

The schedules are intended for short term recording only. Long term recording is to be done in the Electrical Register or the Radio Equipment Log.

Types of Forms. A standard Schedule form is used for all radio and electrical equipments, the routines on which require recording at weekly or longer intervals. Where it is necessary to record daily routines an additional standard daily record sheet is used. For radio equipments an annual performance sheet is also provided. This is usually peculiar to one particular set.

Design of Forms. A separate form is made out for each item and it is designed to last for one year (or longer if no weekly records are required). On the back of the form are printed the routines required to be carried out.

The fronts of the forms are designed for quick recording of routines completed, defects disclosed, spare gear used etc.

As a convenient means of identifying it a letter indicating the periodicity of each routine suffixed by a number is inserted in the code column on the back of the sheets. The code letters are self-evident viz:-

D - Daily.	3M - Quarterly.
W - Weekly.	6M - Six-monthly.
F - Fortnightly.	A - Annually.
M - Monthly.	

Columns A, B and C are intended for record of any information which may be required by the Class Authority.

Binding and Issue. Groups of Schedule Forms to suit the particular organisation of the ship concerned will be bound into books, which will also include Maintenance Instructions of a general nature and a Record Sheet D.P. 6598(a). These books will be kept by the rating in charge of a section. They are intended for "on the job" information and "day by day" recording. In the case of the Radio Equipment Schedules they should be kept in the "set" office.

Initially the books will be made up and issued by the Class Authority. As sheets are filled replacements are to be demanded from the Class Authority and headings filled in by the ship.

Record Sheet D.P. 6598(a)

This sheet provides:-

- (a) An index to the equipment covered by the Schedule Book.
- (b) The Electrical Officer and rating in charge with a summary of routines completed or outstanding, defects, etc., and items to be transcribed in the Register or Radio Equipment Log.
- (c) A means of reporting back to the Class or Administrative Authority (if required) without duplication of writing.

The sheet is designed to cover a three monthly period and to record in the appropriate column by a:-

- ✓ - Routines completed without incident.
- D - A defect found during a routine or a routine carried out whilst making good a defect.
- N - Routines not carried out.
- T - (In pencil). That information is to be recorded in the Register or the Radio Equipment Log.

Space is provided on the back of this sheet for amplifying remarks on D, N and T.

The Record Sheets are to be kept in duplicate (by the use of carbon papers) one copy being forwarded to the Class Authority if and when required. The second copy is intended for the Administrative Authority if required or may otherwise be retained by the ship. (If you have the Electrical Register you don't need it).

Routines and Periodicity. Except in cases of some radio and other complex equipment the routines are intended to be "typical". Where possible they have been written to have a wide application rather than to apply to specific equipments. They do not necessarily conform to existing instructions included in B.Rs., since these in many instances are unnecessarily elaborate and over-cautious.

The aim has been to state in general terms the minimum of work to be carried out at the maximum periodicity commensurate with the prevention of failure and the maintenance of accuracy. The routines have been written and their periodicity determined for continuously running equipment in average climatic and other conditions. They may require adjustment to suit conditions peculiar to individual ships.

They are intended to reduce as much as possible the need to refer to handbooks when carrying out purely routine maintenance. Such reference will still be necessary, however, in some cases for setting up procedures, annual performance tests etc.

Application. The introduction of Planned Maintenance Schedules in no way alters existing responsibilities. On the contrary they are designed to assist all electrical personnel in fulfilling these responsibilities and with the intention of achieving a self-correcting method of controlling maintenance. To this end it is necessary to:-

- (a) Decide on the appropriate periodicity for each individual equipment.
- (b) Where necessary amplify the "typical" routine to include features peculiar to a particular ship and/or equipment which would not otherwise be covered.

In making decisions (a) and (b) above the following should be taken into consideration:-

- (i) Whether this equipment is in frequent or infrequent use.
- (ii) Its age, condition and history.
- (iii) Its ambient conditions, i.e. temperature, humidity and vibration.
- (iv) Its relative importance.
- (v) The man-power situation.

"As Fitted" Drawings

These are drawings supplied to the ship by the Director of Dockyards Departments and held on charge by the Electrical Officer on Form D.787. These drawings which are usually printed on linen are both an authority to hold the electrical equipment in the ship and a detailed diagram of the layout of the main run wiring and the components (and their locations) which make up the equipment.

They are peculiar to the ship (or in a few cases to a class of ship) and must be mustered when handed over from one Electrical Officer to another on supersession. It is your responsibility to see that when the ship or equipment undergoes conversion or alteration that the "as fitted" drawings are amended either by the Dockyard Drawing Office or by the Ship's Staff. Where the alterations are done by Ship's Staff a copy of the alterations (or a statement of them in precise terms) is forwarded to the Electrical Engineering Manager of the Dockyard concerned so that his copies may be amended. The name of the Yard is shown on the drawings.

In most ships a cupboard is supplied for the stowage of the drawings and you should (if this has not already been done) draw up a catalogue showing the drawings and the folios in which they are located. The greatest care should be taken of these drawings as they are required in some cases to last for years. Anyone who has had to pore over a dirty, tattered, detailed diagram will need no reminder of this. A drawing desk is nearly always provided. Insist that the drawings in use are laid out on this desk and that no-one is allowed to put dirty oil components on them.

If it is absolutely essential to remove a diagram to some other part of the ship insist that the user signs for it in the Temporary Loan Book (S.1092) and if he returns it in a dirty or torn condition you are recommended to take action on the last but one form described in the Chapter on Reports and Returns.

Form S.1275 - The Radio Equipment Log

The Radio Equipment Log is provided to maintain a permanent record of:-

- (a) The history of each piece of Radio equipment in the ship including As. & As., modifications and defects.
- (b) The performance of the same equipment on first fitting, on periodical routine tests and after modification or repairs which invalidate previous records.
- (c) Remarks on maintenance of a permanent or interesting nature.

Information should be recorded as follows:-

(a) On S.1275C (Index)

A list of all complete Wireless and Radar Equipments fitted in the ship with their location. (In ships which carry a great deal of Radio equipment it is advisable to keep separate logs of Wireless and Radar equipment.)

(b) On S.1275 (n) Display Index

A list of all ancillary Display Equipments in the ship with their location and an index number for each. This index number is to be carried on the front of the modification and defect sheets in the display folio, thus ensuring that the record sheets are identified with the correct displays.

(c) On S.1275 (e) Modifications and As. & As.

All As. and As. and modifications authorised for each piece of equipment quoting the authority and a brief description of the work. When the modifications have been incorporated the date is to be inserted in the appropriate column.

(d) On S.1275 (f) Defects

All defects for which a Form S.1183 is rendered.

(e) On S.1275 (h) Performance Records

The results of electrical and mechanical tests and inspections. These are to be recorded:

- (i) On installation by the Fitting Out Officer.
- (ii) Monthly as specified on the Performance Record Sheets.

- (iii) On completion of a major repair or modification invalidating previous records. Where modifications occasion alteration in the Typical Results of Performance Tests a new Performance Sheet is to be inserted in the Log and the "fitting out" results inserted by the Electrical Officer. The former sheet is to be retained for record purposes.
- (iv) On supersession of the Officer responsible by him and his relief in consultation.

NOTES

1. The routines detailed in the set office Performance Record Books are the minimum which must always be completely carried out to ensure the efficient operation of the equipment. The tests to be recorded in S.1275(h) are selected tests from these books and are those which will give a good indication of the state of the equipment.
2. In the column headed "Typical" the set of prepared figures (as appropriate) published in the handbook is to be copied. These are approximate for any particular set. In the next column headed "Fitting out results" standard figures for the installation concerned are to be entered by the fitting-out or working-up Officer. In the remaining columns a monthly summary of the daily performance figures as shown in the set office Performance Log is to be recorded.

The Log is to be kept by the Electrical Officer and should be inspected and signed monthly by the Commanding Officer. It should be kept locked up when not in use.

Copies of reports of External Communications Trials and D/F Calibrations should be inserted in the log.

A list of the forms used in the log is to be found inside the back cover. After the index letter a figure is given to each sheet. The figure indicates to what equipment the sheet is appropriate (e.g. S.1275(h) 74 is the Performance Record Sheet for Type 275 Radar).

Specimen Performance Record Sheets are to be found at the end of this chapter.

Installation Specifications

These specifications are prepared by the Admiralty Signal and Radar Establishment and as their name implies are instructions for the installation of Radio Equipment and their power supply systems. In ships built or converted after 1950 "As Fitted" drawings are supplied in lieu of Installation Specifications. None the less these specifications are still handy to have since they lay down the physical limitations (e.g. lengths of certain feeders) which must not be transgressed.

Specifications are listed in Specification No. 9001 and may be obtained on demand (on Form S.134) from the Electrical Engineering Manager of the Dockyard.

Establishment Lists (usually called 'E' lists)

An Establishment List is prepared by the Admiralty Signal and Radar Establishment for each Radio Equipment. This list has two important functions:-

- (a) It informs the Naval Store Department of the type and quantity of stores required for ready use spares and ship's spares for each equipment (but see Chapter on Stores and Storekeeping).

- (b) It is of enormous value in compiling the Annual Radio Equipment inventory since all Radio Equipments are allocated Type or Outfit numbers and/or letters and the 'E' List "talks" throughout in this code (e.g. Type 974 is a high definition warning radar manufactured by Messrs. Decca).

The list lays down precisely what items are necessary to make up the complete equipment in various types and classes of ships, which are permanent and which are consumable and the annual allowance of ready-use spares which should be held by the Electrical Officer (but once again see Chapter on Stores and Storekeeping).

A list of all current 'E' Lists will be found in the appendix to G.A.F.O. 153/54.

B.R. 1917 - Minor Modifications to Radio Equipments

As experience indicates that minor changes in radio equipments are desirable or necessary to improve performance, these changes are initiated by the Admiralty and included in B.R. 1917 - Minor Modifications to Radio Equipments.

All major Radio Equipments are included in the book which is in two volumes. The two volumes deal with the object and method of carrying out and the stores required to do so. A list of modifications opposite to each equipment should be recorded in the Modifications and As. & As. sheet (S.1275(e)) of the Radio Equipment Log together with the date of completion.

These minor modifications are intended to be carried out by Ship's Staff wherever possible but it is realised that with shortages of staff this cannot always be done. Accordingly a continuing A. & A. is being introduced for all classes of ships which will read:-

"To bring up to date all minor modifications to radio equipment outstanding"

This A. & A. does not of course relieve you of the responsibility for trying to keep them up to date yourself.

Demands for stores required to carry out these modifications should be endorsed (e.g. "required to carry out minor modification No. 10 to Type 277 vide B.R. 1917 Vol. II Chapter 13").