No. 4.
- 2486.—Vol. II, Part 3—Ground Gun Mountings—Amendment List No. 56.
- 3024.—Flying Control in the R.A.F.—Amendment List No. 25.

## 5488.—Air Ministry Confidential Documents—Down Grading

(M.2305/44.—12 Oct. 1944.)

The undermentioned Air Ministry Confidential Documents and relative leaflets have been down-graded to the RESTRICTED category and given A.P. reference numbers as follows :—

<i>C.D. Number</i>	<i>New A.P. Number</i>
C.D. 0776, Sect. 8, ch. 9 ...	A.P. 2563T
C.D. 0777, Chs. 1-15, 17, 39 ...	A.P. 2563 followed by Chapter Nos. as under C.D. reference.
C.D. 0777, Ch. 18 ...	
C.D. 0777, Ch. 20 ...	
C.D. 0777, Chs. 21 and 22 ...	
C.D. 0777, Ch. 23 ...	
C.D. 0777, Ch. 25 ...	
C.D. 0777, Ch. 28 ...	
C.D. 0777, Ch. 29 ...	
C.D. 0777, Ch. 30 ...	
C.D. 0777, Ch. 31 ...	
C.D. 0777E ...	A.P. 2563E
C.D. 0338F ...	A.P. 2877F
C.D. 0408C ...	A.P. 2563U
C.D. 0471F ...	A.P. 2545F

2. All the above publications are to be removed from register charge, and their covers amended.

## 5489.—B.R. 141—R.M. Clothing, Appointments, etc.—Issuing Prices, etc.—Reprint

(V. 8/5551/44.—12 Oct. 1944.)

The above publication has now been reprinted and copies will shortly be distributed to ships and services concerned without demand.

2. On receipt of this reprint, copies of the earlier edition and errata thereto are to be disposed of in accordance with the instructions in B.R. 1.

(A.F.O. 3496/43 is cancelled.)

## 5490.—B.R. 973—Manual of Gunnery (Vol. III) for His Majesty's Fleet—Exhaustion of Stock

(G. 4468/44.—12 Oct. 1944.)

Stocks of B.R. 973 are exhausted and it is not proposed to reprint the book in its present form. A revised edition will be printed after the war.

2. In the meantime demands for B.R. 973, dated 1933, can only be met from any copies which may be returned to stock.

## 5491.—B.R. 980 (J)—Additional Pages to R.T.'s. 342, 348, 408 and 408A for B.L., 6-in. Guns, Marks XXII and XXIII, dated July, 1944—Issue

(G. 3680/44.—12 Oct. 1944.)

The following additional pages dated July, 1944, to Range Tables for B.L. 6-in. guns, Marks XXII and XXIII, are now in the press :—

- R.T.342—additional page 1A.
- R.T.348—additional page 1A.
- R.T.408—additional page 2A.
- R.T.408A—additional page 3A.

2. Copies will be issued to all holders of the main tables 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.

**5492.—B.R. 980(K)—Revised and Additional Pages to Range Tables 373A and 373B for Q.F., 4-in., Mark XVI\*, Guns—Issue**

(G. 3964/44.—12 Oct. 1944.)

Revised and additional pages, dated July, 1944, to Range Tables Nos. 373A and 373B as enumerated below are now in the press.

R.T. 373A ... Revised pages 1 and 2. Additional pages 2A and 26.

R.T. 373B ... Revised pages 1 and 2. Additional pages 2A and 21.

2. Copies will be issued to all concerned 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.

3. The revised pages 1 and 2 to Range Tables 373A and 373B supersede the existing pages 1 and 2 which should be disposed of in accordance with B.R. 1—B.R. and I.D. Catalogue, when the new pages are received.

**5493.—Forms O.460 and O.460A—Introduction**

(A.S./Sta. 17574/44.—12 Oct. 1944.)

The following new forms have been introduced :—

O.460—History sheet for 21-in., Mark XI, torpedoes.

O.460A—Continuation sheet for page 5 of Form O.460 (Re-adjustments) and should be added to Form O.1.

2. An initial distribution to Torpedo Depots concerned has been arranged. Future requirements should be demanded from Superintending Naval Store Officer, R.N. Store Depot, Park Royal, London, N.W.10.

**5494.—Supersession of Forms S.1512A and B, and R.P.S.14A and B by S.1512/R.P.S.14C**

(T.D. 253/44.—12 Oct. 1944.)

A revised combined British/U.S. C.B. register card S.1512/R.P.S.14C, for issue to United Nations' merchant ships, will shortly be distributed without demand to D.As. for N.C.S.Os.

2. These new cards, which will supersede Forms S.1512A and B, and R.P.S.14A and B, are to be issued as necessary to replace existing cards, and are to be issued to new merchant ships when being supplied with Admiralty confidential books.

3. Instructions for the use of these new register cards are being promulgated in C.B.03050 (11), N.C.S.I.68.

**5495.—O.U.5292—Block Sketch Cards of British War Vessels—Tracings of Silhouettes**

(P. 01427/44.—12 Oct. 1944.)

It is essential that O.U.5292 (Block Sketch Cards of British War Vessels) should be kept up to date, particularly so far as capital ships, aircraft carriers, cruisers and destroyers are concerned.

2. The silhouettes are to be drawn to a scale of 1 in. = 50 ft. on tracing cloth. The guns and rangefinders are to be shown trained towards the observer. White prints are not required as these are generally unsuitable for reproduction.

3. One broadside and two oblique silhouettes are required. The latter should be drawn to represent a view from an angle of 45° and 60° with the bow on the starboard side (i.e. inclinations of 135° and 150°).

4. Dockyards or repair bases where the vessels next refit or are in hand for sufficient time (i.e. a week or longer) to enable the information for preparation and completion of the tracings to be taken off, are to submit the silhouettes to the Secretary of the Admiralty (P. Branch), Bath.

5. Ships concerned are to insert an item to cover this work in the defect list. In the event of it being found impracticable to carry out the preparation of tracings on the first available occasion, the defect item is to be repeated until the work has been done.

6. In future, when any vessel is taken in hand for extensive modifications involving alterations to the appearance of the ship, a new tracing of silhouette is to be prepared and forwarded to the Admiralty. Original tracings of the silhouettes at present included in O.U. 5292 are available at the Admiralty for modification if necessary.

7. Silhouettes for vessels under construction and for future construction are to be prepared by the shipbuilder for contract built ships whenever possible; the Principal Ship Overseers concerned for ships of the same class should collaborate so as to avoid duplication of the work. For a dockyard built ship which is the only one of her type, the silhouette is to be prepared by the yard concerned. These silhouettes, which are to be forwarded to the Secretary of the Admiralty (P Branch), Bath, at the earliest opportunity, are required for capital ships, aircraft carriers, cruisers, destroyers and submarines.

8. The following information is to be supplied with the silhouettes :—

(1) *Battleships, battle cruisers, cruisers and destroyers*—

Length on waterline.

Length from fore perpendicular to after side of fore mast.

Length from fore perpendicular to after side of fore funnel.

Length from fore perpendicular to fore side of after funnel.

Length from fore perpendicular to fore side of main mast.

(2) *Aircraft carriers*—

Length on waterline.

Length from fore perpendicular to fore end of superstructure.

Length from fore perpendicular to after side of fore mast.

Length from fore perpendicular to after end of funnel.

Length from fore perpendicular to after end of superstructure.

(3) *Submarines*—

Length extreme.

Length from bow to fore side of conning tower superstructure.

Length from bow to after side of conning tower superstructure.

Length from bow to after end of superstructure (if any).

*Table of heights, etc., for battleships, battle cruisers, aircraft carriers, cruisers and destroyers.*

*Top of Spotting Top to		Top of Funnel to		Top of Bridge (including weather canvas) to		†Transit Angle (degrees)
†Forecastle Deck	W.L.	†Forecastle Deck	W.L.	†Forecastle Deck	W.L.	

\* Where no spotting top, height from fore truck to be given.

† For aircraft carriers—flight deck.

‡ See C.B.1791/43, page 3, paragraph 9.

*Submarines*—Top of gun to waterline. Top of periscope pedestal to waterline.

9. Professional officers' instructions will be amended in due course.

(A.F.Os. 833/39, 3/40, 2849/40 and 6092/42 are cancelled.)

5496.—H.M.S. "Birmingham" and Naval Cashier, Birmingham—Addressing of Correspondence

(M. 2006/44.—12 Oct. 1944.)

The Commanding Officer, H.M.S. "Birmingham," has reported that correspondence intended for the Naval Cashier, Birmingham, is frequently delivered to his ship in error, owing to envelopes being insufficiently addressed.

The correct postal address for the Naval Cashier, Birmingham, is :—

The Naval Cashier,  
241, Hagley Road,  
Edgbaston,  
Birmingham.

(A.F.Os. 3629/43 and 5929/43.)

5497.—National Health and Pensions Insurance—Pamphlet D

(P.M. 964/44.—12 Oct. 1944.)

A pamphlet of general information regarding the application of the schemes of National Health and Contributory Pensions Insurance to persons serving in the various branches of H.M. Forces and Auxiliary Services is shortly to be issued by the Ministry of Health, and will be distributed to the Fleet on the same scale as A.B.C.A. Map Review.

2. The pamphlet does not endeavour to cover the whole complex field of health and pensions insurance, but it is hoped it will provide satisfactory answers to the more straightforward enquiries which are constantly being raised.

5498.—Photographic Catalogue of American Aeronautical Material, Spare Parts and Equipment

(N.S. Air 2717/44.—12 Oct. 1944.)

Distribution of the above-mentioned publication has now been made, from the S.N.S.O. R.N. Store Depot, 191A, Askew Road, Shepherds Bush, to the following services :—

		Copies		
A.P. (N) 1	Column 3	...	...	1*
	Column 5	...	...	1*
	Column 6	...	...	1*
	Column 7	...	...	1*
	Column 9	...	...	1*
	Column 10	...	...	2
	Column 11	...	...	2
	Column 18	...	...	2
	Column 19S	...	...	3
	Column 19E	...	...	1
	Column 22	...	...	1
	Column 23	...	...	1
	Column 24	...	...	1
	Column 25	...	...	1*
	Column 29	...	...	2
	Column 30	...	...	6
	D.A.C.R.	...	...	1
	Messrs. Lockheeds, Renfrew	...	...	2
	41 Group	...	...	2
	Necessary M.U.s. and C.R.O. firms...	...	...	2

\*If American aircraft are held.

The undermentioned sections of the book have so far been distributed; remaining sections will be issued with demands to the holders of the main book when available; details of which will be promulgated by A.F.O.

Classes of which General Distribution has been made

Class No.	Title	Class No.	Title	
	Classification Index of Naval Aeronautical Materials, August 1943.	51	Paint and chemicals.	
6	Anchors and buoys	} Combined.	51	Cylinders.
8	Tyre valves.		52	Varnishes.
10	Outboard motors.		56	Emergency ration K.
12	Shackles	} Combined.	66	Machinery.
13	Oilers.		69	Hand trucks and dollies.
14	Lubricants.		72	Rain suits and rubber boots.
15	Electrical wire and	} Combined.	74	Canteen and jungle kits.
16	Cable class.		82	Master brake cylinders.
16	Resistors.		82	Wheels.
16	Capacitors.		82	Brakes.
17	Electrical equipment.		82	Tie rod assemblies.
17	Cannon connectors.		82	Naval aircraft.
18	Magnetic equipment.		82	Turnbuckles.
18	Photographic equipment.		82	Wheels, brakes, etc.
23	Water breakers.		82	Bendix shock struts.
29	Toilet articles.		83	Tyres and tubes.
31	Flares and torches.		86	Carburettors.
33	Rubber	} Combined.	86	Fuel pumps.
34	Leather		86	Vacuum pumps.
37	Flight gear.		86	Aircraft magnetos.
38	Brushes, Wood	} Combined.	86	Spark plugs.
39	and Timber.		86	Auxiliary power units
40	Machine tools.		17	Storage batteries.
42	Hardware.		86	Eclipse combustion starters.
44	Rigid tubing.		86	Aircraft starters.
46	Metal bars.		86	Jack Heintz starter parts.
47	Metal sheets.		86	Combustion starter and breech parts.
			87	Hamilton propellers control equipment.
			87	Curtiss Wright propeller parts.

Distribution of advance copies of the remaining section are issued to the undermentioned services on priority :—

		Copies	
Director of Stores	...	...	1
D.A.M.R.	...	...	1
R.N. Store, Copenacre	...	...	1
R.N. Store, Copenacre, Perth	...	...	2
R.N. Store, Copenacre, Stafford	...	...	2
F.O.N.A.S.	...	...	1
R.A.N.A.S.(N)	...	...	1
Messrs. Blackburns, Brough	...	...	1
Messrs. Lockheeds (Renfrew)	...	...	1

Classes of which over Priority Distribution has been made

Class No.	Title	Class No.	Title
16	Radio relays.	63	Water coolers.
17	Plugs.	63	Miscellaneous gear.
17	Fuses.	64	Gallery gear.
18	Magneto instructions.	86	Power units.
33	Rubber, etc.	86	Generators.
38	Brushes.	87	Curtiss propellers.
43	Bolts, nuts and screws.	87	Propeller tools.

## 5499.—Supply Position of Airframe and Engine Publications

(N.S. Air 11582/44.—12 Oct. 1944.)

The following statement, showing the supply position up to 28th September, 1944, of Airframe and Engine Publications in constant demand by Naval Air Services, is promulgated for information. It is intended to revise the information monthly.

2. The key to the notations in the "Remarks" column is as follows:—

D.A.	...	Distribution completed. Stocks available.
D.E./T.M.	...	Distribution completed. Stocks exhausted. Additional supplies expected within two months.
D.E./N.Y.S.	...	Distribution completed. Stocks exhausted. Additional supplies not yet in sight.
P.D./T.M.	...	Partial distribution effected. Additional supplies expected within two months.
P.D./N.Y.S.	...	Partial distribution effected. Additional supplies not yet in sight.
T.M.	...	Distribution not yet commenced. Supplies expected within two months.
N.Y.S.	...	Distribution not yet commenced. Supplies not yet in sight.
*	...	Change in supply position or details of book.

3. As many airframe and engine publications are in short supply, services should return to Shepherd's Bush, for the benefit of other services which may have urgent requirements, and also to eliminate any unnecessary correction work, any books surplus to immediate requirements. It is important that such books returned should be accompanied by the appropriate Amendment Lists, if not already incorporated, as deliveries of new Amendment Lists are insufficient to provide for duplicate issue.

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Avenger I and II, TBF, 1 and 1C. TBM, 1 and 1C.	<i>Airframe</i>		
	A.P. 2380A and B ...	<i>American Aircraft</i> Pilot's Notes ... ..	D.A.
	NavAer 01-85WA-2 ...	Erection and Maintenance Manual	D.A.
	A.P. 2380A and B, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2380A and B, Vol. II, Part 2.	Inspection Schedule ... ..	D.A.
	NavAer 01-85WA-3 ...	Manual of Structural Repairs ...	P.D./T.M.*
	A.P. 2380A, Vol. III, Part 1.	Parts Catalogue ( <u>Avenger I only</u> )	D.A.*
	A.P.2380B, Vol. III, Part 1.	Parts Catalogue ( <u>for Avenger II</u> )	N.Y.S.
	A.P. 2380A, Vol. III, Part 2, Mark I only.	Appendix "A", Serial No. 1442 ...	D.A.
	A.P. 2380B, Vol. III, Part 2, Mark II only.	Appendix "A", Serial No. 1529...	D.A.*
	Photographic Catalogue B.R.377, Mark I (K), Mark II (N).	Avenger Spares ... ..	P.D./T.M.
	B.R.378, Mark I (K), Mark II (N).	Establishment of Aircraft Stores for R.N. Stations.	D.A.*
	(Provisional Allowance Lists only, covering stations and ships).	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	
	B.R.380, Mark I (KB), Mark II (KC).	Standard Aircraft Equipment List and Standard Airframe Transfer List.	P.D./T.M.
Wright-Cyclone R.2600-8 Engine.	†02-35HB-1 ... ..	Operating Instructions ... ..	D.A.*
	†02-35HB-2 ... ..	Service Instructions ... ..	D.A.*
	A.P. 2046B, Vol. II, Part 1.	General Orders and Modifications	N.Y.S.
	†02-35HB-3 ... ..	Overhaul Manual ... ..	D.A.*
	†02-35HB-4 ... ..	Parts Catalogue ... ..	D.A.*
	† Revised edition being shipped from U.S.A.		T.M.*

Type of Aircraft	Airframe or Engine No.	Title	Remarks.
Avenger III, T.B.M.-3	<i>Airframe</i>		
	A.P. 2380C ... ..	Pilot's Notes ... ..	D.A.
	AN01-90EB-2 ... ..	Erection and Maintenance Manual	N.Y.S.
	A.P. 2380C, Vol. II, Part 1	General Orders and Modifications	T.M.
	A.P. 2380C, Vol. II, Part 2	Inspection Schedule ... ..	N.Y.S.
	NavAer 01-85WA-3 ...	Manual of Structural Repairs ...	P.D./T.M.*
	AN01-90EB-4 ... ..	Parts Catalogue ... ..	N.Y.S.
	A.P. 2380C, Vol. III, Part 2.	Appendix A (Serial No. not known) (British Conversion)	N.Y.S.
	Photographic Catalogue B.R. 377 ( ) ... ..	Avenger Spares ... ..	N.Y.S.
	B.R. 378 ( ) ... ..	Establishment of Aircraft Stores for R.N. Stations.	N.Y.S.
	B.R. 380 (KC) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	N.Y.S.
		Standard Aircraft Equipment List and Standard Airframe Transfer List.	N.Y.S.
Wright Cyclone R2600-20 Engine.	AN02-35HC-2 ... ..	Operating Service Manual ... ..	P.D./T.M.*
	A.P. 2046C ... ..	General Orders and Modifications	N.Y.S.
	AN02-35HC-3 ... ..	Overhaul Manual ... ..	P.D./T.M.*
	AN02-35HC-4 ... ..	Parts Catalogue ... ..	P.D./T.M.*
Corsair, Mark I, F.4U-1 Mark II, F.4U- 1A Mark III, F.3A -1 Mark IV, F.G-1	A.P. 2351A, B, C and D	Pilot's Notes (Provisional) ...	D.A.*
	†A.P. 2351A, B and C, Vol. I.	Erection and Maintenance Manual	D.A.*
	A.P. 2351A, B and C, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2351A, B and C, Vol. II, Part 2.	Inspection Schedule ... ..	D.A.*
	A.P. 2351C and D, Vol. II, Part 2, Marks III and IV.	Inspection Schedule ... ..	T.M.*
	A.P. 2351, Vol. II, Part 4, Mark III.	Major Repairs ... ..	T.M.
	AN01-45HA-3 (dated 18 Jun. 1943).	Manual of Structural Repairs ...	D.A.*
	AN.01-45 HA-4 ... ..	Parts Catalogue ... ..	N.Y.S.*
	Designation unknown ...	Maintenance Parts Breakdown List with Index Corsair IV	P.D./N.Y.S.*
	A.P. 2351A, B and C, Vol. III, Part 2.	Appendix A Serial Nos. — Mark I—1446; Mark II—1491; Mark III—1544.	D.A.
	Photographic Catalogue B.R. 377 (P) ... ..	Corsair Spares, Marks I and II only	P.D./T.M.
	§B.R. 378 (P) ... ..	Establishment of Aircraft Stores for R.N. Stations.	
	(Provisional Allowance Lists only, covering Stations and Ships.)	Establishment of Aircraft Stores for H.M. Carriers.	D.A.*
	B.R. 380 (P) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	
		† Revised edition in course of preparation will be numbered AN. 01-45HA-2. Delivery ... ..	N.Y.S.
		σ Publication has been revised and will be numbered A.N. 01-45HA-3 (dated 1 May, 1944). Delivery ...	T.M.
		§ Final book for B.R. 378 (P) is being printed. Delivery ...	T.M.*

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Pratt & Whitney R-2800-8 Engine.	<i>Airframe</i>		
	A.P. 2044C, Vol. I ...	Operating Instructions ...	D.A.
	A.P. 2044C, Vol. II, Part 1	General Orders and Modifications	N.Y.S.
	A.P. 2044C, Vol. II, Parts 2 and 3.	Overhaul Manual ...	D.A.
	A.P. 2044C, Vol. III, Part 1.	Parts Catalogue ...	D.A.
	†T.O. 02-10GB-2 ...	Operating Instructions ...	T.M.*
	†T.O. 02-10GB-3 ...	Overhaul Manual ...	T.M.*
	†A.N. 02-10GB-4 ...	Parts Catalogue ...	T.M.*
	†These books will supersede A.P. 2044C, Vol. I, Vol. II, Parts 2 and 3, and Vol. III, Part 1.		
	Expediter I and II, UC45B and 45F.	A.P. 2699A ...	Pilot's Notes ...
A.N. 01-90CD-2 ...		Erection and Maintenance Manual	D.A.*
A.P. 2699A, Vol. II, Part 1		General Orders and Modifications	N.Y.S.
⊙A.P. 2699A, Vol. II, Part 2		Inspection Schedule ...	—*
A.N. 01-90-3 ...		Manual of Structural Repairs ...	P.D/T.M.*
A.N. 01-90CD-4 ...		Parts Catalogue ...	P.D/T.M.*
		Appendix A (Serial No. 3116) (American).	D.A.*
⊙Will not be published as sufficient information is contained in A.N. 01-90CD-2.			
Pratt & Whitney R.985-A.N.-1 Engine.	A.P. 1705A—See "Traveller" Aircraft.		
	<i>Airframe</i>		
	A.P. 1691G ...	Pilot's Notes (American) ...	D.A.*
	†A.N.01-60F-2 dated 15 Jan. 1943).	Erection and Maintenance Manual	D.A.*
	A.P. 1691G, Vol. II, Part 1.	General Orders and Modifications	T.M.
	A.P. 1691G, Vol. II, Part 2.	Inspection Schedule ...	N.Y.S.
	A.N. 01-60F-3 ...	Manual of Structural Repairs ...	D.A.
	A.N.01-60FF-4 ...	Parts Catalogue ...	T.M.
	A.P. 1691G, Vol. III, Part 2	Appendix A, Serial No. 1533 ...	N.Y.S.
	SATCL 719	Standard Aircraft Transfer Checking list.	D.A.
†Revised edition being sent from U.S.A. will be numbered A.N.01-60F-2 dated 5 Aug. 1944 delivery.			
Pratt Whitney R.1340—A.N.1 engine.	02-10 DC-1	Operating Instructions ...	T.M.*
	02-10 DC-2 ...	Service Instructions ...	D.A.*
	A.P. 1705A, Vol. II, Part 1.	General Orders and Modifications	D.A.*
	02-10 DC-3	Overhaul Instructions ...	D.A.*
	02-10 DC-4 ...	Parts Catalogue ...	D.A.*
Hellcat, Mark I, F6F-3, Mark II, F6F-5	<i>Airframe</i>		
	A.P. 2382A ...	Pilot's Notes ...	D.A.
	⊙A.P. 2382A, Vol. I ...	Erection and Maintenance Manual	P.D./N.Y.S.
	A.P. 2382A, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2382A, Vol. II, Part 2.	Inspection Schedule ...	D.A.
	A.N.01-85 FB-3 ...	Manual of Structural Repairs ...	N.Y.S.
	†NavAer 01-85 SA-8 (dated 7 Jan. 1944).	Preliminary Parts Catalogue ...	D.A.*
	A.P.2382A, Vol. III, Part 2.	Appendix A, Serial No. 1421 ...	D.A.
	Photographic Catalogue	Hellcat Spares ...	PD/TM*
	B.R.377 (L) ...	Establishment of Aircraft Stores for R.N. Stations.	DA*
	B.R. 378 (L) ...	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	
	(Provisional Allowance Lists only, covering Stations and Ships.)		

Type of Aircraft	Airframe or Engine No.	Title	Remarks	
Hellcat, Mark I, F6F-3, Mark II, F6F-5.	<i>Airframe</i>			
	B.R.380 (L) ...	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.	
	⊙A.N.01-85FB-2 dated 15 Apr. 1944, Final Erection and Maintenance Manual due from printers in U.S.A. will supersede A.P. 2382A, Vol. I. Delivery . . . .		N.Y.S.	
	†A.N.01-85FB-4 Final Illustrated Parts Catalogue due from printers in U.S.A. will supersede NavAer 01-85SA-8 (dated 7 Jan. 1944). Delivery . . . .		N.Y.S.	
	Pratt & Whitney R-2800-10 engine.	See "Corsair" engine publications.		
	Helldiver— Mark I, SBW-1 Mark II, SBW-2	<i>Airframe</i>		
		A.P. 2385A ...	Pilot's Notes ...	N.Y.S.
		NAV-AER 01-25RA-2...	Erection and Maintenance Manual	P.D/T.M.*
		A.P. 2385A, Vol. II, Part I	General Orders and Modifications	N.Y.S.
A.P. 2385A, Vol. II, Part 2		Inspection Schedule ...	T.M.*	
Wright Cyclone 2600-8-20 Engine.	See "Avenger I, II and III" Publications.			
	<i>Airframe</i>			
	A.P. 2338A ...	Pilot's Notes ...	D.A.	
	T.O.-01-50KA-2 ...	Erection and Maintenance Manual	D.A.	
	A.P. 2338A, Vol. II, Part 1	General Orders and Modifications	D.A.	
Reliant, Mark I— A.T. 19.	A.P. 2338A, Vol. II, Part 2	Inspection Schedule ...	D.A.	
	T.O.-01-50KA-3 ...	Manual of Structural Repairs ...	D.A.	
	T.O.-01-50KA-4 ...	Parts Catalogue ...	D.A.	
	A.P. 2338A, Vol. III, Part 2.	Appendix A, Serial No. 1441 ...	D.A.	
	S.A.T.C.L. 621 ...	Standard Aircraft Transfer Checking List.	D.A.	
	Lycoming 680-13 Engine.	T.O.-02-15 AB-1 ...	Operating Instructions ...	D.A.
		T.O.-02-15 AB-2 ...	Service Instructions ...	D.A.
		A.P. 2050B, Vol. II, Part 1	General Orders and Modifications	N.Y.S.
		T.O.-02-15AB-3 ...	Overhaul Instructions ...	D.A.
		T.O.-02-15AB-4 ...	Parts Catalogue ...	D.A.*
Traveller I, U.C.43 and G.B.2.	<i>Airframe</i>			
	A.P. 2386A ...	Pilot's Notes ...	D.A.	
	A.N.O.1-90CC-2 ...	Erection and Maintenance Manual	D.A.	
	A.P. 2386A, Vol. II, Part 1	General Orders and Modifications	N.Y.S.	
	†A.P. 2386A, Vol. II, Part 2	Inspection Schedule ...	—*	
	A.N.01-90CC-3 ...	Manual of Structural Repairs ...	T.M.	
	T.O.01-90CC-4 ...	Parts Catalogue ...	D.A.*	
	A.P. 2386A ...	Appendix A (Serial No. 3104) (American).	D.A.*	
† Will not be published as sufficient information is contained in A.N. 01-90CC-2.				
Pratt & Whitney R.985-AN-1 Engine.	T.O. 02-10AB-1 ...	Operating Instructions ...	D.A.*	
	T.O. 02-10AB-2 ...	Service Instructions ...	D.A.*	
	A.P. 1705A, Vol. II, Part 1	General Orders and Modifications	D.A.*	
	T.O. 02-10AB-3 ...	Overhaul Instructions ...	D.A.*	
	T.O. 02-10AB-4A ...	Parts Catalogue ...	D.A.*	

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Wildcat V, F.M.-1.	<i>Airframe</i>		
	A.P. 2031E ... ..	Pilot's Notes (Provisional) ...	D.A.
	A.P. 2031E, Vol. 1 ...	Erection and Maintenance Manual	D.A.
	A.P. 2031E, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2031D, E and F, Vol. II, Part 2.	Inspection Schedule (Issue 2) ...	T.M.*
	†NavAer 01-85-R.C.-3 ...	Manual of Structural Repairs ...	D.A.*
	A.P. 2031E, Vol. III, Part 1.	Parts Catalogue ... ..	D.A.*
	A.P. 2031E, Vol. III, Part 2.	Appendix A, Serial No. 1415 ...	D.A.
	Photographic Catalogue B.R.377 (M) (Provisional copies only.)	Wildcat V Spares ... ..	P.D./N.Y.S.
	B.R. 378 (M) (Provisional copies only.)	Establishment of Aircraft Stores for R.N. Stations.	P.D./T.M.*
	B.R. 380 (M) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers and Catapult Ships.	P.D./T.M.
	B.R. 380 (M) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.
	† Edition in course of preparation for Wildcat VI. A.N. 01-190F-3 will cover both Marks.		
Pratt & Whitney R.1830-86 Engine.	A.P. 1847C, Vol. I ...	Operating Instructions ... ..	D.A.
	A.P. 1847C, Vol. II, Part 1.	General Orders and Modifications	N.Y.S.
	A.P. 1847C, Vol. II, Parts 2 and 3.	Overhaul Manual ... ..	D.A.
	A.P. 1847C, Vol. III, Part 1.	Parts Catalogue ... ..	D.A.
Wildcat VI, F.M.-2.	<i>Airframe</i>		
	A.P. 2031F ... ..	Pilot's Notes (Provisional) ...	D.A.
	†NavAer 01-190QB-2 (dated 15 Mar. 1944).	Erection and Maintenance Manual	P.D./T.M.
	A.P. 2031F, Vol. II, Part 1.	General Orders and Modifications	N.Y.S.
	A.P. 2031D, E and F, Vol. II, Part 2.	Inspection Schedule (Issue 2) ...	T.M.*
	A.N. 01-190F-3... ..	Manual of Structural Repairs ...	N.Y.S.
	A.N. 01-190FB-4 ... ..	Parts Catalogue ... ..	N.Y.S.*
	NavAer 01-190F-508 ...	Maintenance Parts Breakdown List	P.D./N.Y.S.
	A.P. 2031F, Vol. III, Part 2.	Appendix A, Serial No. 1550 ...	N.Y.S.
	Photographic Catalogue B.R. 377 (O) ... ..	Wildcat V Spares ... ..	N.Y.S.
	B.R. 378 (O) ... ..	Establishment of Aircraft Stores for R.N. Stations.	} D.A.*
	(Provisional Allowance Lists only, covering stations and ships.)	Establishment of Aircraft Stores for H.M. Aircraft Carriers and Catapult Ships.	
	B.R. 380 (O) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	P.D./T.M.
† Revised edition being prepared in U.S.A. will be numbered A.N. 01-190FB-2, covering Wildcat V and VI. Delivery ...			
Wright R.1820-56 Engine.	AN 02-35GD-1... ..	Operating Instructions ... ..	N.Y.S.*
	AN 02-35GD-2... ..	Service Instructions ... ..	P.D./T.M.*
	A.P. 1717A, Vol. II, Part 1.	General Orders and Modifications	N.Y.S.*
	ANO2-35GD-3 ... ..	Overhaul Manual ... ..	T.M.*
	ANO2-35GD-4 ... ..	Parts Catalogue ... ..	N.Y.S.

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Barracuda, Mark III. (Data for Mark III will be incorpora- ted in the existing series of Marks I and II publications with the ex- ception of Vol. II, Part 2, where a re- vised edition is in course of printing.)	<i>British Aircraft</i>		
	<i>Airframe</i>		
	A.P. 2018A, B and C ...	Pilot's Notes ... ..	D.A.
	A.P. 2018A, B and C, Vol. I.	Handbook or Manual ... ..	D.A.
	A.P. 2018A, B and C, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2018A, B and C, Vol. II, Part 2.	Inspection Schedule (Issue No. 3)	T.M.
	A.P. 2018A, B and C, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 2018A, B and C, Vol. III, Part 4.	Major Repairs ... ..	D.A.
	†A.P. 2018A, B and C, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.*
	A.P. 2018A, B and C, Vol. III, Part 2.	Appendix A, Serial No. 1517 ...	D.A.*
	⊕B.R. 377 (B) (Provisional Copies only.)	Establishment of Aircraft Stores for R.N. Stations.	P.D./N.Y.S.*
	B.R. 378 (B) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	D.A.
	B.R. 380 (B) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.*
† Revised edition in course of preparation. Delivery ... .. N.Y.S.			
⊕ Final Book is being printed. Delivery ... .. T.M.*			
Merlin 32 Engine.	A.P. 1590D and M, Vol. I	Handbook or Manual ... ..	D.A.
	A.P. 1590D and M, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 1590D and M, Vol. II, Part 2.	General Fits and Clearances ...	D.A.
	A.P. 1590D and M, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 1590D and M, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
Firefly, Marks I and II.	<i>Airframe</i>		
	A.P. 2102A and B ...	Pilot's Notes ... ..	D.A.
	A.P. 2102A and B, Vol. I	Handbook or Manual ... ..	D.A.
	A.P. 2102A and B, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2102A and B, Vol. II, Part 2.	Inspection Schedule ... ..	D.A.
	A.P. 2102A and B, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 2102A and B, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
	A.P. 2102A, Vol. III, Part 2.	Appendix A, Mark I, Serial No. 1552.	D.A.
	A.P. 2102B, Vol. III, Part 2.	Appendix A, Mark II, Serial No. 1394.	D.A.
	B.R. 377 (C) ... ..	Establishment of Aircraft Stores for R.N. Air Stations.	D.A.
	B.R. 378 (C) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	D.A.
	B.R. 380 (C) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.
	Griffon II Engine.	A.P. 2234A, Vol. I ...	Handbook or Manual ... ..
A.P. 2234A, Vol. II, Part 1		General Orders and Modifications	D.A.
A.P. 2234A, Vol. II, Part 2		General Fits and Clearances ...	N.Y.S.
A.P. 2234A, Vol. II, Part 3		Instructions for Repair ... ..	D.A.
A.P. 2234A, Vol. III, Part 1.		Schedule of Spare Parts ... ..	D.A.

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Seafire, Mark III	<i>Airframe</i>		
	A.P. 2280C ... ..	Provisional Pilot's Notes... ..	D.A.
	A.P. 2280C, Vol. I ... ..	Handbook or Manual ... ..	D.A.
	A.P. 2280C, Vol. II, Part 1	General Orders and Modifications	D.A.
	† A.P. 2280C, Vol. II, Part 2	Inspection Schedule (Issue No. 2)	D.A.*
	A.P. 2280C, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.
	A.P. 2280C, Vol. II, Part 4	Major Repairs ... ..	T.M.
	A.P. 2280C, Vol. III, Part 1.	Schedule of Spare Parts ... ..	P.D./T.M.*
	A.P. 2280C, Vol. III, Part 2.	Appendix A, Serial No. 1308 ...	D.A.
	B.R. 377 (J) ... ..	Establishment of Aircraft Stores for R.N. Air Stations.	T.M.*
B.R. 378 (J) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	D.A.	
B.R. 380 (J) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.	
† A.P. 2280C, Vol. II, Part 2, Issue No. 3 is in course of printing. Delivery...			T.M.
Merlin 55 Engine	A.P. 1590T, Vol. I ... ..	Handbook or Manual ... ..	D.A.
	A.P. 1590T, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1590T, Vol. II, Part 2	General Fits and Clearances ...	D.A.
	A.P. 1590T, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.
	A.P. 1590T, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.*
Seafire XV ...	<i>Airframe</i>		
	A.P. 2280D ... ..	Pilot's Notes ... ..	T.M.
	A.P. 2280D, Vol. I ... ..	Handbook or Manual ... ..	T.M.
	A.P. 2280D, Vol. II, Part 1	General Orders and Modifications	N.Y.S.
	A.P. 2280D, Vol. II, Part 2	Inspection Schedule ... ..	T.M.
	A.P. 2280D, Vol. II, Part 3	Instructions for Repairs ... ..	T.M.
	A.P. 2280D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	N.Y.S.
	A.P. 2280D, Vol. III, Part 2.	Appendix A, Serial No. 1460 ...	D.A.
	B.R. 377 (J) ... ..	Establishment of Aircraft Stores for R.N. Stations.	T.M.*
B.R. 378 (J) ... ..	Establishment of Aircraft Stores for H.M. Aircraft Carriers.	D.A.*	
B.R. 380 (J) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	N.Y.S.*	
Griffon VI Engine.	A.P. 2234B, Vol. I ... ..	Handbook or Manual ... ..	T.M.
	A.P. 2234B, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 2234B, Vol. II, Part 2	General Fits and Clearances ...	T.M.
	A.P. 2234B, Vol. II, Part 3	Instructions for Repairs ... ..	T.M.
	A.P. 2234B, Vol. III, Part 1.	Schedule of Spare Parts ... ..	T.M.
Sea Otter	<i>Airframe</i>		
	A.P. 2209A ... ..	Provisional Pilot's Notes ... ..	D.A.
	A.P. 2209A, Vol. I ... ..	Handbook or Manual ... ..	D.A.
	A.P. 2209A, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 2209A, Vol. II, Part 2.	Inspection Schedule ... ..	D.A.
	A.P. 2209A, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.*
	A.P. 2209A, Vol. III, Part 1	Schedule of Spare Parts ... ..	D.A.
	A.P. 2209A, Vol. III, Part 2.	Appendix A, Serial No. 1390 ...	D.A.
	B.R. 377 (Y) ... ..	Establishment of Aircraft Stores for R.N. Air Stations.	N.Y.S.
	B.R. 380 (Y) ... ..	List and Standard Airframe Transfer List.	N.Y.S.

Type of Aircraft.	Air frame or Engine No.	Title	Remarks
Mercury 30 Engine	A.P. 1491D, Vol. I ... ..	Handbook or manual ... ..	D.A.
	A.P. 1491D, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 1491D, Vol. II, Part 2.	General Fits and Clearances ...	D.A.
	A.P. 1491D, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 1491D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
Swordfish, Marks I, II, III and IV. These publications are issued for all Marks with exception of Appendix A Schedules, and will be amended as necessary. It should be noted in view of the similarity of the various Marks the preparation of Amendment Lists will receive a low priority.	A.P. 1517A, B, C, and D	Pilot's Notes ... ..	D.A.
	A.P. 1517A, Vol. I ... ..	Handbook or Manual ... ..	D.A.
	A.P. 1517A, B and C, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 1517, Vol. II, Part 2	Inspection Schedule ... ..	D.A.
	A.P. 1517, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.
	A.P. 1517A, B, and D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
	A.P. 1517, Vol. III, Part 2	Appendix A, Serial No. 1244, Marks I and II.	D.A.
	A.P. 1517, Vol. III, Part 2	Appendix A, Serial No. 1471, Mark III.	D.A.
	B.R.377 (A) ... ..	Establishment of Aircraft Stores for R.N. Air Stations.	D.A.
	B.R.378 (A) ... ..	Establishment of Aircraft Stores for H.M. Aircraft..	D.A.
B.R.380 (A) ... ..	Standard Aircraft Equipment List and Standard Airframe Transfer List.	D.A.	
Pegasus XXX Engine.	A.P. 1451D, Vol. I ... ..	Handbook or Manual ... ..	D.A.
	A.P. 1451D, Vol. II, Part 1.	General Orders and Modifications	D.A.
	A.P. 1451D, Vol. II, Part 2.	Schedule of Fits and Clearances	D.A.
	A.P. 1451D, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 1451D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
Anson I ...	<i>Common Types of Aircraft</i>		
	<i>Airframe</i>		
	A.P. 1525A and E ... ..	Pilot's Notes ... ..	D.A.*
	A.P. 1525A, D, E and F, Vol. I.	Handbook or Manual ... ..	D.A.*
	A.P. 1525, Vol. II, Part 1	General Orders and Modifications	D.A.*
	A.P. 1525, Vol. II, Part 2	Maintenance Manual ... ..	D.A.*
	A.P. 1525, Vol. II, Part 3	Instructions for Repairs ... ..	P.D/T.M.*
	A.P. 1525, Vol. III, Part 1	Schedule of Spare Parts ... ..	D.A.*
	A.P. 1525A and D, Vol. III, Part 2.	Appendix A, Serial No. 1355 ...	D.A.
	A.C.L. 57R ... ..	Airframe Checking List ... ..	D.A.*
Cheetah IX Engine.	A.P. 1526A, B and D, Vol. I.	Handbook or Manual ... ..	D.A.*
	A.P. 1526A, Vol. II, Part 1	General Orders and Modifications	D.A.*
	A.P. 1526A, Vol. II, Part 2	General Fits and Clearances ...	D.A.*
	A.P. 1526A, Vol. II, Part 3	Instructions for Repairs ... ..	P.D/N.Y.S.
	A.P. 1326A and D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	P.D/N.Y.S.*

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Beaufighter II	<i>Airframe</i>		
	A.P. 1721B ... ..	Pilot's Notes ... ..	D.A.
	A.P. 1721B, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1721B, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1721B, Vol. II, Part 2	Maintenance Manual ... ..	D.A.
	A.P. 1721B, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.
	A.P. 1721B, Vol. III, Part 1.	Schedule of Spare Parts ... ..	P.D/N.Y.S.
	A.P. 1721B, Vol. III, Part 2.	Appendix A, Serial No. 1277 ...	D.A.
	S.A.T.L. 615 ... ..	Standard Airframe Transfer Checking List.	D.A.
	B.R. 377 (BP) ... ..	Establishment of Aircraft Stores for R.N. Air Stations.	N.Y.S.
Merlin XX Engine.	A.P. 1590G, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1590G, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1590G, Vol. II, Part 2	General Fits and Clearances ...	D.A.
	A.P. 1590G, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.
	A.P. 1590G, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
Beaufort I ...	<i>Airframe</i>		
	A.P. 1580A ... ..	Pilot's Notes ... ..	D.A.
	A.P. 1580A and B, Vol. I	Handbook or Manual ... ..	D.A.*
	A.P. 1580A, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1580A, Vol. II, Part 2	Maintenance Manual ... ..	D.A.
	A.P. 1580A and B, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.*
	A.P. 1580A, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
A.P. 1580A, Vol. III, Part 2.	Appendix A, Serial No. 1406 ...	P.D./T.M.*	
A.C.L. 58R ... ..	Airframe Checking List ... ..	D.A.*	
Taurus XII Engine.	A.P. 1707A, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1707A, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1707A, Vol. II, Part 2	General Fits and Clearances ...	D.A.
	A.P. 1707 A and B, Vol. II Part 3.	Instructions for Repairs ... ..	D.A.*
	A.P. 1707A and B, Vol. III, Part 2.	Schedule of Spare Parts ... ..	D.A.*
Beaufort II ...	<i>Airframe</i>		
	A.P. 1580B ... ..	Pilot's Notes ... ..	D.A.
	A.P. 1580B, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1580B, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1580B, Vol. II, Part 2	Maintenance Manual ... ..	D.A.
	A.P. 1580B, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.
	A.P. 1580B, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
	A.P. 1580B, Vol. III, Part 2.	Appendix A, Serial No. 1268 ...	P.D./T.M.*
A.C.L. 53R ... ..	Airframe Checking List ... ..	D.A.	
Pratt & Whitney 1830-90 S.3C4G Engine	Designation not known		
	Handbook or Manual ... ..		
	Designation not known		
	General Orders and Modifications		
	Designation not known		
General Fits and Clearances ...			
Designation not known			
Instructions for Repairs ... ..			
Designation not known			
Schedule of Spare Parts ... ..			

Type of Aircraft	Airframe or Engine No.	Title	Remarks
Blenheim IV ...	<i>Airframe</i>		
	A.P. 1530B ... ..	Pilot's Notes ... ..	D.A.
	A.P. 1530B, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1530B, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1530A and B, Vol. II, Part 2.	Maintenance Manual (Issue 3) ...	D.A.*
	A.P. 1530B, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.*
	A.P. 1530B, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.*
	A.P. 1530B, Vol. III, Part 2.	Appendix A, Serial No. 1256 ...	D.A.
	A.C.L. 61R ... ..	Airframe Checking List ... ..	D.A.*
	Mercury 30 Engine.	See "Sea Otter" Engine	
Defiant T.T., Mark III.	<i>Airframe</i>		
	A.P. 1592D ... ..	Pilot's Notes ... ..	D.A.
	A.P. 1592D, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1592D, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1592D, Vol. II, Part 2	Maintenance Manual ... ..	D.A.
	A.P. 1592D, Vol. II, Part 3	Instructions for Repairs ... ..	D.A.*
	A.P. 1592D, Vol. III, Part 1.	Schedule of Spare Parts ... ..	N.Y.S.
	A.P. 1592D, Vol. III, Part 2.	Appendix "A", Serial No. 1476...	D.A.
	B.R. 377 (AZ) ... ..	Establishment of Aircraft Stores for R.N. Stations.	N.Y.S.
	Merlin III Engine.	A.P. 1590B, Vol. I ...	Handbook or Manual ... ..
A.P. 1590B, Vol. II, Part 1		General Orders and Modifications	D.A.
A.P. 1590B, Vol. II, Part 2		General Fits and Clearances ...	D.A.
A.P. 1590B, Vol. II, Part 3		Instructions for Repairs ... ..	D.A.
A.P. 1590B, Vol. III, Part 1.		Schedule of Spare Parts ... ..	D.A.
Oxford II ...	<i>Airframe</i>		
	A.P. 1596A and B ...	Pilot's Notes ... ..	D.A.*
	A.P. 1596A, Vol. I ...	Handbook or Manual ... ..	D.A.
	A.P. 1596A, Vol. II, Part 1	General Orders and Modifications	D.A.
	A.P. 1596A, Vol. II, Part 2	Maintenance Manual ... ..	D.A.
	A.P. 1596A and E, Vol. II, Part 3.	Instructions for Repairs ... ..	D.A.*
	A.P. 1596A, Vol. III, Part 1.	Schedule of Spare Parts ... ..	D.A.
A.P. 1596A, Vol. III, Part 2.	Appendix "A", Serial No. 933 ...	D.A.*	
A.C.L. 78R ... ..	Airframe Checking List ... ..	D.A.*	
Cheetah X Engine.	A.P. 1526A, B and D, Vol. I.		
	Handbook or Manual ... ..		
	A.P. 1526B, Vol. II, Part 1		
	General Orders and Modifications		
	A.P. 1526B, Vol. II, Part 2		
	General Fits and Clearances ...		
A.P. 1526B, Vol. II, Part 3			
Instructions for Repairs ... ..			
A.P. 1526B, Vol. III, Part 1.			
Schedule of Spare Parts ... ..			

(A.F.O. 4555/44 is cancelled.)



## Section 6.—SHORE ESTABLISHMENTS

### 5500.—Temporary Clerks—Recruitment, Pay and Conditions of Service

(C.E. 57802/44.—12 Oct. 1944.)

Paragraph 15 of A.F.O. 5118/44 should be amended by the addition of the following :—

"Note.—As a purely wartime concession, an additional 6 days' annual leave (making 18 days) may be granted to Temporary Clerks aged 17."

(A.F.Os. 4833/44 and 5118/44.)

### 5501.—Non-Industrial Staffs—Employment and Conditions of Service of Juveniles

(C.E. 57802/44.—12 Oct. 1944.)

Paragraph 13 of A.F.O. 5120/44 should be amended by the addition of the following :—

"Note.—As a purely wartime concession, an additional 6 days' annual leave (making 18 days) may be granted to those juveniles, aged 17, who would normally become entitled to not less than 18 days' annual leave at age 18."

(A.F.Os. 4833/44 and 5120/44.)

### 5502.—Fire-Fighting Training—Precautions

(L.D./N.L. 10933/44.—12 Oct. 1944.)

The use of unauthorized incendiary bombs for fire-fighting training recently resulted in an accident, involving injuries to personnel.

2. Practice incendiary bombs only are to be obtained and used in accordance with the directions given in A.R.P. Handbook No. 9, chapter 6, and relative appendix.

3. The retention of any other type of incendiary bomb for fire-fighting training is forbidden.

4. Any such incendiary bombs that have been retained are to be handed to the appropriate Bomb Disposal Officer for disposal.

### 5503.—Machine Tools Imported from U.S.A. for Naval Establishments at Home—Revised Payment Arrangements

(D.N.A. 11985/44.—12 Oct. 1944.)

Arrangements have been made with effect from 16th October, 1944, whereby direct settlement will be made by Ministry of Supply with importers for the cost of machine tools imported from U.S.A. for use in Admiralty establishments at home.

2. The firms' invoices for machines, etc., covered by this arrangement, will be endorsed "IMPORTED".

3. When machine tools have been ordered under existing local purchase limits, no payment should be made on any invoice endorsed "IMPORTED". The invoice, together with a certificate as to satisfactory receipt of the supplies, should be forwarded to Director of Navy Accounts (Branch 7A), Bath. Any invoices received prior to but unpaid on 16th October, should be dealt with under the above arrangements.

4. For deliveries under Admiralty contracts, the necessary action will be taken by Director of Navy Accounts. The endorsement "IMPORTED" should, however, be entered on the Account of Receipt where this appears on the Advice of Delivery or other documents received from the supplier.

5. It should be noted that these arrangements only apply to invoices endorsed as indicated above, for all other invoices the present payment procedure should continue.

### 5504.—Workmen Sleeping in Admiralty Establishments for Fire, etc., Duties—Revised Allowance

(L. 10290/44.—12 Oct. 1944.)

The following extract from Award No. 1980 of the Industrial Court is promulgated for information and necessary action :

"5. The Court have given careful consideration to the evidence and submissions of the parties and award that all industrial employees (with the exception of the volunteer Fire Brigades in H.M. Dockyards) in H.M. Dockyards and other Admiralty Industrial Establishments who are at present paid 3s. a night under Article 21, Cash Duties Instructions, for sleeping in the establishment during the silent hours in order to be ready to carry out their normal industrial work, shall be paid an allowance of 5s. a night for this duty. Effect shall be given to this award as from 1st April, 1944."

2. The effect of this decision is that, from the 1st April, 1944, the figures of 30s., 3s. and 6s. prescribed in Cash Duties Instructions should be increased to 50s., 5s. and 10s. respectively.

3. A formal amendment to Cash Duties Instructions is being issued.

### 5505.—Workpeople Released to take up Other Work of National Importance During the War or Discharged on Redundancy

(L. 3654/44.—12 Oct. 1944.)

When Admiralty workpeople are, with the consent of their department and under arrangements approved by the Ministry of Labour and National Service, released for service in industry, or other work of national importance, the following rules are to be observed :—

(a) No established man is to be released without specific Admiralty instructions.

(b) Hired men, so released, should be shown as "absent with permission for service with (name of firm, etc.) under direction by the Ministry of Labour and National Service". Such releases should be reported to the Admiralty.

2. Any workpeople so released, who had they been called up for military service, would have qualified for balance of civil pay, as provided in A.F.O. 1135/39, may be allowed to count service in outside industry for pension or gratuity. The firms to which such workpeople are transferred should therefore be requested to keep a record of their service and to report to the establishment where the men are employed, any further change of employment or release to H.M. Forces as the case may be.

3. Should a workman die or retire on account of ill-health while in private employment, this fact should be made clear in forwarding the application for an award. Such awards will be calculated on the basis of the rate of pay which the man would have received had he not been so released.

4. No award of gratuity can be made to a workman at the time of his release to private employment (but see paragraphs 8 *et seq.*).

5. In order that information concerning breaks in service, due to sickness or unemployment, may be available, each transferred worker who satisfies the conditions in paragraph 2 should, on release, be given a form (specimen copy as Appendix A) and asked to return it quarterly, beginning on 1st October, 1944. After the information has been recorded, the form should, on each occasion, be returned to the workman. Where there has been a break in service exceeding 14 days for a reason other than sickness, the workman should be asked to furnish a certificate (specimen as Appendix B) signed by the Local Officer of the Ministry of Labour and National Service, certifying that he has not refused an offer of suitable employment during the break. Periods of unemployment not exceeding 14 days need not be covered by any certificate. Periods of unemployment exceeding 14 days will reckon for pension or gratuity, only if they are covered by a certificate.

6. Periods of sick absence will reckon for superannuation, etc., purposes to the extent that they would be reckonable had the man actually remained in Admiralty employment.

7. Paragraphs 5 and 6 operate from 20th July, 1944. Past periods of sickness and unemployment while on transfer may be allowed to reckon in full for pension or gratuity, unless there is reason to believe that these absences were due to the workman's own fault.

8. It may be that in the absence of general instructions on the subject, assurances have been given in the past to individual released workmen that their services in outside industry would count for gratuity, even though they would not have qualified for balance of civil pay on mobilization. Such particular assurances are to be honoured, and the circumstances reported when the application for an award is forwarded.

9. It is obvious that the foregoing arrangements will affect a class of workman who, as a general rule, can reasonably be expected to return to Admiralty work after the present emergency, but as a result of changes in the volume of work or some similar cause, cases may arise (a) where men are definitely redundant to requirements and are regarded as discharged when they leave the service for other employment (b) where it is impossible to classify them in either of these two categories.

10. Gratuities may be paid to men in category (a) on discharge, subject to the usual conditions.

11. An option should be given to men in category (b) either to be paid forthwith any gratuity due at the date of discharge, on the understanding that the period of service in industry will not subsequently be taken into account, or to have their gratuity deferred until the end of the war, on the understanding that the period of service in industry will be taken into account when the gratuity is paid.

12. In any cases where a gratuity has been made and the workman is subsequently re-employed in any Government department, he may be permitted to refund it, and service under the Crown, both before and after the period of employment in industry (but not the actual period of service in industry), will then be reckonable when he is finally discharged.

APPENDIX A

Details of Employment in Industry

Table with 4 columns: Period\* (From, To), Employer's name and address, Number of days sick leave during the period, Employer's signature. If signed by a deputy the rank or position held by that deputy.

\* The period should normally be for one quarter (three months) but if employment is changed during the quarter, separate spaces should be used for work for different employers.

Department.....
Officer's name.....
Permanent address.....
Temporary address (if any).....

This form should be returned to the department duly filled in, at the end of each quarter.

APPENDIX B

Certificate to be signed by Local Officer of the Ministry of Labour and National Service.

I certify that M..... registered for employment during the period..... to .....

The claim for unemployment benefit (if any) was/was not\* disallowed on account of a refusal of suitable employment.

(Signed).....
\* Delete whichever is inapplicable.
(A.F.O. 1135/39.)
(A.F.O. 3918/44 is cancelled.)

5506.—Photographic Reproduction of Plans, Drawings, etc.

(U.S.B. 969/44.—12 Oct. 1944.)

Attention is drawn to A.F.O. 5465/44, shown in Section 3 of this issue.

5507.—Mersey Tunnel—Government Warrants

(D.N.A. 30094/44.—12 Oct. 1944.)

Attention is drawn to A.F.O. 5404/44 in Section 2 of this issue.

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