

SUB-SECTION **AD** STORES

STORES

PAGE AD2

This sub-section has been corrected from "Store Keeping Instructions", King's Regulations and Admiralty Instructions and Admiralty Fleet Orders up to May 1931.

W/T Stores may be divided into two classes, viz., pattern articles and experimental stores.  
Pattern Articles. Pattern articles are those for which purchase drawings and specifications, (or in the case of less important items purchase schedules) have been arranged, and approval has been obtained to include them in the "Authorised List of Naval Stores", i.e., "Rate Book".

Such articles on inclusion in "Rate Book" are allotted a pattern number; this number should be used in all dealings with Naval Stores.

Improvements or modifications to the original article are frequently indicated by the addition of a suffix letter to the pattern number, e.g., Pattern 6854, 6854A, 6854B, 6854C, 6854D and 6854E, are all 3 kW. motor alternators, but differ slightly in construction from each other.  
Suffix Letters. A suffix letter used with a pattern number must not be confused with that used in the nomenclature of panels, etc. In the former case the suffix affects the particular machine or instrument only, whereas in the latter it may affect the whole set, e.g., any machines of the Pattern 6854 series may be fitted to Type 37 without altering the type of set. If, however, valve panels 3 KA. are fitted instead of 3K, the set becomes Type 37A. A very general misapplication of the use of suffix letters occurs when designating a set "Type 4A" because it is fitted with an "A" pattern spark gap. This is incorrect as the modification has only been made to the spark gap and the set itself still remains Type 4.

Experimental Stores. These are stores which have not yet been standardised, but may be supplied to ships carrying out experiments or fitted with "X" sets.

The Rate Book. This book contains the current price or rate of all standard stores. It is sub-divided into sub-heads in a similar manner to an ordinary catalogue.

Sub-heads are lettered and numbered and in some cases further sub-divided by another letter, e.g.,

F1 (a) - W/T Stores.

F2 (a) - Battery Stores.

Each sub-head has its own series of pattern numbers, and it may sometimes be found that items in different sub-heads bear the same pattern number. This, however, should not cause confusion, as only stores which are very dissimilar in nature bear the same pattern number.

Where ordinary commercial articles are supplied for Service work, the trade description is retained and they are not allocated a pattern number, e.g., Tyres, pneumatic; Tubes, inner, etc.

The letter "O" in the Rate Book indicates the article is "obsolescent". Stocks are issuable until exhausted but no further purchases will be made.

Co-ordinating Patterns. If an article is common to the Admiralty and other Government departments and standardised specifications or patterns have been adopted, the pattern number is prefixed by:-

- "C" for general stores;
- "T" for textiles and clothing;
- "K" for indicating instruments.

Component Parts. In Appendix III of the Rate Book will be found a List of Component Parts which shows the grouping of various pattern articles under one pattern number for ease of accounting, etc e.g., a valve panel includes all the instruments used in that panel, except those which, on account of their weight or position on the panel, could not easily be packed for shipment. These latter instruments are allowed separately by establishment.

Warrant. The ship's Warrant contains a list of all stores supplied to a ship. It differs from an Establishment in that each entry shows the total quantity allowed to the ship, whereas the Establishment shows the allowance per set.

On first fitting out, three copies of the ship's Warrant are prepared by the Superintending Naval Store Officer of the fitting-out Yard. One copy is retained by the Superintending Naval Store Officer and transferred later to the Storing Yard, one forwarded to Admiralty, and one to the ship.

The ship's copy is corrected to date annually and circulates to Admiralty and Superintending Naval Store Officer of Storing Yard and is finally returned to the ship.

The Superintending Naval Store Officer's copy is used to check demands from the ship, and under normal circumstances, demands for articles not shown in the Warrant will be refused.

In this connection it should be noted that components of an article, as in the paragraph entitled "Component Parts" above, will not be shown on the Warrant. It is therefore essential when forwarding demands for replacement of such articles, that the Form S.156 forwarded to C.S.O. should be endorsed "Component of Patt....."

Fixtures. Fixtures are that part of an installation, which, when fitted in place becomes part of the ship's structure. Fixtures may be either standard pattern stores or stores special to ship. They are not allowed in the W/T Establishment and are not accounted for by the C.S.O. but are shown and accounted for on the "Ship's Fixture List".

Replacements are normally made by "Defect List", but spares not involving Dockyard work for fitting may be obtained through C.S.O. from Dockyard, when required.

By the provisions of A.F.O. 2242/30, the only W/T Stores remaining on the Fixture List is Type 401 Wa/T Set. Spares for these sets are maintained by Yards concerned, and may be drawn in the usual manner as Sea Stores.

Establishment. For the purpose of issues of stores to ships, allowances are made by an establishment for each particular set. Stores are classified under two headings, viz., Permanent and Consumable.

Permanent Stores. Permanent stores are those for which little or no expenditure is anticipated, or stores of such value that it is undesirable to make them Consumable (e.g., valves). Defective permanent stores may be exchanged, but a new instrument will not be issued until the defective one has been returned. The only exception to this is in a case where it is necessary to retain the defective instrument in order to keep the installation in action. In this case the defective instrument is to be returned as soon as possible (vide paragraphs 1 and 2, memo of Instruction in W/T Establishment).

Issues and Replacements. Should it be necessary at any time to return an instrument to store either as surplus or defective, the instrument should be returned to the C.S.O. together with a Form S1091. If replacement is required a Form S156 stating the article required, should accompany the S1091 (see also the above paragraph).

The C.S.O. will then raise a "Report of Survey" voucher, S.331, and if necessary, a "Demand to Replenish" voucher S.134d.

Consumable Stores. On first fitting out, consumable stores will be supplied to the established allowance. The monetary allowance for the upkeep of these stores is shared with the Torpedo Lieutenant and the quarterly value of stores consumed by both W/T and torpedo departments is never to exceed the authorised allowance. Any portion of the allowance unexpended at the end of the quarter may not be carried forward to the next quarter. The monetary allowance varies with the class of ship and is divided by mutual agreement between two departments; but all consumable stores must be purchased out of this allowance irrespective of the type of article required, (e.g., brass terminals and wire may be required to carry out a modification ordered by A.F.O. - the value of all this is taken from the quarterly allowance although they are not, strictly speaking, W/T Stores. In accordance with A.F.O. 2300/30 a category of "Serviceable used" stores has been instituted; such consumable stores if issued to a ship are charged at half rates.

The period for which ships are stored varies with conditions, but in home waters ships are normally stored for four months and, in addition, a minimum period for which stores must be maintained is laid down.

Defective consumable stores should be returned to the C.S.O. for disposal. Metal fittings, terminals, aerial wire and all metal removed from such things as porcelain insulators should be returned to store as "Metal, Old". Ships will be credited with the value of these returns (on paper), but such credits cannot be used for the purchase of additional material.

The only method of obtaining consumable stores in excess of the quarterly allowance is by the return to store of surplus serviceable consumable articles, in a condition fit for re-issue. The value of such articles may then be employed to obtain further consumable stores.

Loan of Experimental Equipment. Experimental stores will invariably be supplied to ships on loan direct from Signal School on Form S.549. Should it be necessary to transfer such stores to another ship they should be supplied to that ship on Form S.549 with instructions that the loan originated in Signal School and that the stores should be returned there on completion of experiments. At the same time as these stores are transferred, the original S.549 and the receipted S.549 from the ship to which the stores have been transferred, should be forwarded to the Captain of Signal School, together with a notification that the transfer has been made (vide A.F.O. 2744/29). Such stores should in no case be returned to Superintending Naval Store Officer other than for transport to Signal School.

First Fitting Stores. Ships fitted with central stores will, on commissioning, invariably be completed in all respects with the stores allowed by establishment. All such stores will be on the charge of the C.S.O.

Transfer of all fitted stores will be made to the W/T officer by means of a loan book. Any alterations or additions made subsequently should be demanded on Form S.156 and returned on Form S.1091. Care must be taken to see the particulars of all alterations and additions are noted in the loan book.

Certain common stores, e.g., menotti, resistance bridge (in small craft only), tools, etc. are allowed for the use of the W/T department. If these are not claimed on commissioning, they are likely to be absorbed by other departments. (Note:- A tool outfit is allowed to flagships for Fleet use in addition to the ordinary ship's establishment). Ships carrying a qualified(S) Officer are also allowed various additional stores, e.g., milliammeters, wavemeters, etc. Full details of such allowances will be found in the establishment.

On first fitting out, Superintending Naval Store Officer, Portsmouth, raises all necessary demands, and the complete outfit, including squadron spares to flagships, is invariably supplied before commissioning.

Alterations and Additions to Equipment. Alterations and additions to equipment of ships are made by A.F.O., which always states whether the stores will be supplied with or without demand. In the former case Form S.156 should be raised on the C.S.O., quoting the A.F.O. as the authority for the demand. In the latter case no action is necessary beyond ascertaining from the C.S.O. if the apparatus has arrived.

When any articles are superseded and ordered to be returned to store, every endeavour should be made to return the superseded articles as soon as possible on receipt of the new patterns, otherwise other ships awaiting the return of these articles will be delayed.

Packing Cases. It must be noted that in some cases instruments bearing a certain pattern number are contained in cases which themselves bear different pattern numbers, e.g., Pattern 7804 Coil is contained in a case, Pattern 7316, and the case is marked "Pattern 7316 containing Pattern 7804 Coil" and care must be taken not to overlook this second pattern number.

Silica Valves. Great care must be taken when handling silica valves especially when packing a defective valve for shipment. The old method of packing was to protect the seals with cotton wool and then place the valve and holder in its box and pack it with eight pounds of cotton wool. A large number of valves at present at sea have been packed in this manner but the newer valves have their seals protected by cotton wool, while the valve, with its holder, rests in protective mattresses made of either wood-wool or horse-hair. Care must be taken, particularly in the older method, to see the valves are sufficiently packed to withstand the rough treatment received during a journey.

A defective silica valve is of considerable value and if properly handled, costs relatively little to repair. Bad packing may render the valve beyond economic repair on its arrival in England.

Silica valves are contained in transport boxes which bear the same pattern number as the valve and holder, the three items constituting one pattern article. If it is necessary to place a valve and holder in any box other than its correct one, the number on the box should be altered to correspond with that of the valve and holder which it contains. A small ivorine label is fitted to the box to facilitate such re-marking. The valve's history sheet, completed up to date, must also always be packed in the box.

Glass Valves. When defective, these should be returned to store, to allow for the salvage of caps and metal, but the glass bulb should always be broken. If this is not done, defective and serviceable valves are likely to be mixed, in which case delays will be caused if the defective articles are again fitted into instruments. Serviceable valves should invariably be returned to Superintending Naval Store Officer in the cardboard boxes or wooden crates in which they were received.

All valve boxes returned to Superintending Naval Store Officer with the seals broken have to be forwarded to Signal School for the valves to be re-tested. This entails considerable expense, especially in the case of valves returned from foreign stations, and great care should therefore be taken not to break the seals unless the valve is actually required for use.

Demands for Spare Parts of Service Pattern Articles. Care must be taken to quote the correct pattern and machine number of the machine for which the spare part is required. Further information as to Maker's name is also often useful, e.g., a Pattern 6854 Alternator may be one of six different types, Pattern 6854A, etc., and the brushes, etc., for these different types are not common. It is necessary, therefore, to quote the correct suffix letter, e.g. "Pattern 6854A" and also the machine number to ensure the supply of the correct article. Spare armatures and field coils are not supplied for machines under 4 kW. For machines under 4 kW a complete new machine must be demanded if either of the above parts become defective. (A submission is now at Admiralty to abolish all spare armatures.)

Demand for Non-Standard Pattern Stores. When demanding spare parts for sets not of a service pattern (e.g., Marconi 1/2 kW), the Marconi pattern number, or maker's catalogue number if known, should be quoted. The addition of any marking of the instrument nameplates which may serve to identify the required articles is also useful.

Ships Storing for Service on S.E. Coast of America. Ships storing for service on the south-east coast of America carry a double quantity of spare permanent and consumable stores (vide paragraph 4 memo of Instructions in W/T Establishment). This is on account of no local dockyard being available from which replenishments can be obtained.

Ships Destoring for Long Refit. A.F.O. 2559/30. When a ship is ordered to be destored for a long refit, such stores as will again be required when the ship is re-fitted for service, will be returned to the Superintending Naval Store Officer of the refitting Yard for custody on Sea Store Deposit. Such stores will remain in the custody of the Superintending Naval Store Officer, on ship's charge. The "Report of Survey" forms S.331 being endorsed "For Sea Store Deposit".

Stores other than those surveyed as repairable, which would not, but for the occurrence of the refit, have been returned to store, are to be re-issued to the ship on recommissioning.

The decision as to which stores are to be so placed on deposit rests with Ship's Officers in agreement with the Superintending Naval Store Officer, and as advised by Captain of Signal School.

Valve Panels, Power Boards, Charging Boards, etc., should be dismantled by Superintending Electrical Engineer's Department, in order to avoid damage which might be occasioned if removed by unskilled labour.

Any experimental apparatus on loan at the time of destoring should, in the absence of instructions for its transfer to another ship, be returned as directed in paragraph entitled "Loan of Experimental Equipment" above.

A.F.O. 2559/30 as issued, covers all classes of Stores. Approval has been given in A.F.O. 1216/31 to modify the provisions of the A.F.O. in regard to W/T Stores. Ship's Officers will be advised by Suptg. Naval Store Officer, and Captain of Signal School as to any stores which will not be required when ship is again brought forward for service, or are required for re-issue to other services, such stores will be returned to Store in the usual manner, and the remainder placed in "Sea Store Deposit."

Flotilla Leaders and Destroyers undergoing re-tubing refits.

For refits covering a period over 4 months. All apparatus except Power Boards, Valve Panels, Charging Boards and gear worked into the structure, is generally removed before vessel pays off for refit. Each case will be treated on its merits, and will largely depend on whether Dockyard work will affect the W/T Office.

For refits of less than 4 months. All apparatus to remain onboard, and a rating to be detailed by Depot to visit ship twice a week for maintenance of W/T gear.

Note. If ratings are not available in Depot all W/T gear is generally removed irrespective of the length of refit. Initiative and decision to rest with the Port W/T officer concerned in both cases.

Disposal of Stores. All W/T apparatus removed is to be dealt with on the lines laid down in A.F.O. 2559/30 (Sea Store Deposit). The decision as to which stores are to be earmarked for Sea Store Deposit and/or Stock, is to rest with Ship's Officers in agreement with Captain of Signal School or his representative, and the Superintending Naval Store Officer. (Authority A.F.O. 1216/31).

Issues in Excess of Establishment. In home waters, if it should be necessary to demand stores in excess of establishment, a covering letter, stating the reason for the extra demand, should be sent with the Form S.134d to the Local Admiral Superintendent. The Admiral Superintendent may then either authorise the issue and report the fact to the Admiralty or, if necessary, refer the matter to the Admiralty for decision.

On foreign stations issues in excess of establishment may be authorised by the Commander-in-Chief, the Admiralty being subsequently informed. (See Article LIII, King's Regulations and Admiralty Instructions).

In addition to the above methods of obtaining stores from Superintending Naval Store Officer, via the C.S.O., the following channels also exist.

The Improvement Fund. King's Regulations and Admiralty Instructions and current Admiralty Fleet Orders specify certain sums of money which are allowed to flagships, the amount varying according to the strength of the squadron, flotilla, etc., for the purchase of stores for the improvement of W/T in the squadron, etc. This allowance may be applied for the purchase of commercial articles or in any other way best calculated to attain the above object. If difficulty is experienced on foreign stations in arranging local purchase of suitable material, a firm's catalogue number should be quoted to the local Superintending Naval Store Officer with a request that he will place an order on repayment.

Loans. If during a cruise a ship expends her entire stock of any particular article, she may obtain a loan of this article from other ships in company, the C.S.O. arranging such transfers on Form S.549. Permanent stores transferred from one ship to another should be reported in accordance with A.F.O. 401/31.

Miscellaneous. When returning articles to store or forwarding them for survey, particular care must be taken that components used with, but supplied separately from, any article, are always removed and dealt with as separate items, in order that the C.S.O.'s accounts may be cleared.

Similarly, if a fixed component is surveyed and replaced, such replacement should not be shown on the ship's account as a separate charge, but absorbed into the pattern article with which it is used (e.g., Pattern 6258A Voltmeter in Pattern 5186A Panel, Transmitting, Upper, Type 36S, is defective, it is surveyed as a component of that panel and, when replaced, should again be absorbed into the pattern number of the panel). Should the above have been dealt with incorrectly, and the new instrument taken on charge separately, C.S.O. will find, on stocktaking, that he has an additional article on charge.

Transformers, Condensers, etc. As transformers, condensers, etc., are invariably supplied without oil, care must be taken to remove all oil before returning such articles to the C.S.O.

Reminder. It should be noted that Signal School is not a Store Department. Requests for supply of stores should, therefore, not be made to Signal School but to the Superintending Naval Store Officer concerned, except in the case of replacements for special stores required in connection with experimental apparatus on loan from Signal School, which cannot be met from ship's resources.