CHAPTER 12

RECORDS, REPORTS, AND PUBLICATIONS

Efficient administration requires exact and current knowledge of all matters under the cognizance of the administrator. In your position as the electronics material officer, you should have knowledge of the current operating status of all electronic equipment and systems for which you have maintenance responsibility. Efficient administration also requires you to supervise the maintaining of proper records, and to forward to higher administrative levels various reports required for these officials to carry out their responsibilities for naval electronic installations. You are also responsible for ensuring the proper use of publications which present information on electronics maintenance matters.

Many publications and records have been, or will be, discussed in other chapters pertinent to their subject matter. Some of the information may be repeated in this chapter because of the importance to the EMO. Only the basic publication number is given for printed matter (manuals, directives, forms,) referred to in this and other chapters. You must determine whether or not you have current information. If not, you must obtain the latest edition or the changes that will bring your copies up to date. Use of incorrect information can be dangerous. Refer to the Navy Directives System-Consolidated Check List, NAVPUBNOTE 5215 (Series), and the Consolidated List of Recurring Reports Required by Washington Naval Headquarters Organizations from the Operating Forces of the Navy, OPNAVINST 5214.1 (Series) for current instructions.

RECORDS

Because complex details of electronics cannot be remembered readily, certain records are necessary. To assist electronics personnel in keeping up-to-date information on equipment under their cognizance, NAVSEA and NAVELEX have established certain required records.

It is the responsibility of the EMO to ensure that required records are maintained by electronics personnel. Regulations governing the requirements of records and instructions as to their use are contained in the following references:

- *Naval Ships Technical Manual,* Chapters 400 and 090
- NAVSEA 0967-LP-000-0100, *Electronics Installation and Maintenance Book, General,* (EIMB Series)
- OPNAV INST 4790.4, *Ship's Maintenance and Material Management (3-M) Manual,* Volumes I-III
- Type Commanders' instructions on required records

THE 3-M SYSTEMS

The primary objective of the ship's 3-M Systems is to provide for managing maintenance and maintenance support in a manner which will ensure maximum equipment operational readiness. The 3-M Systems are applicable to all ships, service craft, and small boats (except those operated by civilian crews). All equipment installed therein are included, except for fleet ballistic missiles and nuclear power plants, and associated test equipment. The 3-M Systems consist of two parts:

1. PMS (Planned Maintenance System)
2. MDS (Maintenance Data System)

PMS provides each ship with a simple and standard means for planning, scheduling, controlling and performing planned maintenance of all equipment.

MDS is the means by which maintenance personnel report corrective maintenance actions on specific categories of equipment (except for submarines, which report corrective maintenance on all equipment).

As EMO, you should be aware of the various reports and forms that must be completed. The following is a brief description of the reports and forms used to report matters related to PMS and MDS. Detailed instructions are available in OPNAVINST 4790.4.

PMS Feedback Report

The PMS Feedback Report (PMS FBR) is a form (OPNAV 4790/7B), used by fleet personnel to notify the NAVSEACEN or the TYCOM, as applicable, on matters related to PMS. The report is a five-part form composed of an original and four copies. Instructions for preparation and submission of the form are printed on the back of the last copy. These forms are available through the Navy supply system.

MDS Reporting

The MDS requires the reporting of maintenance actions in order to achieve desired objectives. It identifies the deferment or completion of a maintenance action. The following forms are used to report information into the MDS.

OPNAV 4790/2K, SHIP'S MAINTENANCE ACTION FORM.—This form is used by maintenance personnel to report:

Deferred maintenance actions

Completed maintenance actions (including those previously deferred)

This form also allows the entry of screening and planning information for management and control of intermediate maintenance activity (IMA) workloads.

OPNAV 4790/2L, SUPPLEMENTAL FORM.—This form is used by maintenance personnel to provide amplifying information relating to a maintenance action reported on an OPNAV Form 4790/2K (e.g., drawings, listings, and the like, for use by repair activities).

OPNAV 4790/2P, MAINTENANCE PLANNING AND ESTIMATING FORM.—This form is used with an OPNAV 4790/2K deferring maintenance to be done by an IMA under Intermediate Maintenance Activity Maintenance Management Subsystem (IMMS). It is designed to allow screening and planning to be done in detail. This planning will include information pertinent to the Lead Work Center, Assist Work Center(s), material requirements, technical documentation, cost estimates and man-hours required to complete the maintenance action.

OPNAV 4790/2Q, AUTOMATED SHIP'S MAINTENANCE ACTION FORM.—This form, which is filled in by computer, contains the same information as the OPNAV 4790/2K. Additional handscribed information may be entered by maintenance personnel. This form may be used as an automated work request and may also be used in preparation for INSURV.

OPNAV 4790/2R, AUTOMATED WORK REQUEST.—This form combines the information from the OPNAV 4790/2K and 4790/2P. It is available in four copies. It has been designed for machine and hand printed entries. This form may be used:

- As an automated work request
- As an ADP-produced work control document for internal IMA use
- In preparation for INSURV

OPNAV 4790/CK, SHIP'S CONFIGURATION CHANGE FORM.—This form is used to report configuration changes at the individual equipment level as described in Chapter Nine of OPNAVINST 4790.4 and SECAS Program Manual, Vol. IV.

NAVSUP FORM 1250 AND DD FORM 1348.—These are covered in Chapter 14. The EMO should also become familiar with the Departmental Master PMS Manual and the Work Center PMS Manual outlined in OPNAVINST 4790.4, Volume I.

Current Ship's Maintenance Project (CSMP)

The purpose of the CSMP is to provide shipboard maintenance managers with a consolidated listing of deferred corrective maintenance to manage and control its accomplishment. All such deferred maintenance should be recorded in the CSMP. The complete shipboard CSMP consists of:

- Computer-produced standard CSMP reports listing deferred repairs and alterations which have been identified through MDS reporting

- Ship-retained copies of MDS documents which have been submitted, but are not yet reflected in CSMP reports

- Lists of discrepancies which are to be corrected by ship's force, but do not require reporting when documenting a deferred maintenance action

In the past, the CSMP consisted of the Repair Record, Alteration Record, and Record of Field Changes. With the full implementation of the MDS Reporting, these records have little usage today, but you may encounter them in some situations. For specific details, refer to NAVSEA 0967-LP-000-0100, *Electronics Installation and Maintenance Book, General,* Section 2.

CONTROLLED EQUIPAGE

Controlled equipage is the term used to designate selected items of equipage which require increased management control because they are costly, are easy to pilfer, or are essential to the ship's mission. Controlled equipage includes such material as tape recorders, first aid boxes and life preservers. A complete listing can be found in *Afloat Supply Procedures,* NAVSUP Publication 485. You, as EMO, must ensure that all equipment in the electronics area is managed properly, even though it may not be listed as controlled equipage.

A custody signature (of the responsible department head) is mandatory on Controlled Equipage Custody Record (NAVSUP FORM 306) for articles of controlled equipage listed in Controlled Equipage Item List (CEIL) and equipage items which the type commander or the commanding officer determines should have a custody signature.

A copy of the Controlled Equipage Custody Record must be furnished to the department head at the time the original custody card is signed. The duplicate copy becomes the department head's record of controlled equipage requiring custody signature. As controlled equipage is received or expended, appropriate entries are made on all equipage records. The supply officer and custodial department head are jointly responsible for ensuring that the original and duplicate custody cards are in agreement.

Inventories of Controlled Equipage

All items of controlled equipage, including custody-signature-required items, must be inventoried annually. Deficiencies must be reported by the supply department to type commanders in Budget/OPTAR (Operating Target) reports. Inventories are also required when the ship is commissioned, inactivated, or reactivated; upon relief of the head of department (inventory must be taken jointly by the relieved and relieving department heads) and upon changes of command at the discretion of the relieving commanding officer.

The head of department is furnished a file of duplicate copies of the Controlled Equipage Custody Record (NAVSUP 306), which provides a logical basis for conducting the inventory of controlled equipage. Each article must be sighted and inspected for serviceability by the inventorying officer. Articles identified by serial numbers must be checked by those numbers when inventories are taken. Any shortages or items found to be unserviceable during the

inventory must be covered by survey procedure as required by NAVSUP P-485.

All equipage inventories must be completed within 30 days after the date of commencement. When taken jointly by the relieved and the relieving head of department, the inventory must be completed prior to detachment of the outgoing head of department.

Upon completion of the equipage inventory, the department head must submit a letter to the commanding officer and a copy to the supply officer. When possible, the letter should be a joint report from the relieved and relieving heads of department, and both officers must sign the report.

The report must include the following information:

The department equipage inventory has been completed

Required requests for issues and surveys have been submitted for shortages and unserviceable items found during the inventory (or the reasons such requests have not been submitted)

A list of controlled equipage including justification or authority for any excess items desired to be retained

Memorandum Receipts

As EMO, you will normally be directly responsible to the operations department head for the control and inventory of "signature required" electronic controlled equipage. This is accomplished by the use of a memorandum receipt. An example of a memorandum receipt is shown in figure 12-1.

Column entries on the card are made by pen. The person requesting use of the controlled equipage should fill in the Date Out, Division/Department and Signature Columns. This information should be checked for legibility and accuracy by the person issuing the equipment. The person making the issue should then initial in the column provided. Upon return of the controlled equipage, the Date Returned and the Signature of Person Accepting Return entries should be made in the presence of the person returning the equipage.

SIGNAL GENERATOR

AN/URM-25D SERIAL NO. 609

RECEIPT IS ACKNOWLEDGED FOR SIGNAL GENERATOR AN/URM-25D, SERIAL NUMBER 609.

DATE OUT	DIVISION OR DEPART.	SIGNATURE	INITIALS	DATE RETURNED	SIGNATURE OF PERSON ACCEPTING RETURN

245.69

Figure 12-1.—Sample memorandum receipt on 3″ × 5″ card.

REPORTS

To increase the effectiveness of recurring reports and to avoid duplication, a program known as the Reports Control Program has been put into effect. The major objectives of this program are: (1) to develop the most effective new reports and reporting procedures; (2) to improve existing reports and related procedures in the light of current needs; (3) to ensure economy in paperwork, man-hours, and other costs by analyzing and simplifying reports and reporting procedures; and (4) to eliminate and prevent unnecessary or duplicate reporting.

The Reports Control Program is installed in the various naval commands and offices, in the Marine Corps, in each continental naval area, and in selected major field activities. Direct responsibility for the program is vested in the Chief of Naval Operations (OP 09B83).

Reports which are the responsibility of the electronics material officers are discussed in the following paragraphs.

SHIP EQUIPMENT CONFIGURATION ACCOUNTING SYSTEM (SECAS)

The ability to accurately define the configuration of a ship and its systems is a critical factor in maintaining proper shipboard support. Navy managers responsible for the operation, maintenance, modification and life cycle logistic support of both ships and equipment have a

common need to receive accurate configuration data in a timely manner. To ensure availability of configuration data, many Navy managers have historically developed independent information systems for gathering and processing the ship configuration data appropriate to their unique, individual needs. While such systems satisfied specific requirements, each required maintenance and organizational support and imposed redundant reporting responsibilities on the fleet. Managers lacking the resources to develop their own configuration information system were forced to collect data from the various existing systems. This fostered inconsistent results and interface problems due to language or equipment identification incompatibilities. The need to provide all managers with a single, standard source of accurate ship configuration data, and reduce fleet reporting to a single requirement, dictated a central Navy ship configuration status accounting system.

Program Development

In 1971, efforts to develop the integrated system were initiated. Electronics (Elex) configuration data was the first to be implemented, followed by Hull, Mechanical and Electrical (HM&E) configuration data. Finally, the existing Ordnance (ORD) configuration data base was consolidated with SECAS. In 1974, the Chief of Naval Material published the official "charter" which established the Ship Equipment Configuration Accounting System (SECAS) as the central authority within the Navy for integrated ship configuration status accounting information. SECAS has evolved to the point that it is now applicable to all ships of the active and reserve fleets (except certain exclusions of Fleet Ballistic Missile Submarines (SSBNs) and nuclear propulsion systems); encompasses all ship systems (i.e., HM&E, electronics, and ordnance); and covers the life cycle of the ship starting with the date of delivery to the Navy. SECAS also includes the maintenance of configuration status data for all Chief of Naval Education and Training (CNET) Technical Training Activities and Naval Air Traffic Control, Air Navigation Aids and Landing Systems (NAALS), at naval air stations, and for many fleet activities. Therefore, all terminology used when referring to a ship also applies to designated fleet and shore activities.

Program Objectives

The structure and composition of a ship, defined in terms of its onboard systems/equipment, is referred to as the ship's configuration. Configuration status accounting is defined by MIL-STD-482A as the recording and reporting of the information that is needed to manage configuration effectively, including a listing of the approved configuration identification, the status of proposed changes to configuration, and the implementation status of approved changes. In keeping with this definition, the objectives of SECAS are to:

- Collect, maintain and report the current configuration status of ships (i.e., the status of shipboard systems/equipment, including all changes to the systems/equipment)

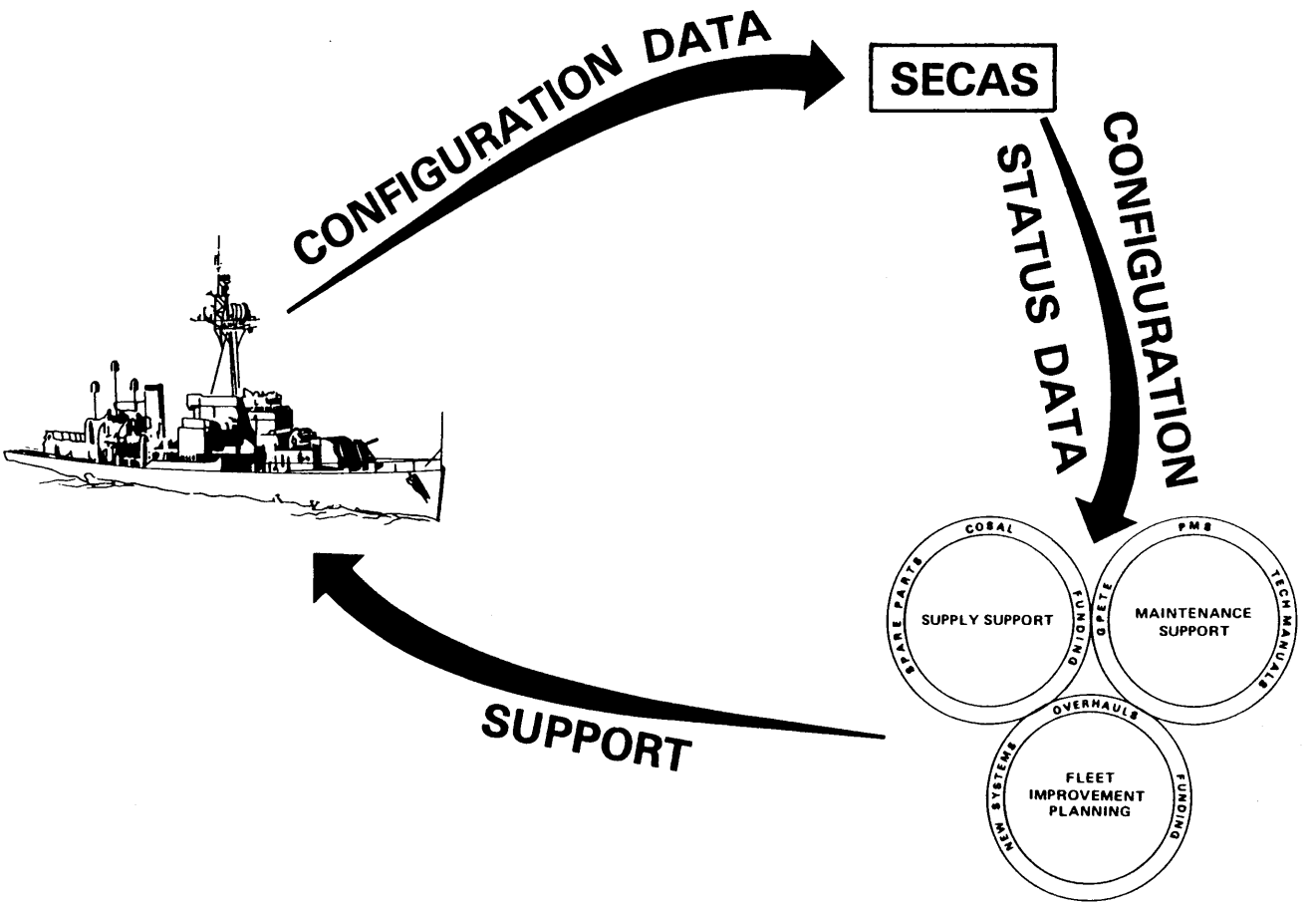
- Operate as a management information system to provide current shipboard system/equipment configuration data to all Navy planners and managers for performance of their functions relating to ship life cycle management

- Provide the standards, requirements and policies for the collection, maintenance, and reporting of projected/actual ship configuration data prior to and during availabilities, for generation of logistic support

Relationship to Logistic Support

SECAS is an important part of the overall system for fleet logistic and maintenance support. As the central, integrated source of ship configuration data, SECAS has the capability to eliminate the data inconsistencies common to independent systems. SECAS provides the accurate and current ship configuration data necessary for life cycle management of logistic and maintenance support for the ship. The following are some of the support factors influenced by SECAS:

- Funding for onboard logistic support (e.g., technical manuals, repair parts, planned maintenance, test equipment)



245.108

Figure 12-2.—SECAS and the Fleet Logistic Support System.

Range and depth of onboard repair part support Coordinated Shipboard Allowance List (COSAL) production

Types and amounts of General Purpose Electronic Test Equipment (GPETE)

Overhaul planning and funding

Determination of a ship's training and personnel requirements

Figure 12-2 depicts the relationship of SECAS to other elements of the overall fleet logistic support system.

SECAS Products

SECAS produces a number of report formats which are identified in the SECAS Catalog of Products (See table 12-1 for a list.) The catalog also illustrates the formats of the various products.

SECAS Operations Manual, Volume Four, describes the overall SECAS program and should be available for your use aboard ship.

Program Elements

There are two basic elements of the SECAS program: Validation, to sight inventory and record the equipment configurations, and

Table 12-1.—SECAS Products

REPORT NO.	TITLE
	ELECTRONICS
101	Filed Change Key Checkpoint
102	Field Change Quality Status Report
103	Field Change Key Checkpoint Master Index
501	Validation Aid, Location Sequence
501.A	Validation Aid, Type Designation Sequence
501.B	Validation Aid, Work Center Sequence
502.1A	Ship Equipment Configuration Accounting System, Type Designation Sequence
502.1B	Ship Equipment Configuration Accounting System, Type Designation Sequence
502.1C	Ship Equipment Configuration Accounting System, Category Sequence
502.1R	Ship Equipment Configuration Accounting System, Type Designation Sequence
503.1	Ship Equipment Configuration Accounting System, Location Report
506.1	SECAS System Sort
506.2	SECAS System Sort
530.02	Ship Equipment Configuration Accounting System
530.D1	Ship Equipment Configuration Accounting System
530.M1	Ship Equipment Configuration Accounting System
530.N1	Ship Equipment Configuration Accounting System
530.R1	Ship Equipment Configuration Accounting System
540.1	SECAS Electronics Configuration Status, Ship ID Sequence
540.2	SECAS Electronics Configuration Status, Ship ID Sequence
540.3	SECAS Electronics Configuration Status, Ship ID Sequence
540.4	SECAS Electronics Configuration Status, Ship ID Sequence
541.1	SECAS Electronics Configuration Status, Equipment Sequence
541.2	SECAS Electronics Configuration Status, Equipment Sequence
541.3	SECAS Electronics Configuration Status, Equipment Sequence
541.4	SECAS Electronics Configuration Status, Equipment Sequence
550.01	Ship Equipment Configuration Accounting System, Fleet Summary, Active Fleet
551.1	Fleet Compilation of Electronics Systems, Active Fleet
551.2	Fleet Compilation of Electronics Systems, Reserve Fleet
551.3	Fleet Compilation of Electronics Systems, Other Ships
551.C	Fleet Compilation of Electronics Systems, Active Fleet by Type Commander
551.E	Fleet Compilation of Electronics Systems, Active Fleet by Fleet
610.1	Ship Total Report of Onboard Equipment, Electronics Portion
	HULL, MECHANICAL & ELECTRICAL
VO2-CAIL	Ship Integrated Configuration Report
VO2-EAIL	Validation Aids Control Report
VO2-FAIL	Pre-Validation Conference Planning Report

Table 21-1.—SECAS Products—Continued

REPORT NO.	TITLE
	ORDNANCE
E0010	Ship Armament Installation List
E0030	Total ORDALT Application Listing (TOAL)
E0040	System/Equipment Installations (SEI)
E0043	System/Equipment Installations for Military Security Assistant Program Vessel (SEI MSAP)
E0045A	SECAS (ORDNANCE) System/Equipment Installations (SEI)
E0045B	SECAS (ORDNANCE) System/Equipment Installations (SEI)
E0050	System/Equipment Population Summary (SEPS)
E0051	System/Equipment Population Summary for Military Assistance Vessels (MSAP SEPS)
E0062	Ordnance Summary
E0160	System/Equipment Nomenclature in Alphabetic Sequence System/Equipment Nomenclature in Code Sequence
E0190	Master Ordnance Configuration (MOC) File
E0271	ORDALT Cross Reference Index (Part C)
E0295A	SECAS Ordnance, One Hundred Percent Accomplished ORDALTS
E0300A	Military Security Assistance Program (MSAP) Ship Data Master List
E0300B	Military Security Assistance Program (MSAP) Ship Data Master List

Baseline Updating, to correct errors or omissions and to document configuration changes.

VALIDATION.—Validation is accomplished by teams of trained specialists, who actually board the ships and record data from the equipment nameplates and other sources. The subsequent data analysis, conversion to machine format, transmission to a central computer bank, and distribution of this information in computer print-out report format are all under the supervision of the same team of SECAS validators responsible for the raw data.

BASELINE UPDATING.—Once a ship has been validated, the baseline must be changed as equipment is installed, removed, or altered by engineering changes. The baseline must also be changed when errors or omissions are detected in output report printouts.

Conscientious updating of the baseline is essential for accuracy. The ship's personnel are responsible for reporting these configuration changes. Complete information on when, how, and where to report these changes is contained in the SECAS Program Manual, Volume Four.

SURVEY REPORT

A survey is the procedure required by U.S. Navy regulations when naval property must be condemned as a result of damage, obsolescence, or deterioration; or acknowledged as nonexistent as a result of loss, theft, or total destruction. The survey is made in accordance with NAVSUP P-485.

NONEXPENDABLE SHIPBOARD EQUIPMENT STATUS LOG 4855/2

All ships of the operating fleet equipped with surface missile systems (SMS) shall complete an original and one copy of the Nonexpendable SMS Equipment Status Log, NAVSEA Form 4855/2, figure 12-3, for each applicable equipment. The reports are required to be forwarded within 7 days after completion, with at least one entry at the beginning of each day and one at the end of each day. Procedures for completing the 4855/2 are explained in NAVSEAINST 4855( ).

TROUBLE REPORTS

Normally the electronics maintenance assignments are made by the EMO and LPO

(Security Classification)

NAVSEANOTE 4855
2 July 1979

NONEXPENDABLE SHIPBOARD EQUIPMENT STATUS LOG
NAVSEA 4855/2 (10-77) (FORMERLY NAVORD 8810/2)

REPORT SYMBOL NAVSEA 4855-12

S/N COG 1 0116-LF-048-5510

Retain yellow copy of this form in equipment rough log.

TO: Officer in Charge, Fleet Analysis Center, Naval Weapons Station, Seal Beach, Corona Annex, Corona, California 91720.

1. FROM (Ship classification & hull number)	2. EQUIPMENT ID CODE	3. SERIAL NO.	4. WEEK BEGINNING YEAR MONTH DAY	5. PAGE OF PAGES
DDG-2	5ABB000	2	79 08 09	1 1

6. DATE	7. TIME	8. CODE	9. REMARKS
019	0810 10	3	
019	1101 10	2	COMMENCED DSOT W-1
019	1101 50	3	SATISFACTORY
019	1150 10	3	R.J. Jones
110	0810 10	3	
110	0191 10	2	COMMENCED DSOT W-2
110	1101 10	3	UNSAT, FAILED STEP E.14
110	1131 10	2	COMMENCED DSOT
110	1131 45	3	SATISFACTORY
110	1150 10	3	R.J. Jones

WEEKLY TIME METER READINGS	10. DATE	11. TIME
	019	0810 10

M/C	12. METER NAME	13. METER HOURS

M/C	12. METER NAME	13. METER HOURS
	HV	19811.5
	FIL	13506.7

M/C	12. METER NAME	13. METER HOURS

(Security Classification)

94.166

Figure 12-3.—Nonexpendable Equipment Status Log.

based on the priorities of locally generated equipment trouble reports. Each time an equipment trouble is detected, a separate trouble report is filled out indicating such things as equipment affected, nature of trouble, time of failure, and the like. After the report is filled out, or in urgent situations which require immediate action, the failure is brought to the attention of the EMO or LPO to ensure correct assignment of maintenance priorities and proper supervision. When the trouble has been corrected, the person ensuring that the correction was done should sign the appropriate block in the original trouble report. The trouble reports are then used to make appropriate 3-M reports.

CASUALTY REPORTING

The Casualty Report (CASREP) has been designed to support the Chief of Naval Operations (CNO) and Fleet Commanders in the management of assigned forces. The effective utilization and support of Navy Forces require an up-to-date, accurate operational status for each unit. An important part of operational status is casualty information. The CASREP system contains four types of reports: initial, update, correct and cancel. These reports are described in general in the following paragraphs. CASREPS are not a substitute for, but are in addition to and complement, 3-M data. For more complete information on preparation and submission of the reports, see Operational Reports NWP-7 (current revision) and the outstanding Operational orders.

Initial Casualty Report (INITIAL)

An INITIAL casualty report identifies, to an appropriate level of detail, the status of the casualty and parts and/or assistance requirements. This information is essential to allow operational and staff authorities to apply resources at the proper priority.

Update Casualty Report (UPDATE)

An UPDATE casualty report contains information similar to that submitted in the INITIAL report and/or submits changes to previously submitted information.

Correction Casualty Report (CORRECT)

A unit submits a Correction (CORRECT) casualty report when equipment which has been the subject of casualty reporting is repaired and back in operational condition.

Cancellation Casualty Report (CANCEL)

A unit submits a Cancellation (CANCEL) casualty report when equipment which has been the subject of casualty reporting is scheduled to be repaired during an overhaul or other scheduled availability. Outstanding casualties which will not be repaired during such availability shall not be cancelled and shall be subject to normal follow-up casualty reporting procedures as specified.

ANORS

NAVSUP P-485 and OPNAVINST 4614.16 (Series) describe the use of Anticipated Not Operational Ready-Supply (ANORS) requisitions when a casualty is anticipated because of the lack of material. For example, the ship's AN/SPS-10 Magnetron is beginning to arc, and there is no spare on board. The AN/SPS-10 would still be operational; however, since failure of the magnetron is anticipated, an ANORS requisition would be made.

GETTING UNDERWAY REPORTS

On most ships the EMO is responsible for turning in an equipment status report prior to getting underway. This report may be due any time between 72 hours and 24 hours prior to getting underway depending on the requirements of the TYCOM. It usually includes major equipment status, estimated time of repair (ETR), power out/MDS readings from the radars, and power out/receiver sensitivity readings from communications equipment. This report is usually a locally generated form and may vary between commands.

EIGHT O'CLOCK REPORTS

The eight o'clock reports are written equipment status reports given to the commanding officer by the executive officer at eight o'clock (2000). (In port they are reported to the CDO by department representatives). As EMO, you will normally be responsible for making electronic equipment status reports to the operations department head or executive officer between 1900 and 1930. These reports are verbal and include major equipment status and estimated time of repair (ETR). You must have up-to-date information and be able to answer any questions that may arise. For example: What parts do we need for repair? Are they on board? Has a requisition been made to supply? Will a Casualty Report (CASREP) be necessary?

The ship will have a 4790 instruction entitled, "Material Deficiency Management" from which the EMO may control the status of equipment. The Equipment Status Log (ESL) is the main component of this tool. See OPNAVINST 4790.2 (Series) and your ship's instruction.

DEFECTIVE MATERIAL REPORTING

Reporting of defective materials obtained through the supply system is covered in NAVSUPINST 4440.120( ). It is important to note that in many instances SPCC does not receive a report of defective material such as improper fit, poorly packaged, of cheaper quality than previous issue, or incorrect replacement. The EMO is encouraged to ensure that SPCC is notified directly of defective material in the supply system and should provide other reports which may close the loop. SPCC does not always get information which has been reported through other systems.

ADDITIONAL REPORTS

Type commanders and other authorities may require reports in addition to the ones already mentioned. Instructions concerning such reports may be promulgated via letter, message, or other official means. As EMO, you must examine all official correspondence regarding electronics, forwarded to your activity, in order to keep abreast of current instructions.

PUBLICATIONS

Various publications, some of which are discussed below, are available for guidance in maintenance work, or for reference and study. Some are as vital to intelligent maintenance as is test equipment.

In general, publications are available from the forms and publications supply distribution point, Naval Publications and Forms Center (NPFC), Philadelphia, Pennsylvania. The equipment installed, the mission of the ship or activity, the purpose of, and distribution policy for, the individual publication, and the available stowage space should all be considered before requisitioning such material.

Because it is essential that reference material be as current and accurate as possible, publications changes and corrections should be entered as they become available. For example, if the current issue of the EIB corrects information in an earlier issue, the earlier issue should be changed. If no page is furnished for recording completed changes, some method for this must be devised. One method is to annotate the margin of the new material to indicate the publications in which the change has been entered.

By assigning to specific individuals responsibility for making all changes in designated publications and by checking their entries from time to time, you will do much toward eliminating the possibility of your crew using incorrect repair information.

In order that an activity's file publications may be kept up-to-date, current issues of NAVSEA *deckplate,* the EIB, and the EIMB should be examined for information on the availability of handbooks, final technical manuals, revisions, supplements, and changes pertaining to the equipment on board.

INSTALLATION AND MAINTENANCE PUBLICATIONS

The Naval Sea Systems Command is endeavoring to eliminate the large number of maintenance and installation publications now in use. Some of those currently in print are discussed below.

Naval Ships Technical Manual

The Naval Ships Technical Manual is one of the most complete authoritative references available on NAVSEA equipment. Chapter 400 of the Manual is titled Electronics and is required reading for electronics personnel. This chapter is available as a separate pamphlet, and two copies per ship are usually required, one for the shop and one for the electronics officer. Chapter 400 lists other publications containing information of value to electronics personnel.

The purpose of Chapter 400 is to provide major policies and instructions pertaining to electronics work and electronics material under NAVSEA and NAVELEX cognizance.

Other chapters of the Naval Ships Technical Manual of interest to the electronics personnel are listed below.

Chapter 90	Inspections, Tests, Records and Reports
Chapter 300	Electric Plant General
Chapter 491	Electrical Measuring and Tests Instruments
Chapter 532	Liquid Cooling Systems for Electronics Equipment
Chapter 634	Deck Coverings

Electronics Installation and Maintenance Book

The *Electronics Installation and Maintenance Book* (EIMB), NAVSEA 0967-LP-000-0000, consists of a series of authoritative publications which provide fleet and field activities with information on the installation and maintenance of electronic equipment under the technical control of NAVSEA and NAVELEX. Information for the EIMB has been taken from such sources as the Electronics Information Bulletin (EIB), NAVSEA *deckplate,* Notices, and Instructions. It is a supplement to equipment technical manuals and related publications, and is intended to reduce time-consuming research.

The EIMB is organized into 13 handbooks listed below:

TITLE	NAVSEA NUMBER
Communications	SE000-00-EIM-010
Radar	0967-LP-000-0020
Sonar	SE000-00-EIM-030
Test Equipment	SE000-00-EIM-040
Radiac	0967-LP-000-0050
Countermeasures	0967-LP-000-0070
General	0967-LP-000-0100
Installation Standards	0967-LP-000-0110
Electric Circuits	0967-LP-000-0120
Test Methods and Practices	0967-LP-000-0130
Reference Data	0967-LP-000-0140
Electromagnetic Interference Reduction	0967-LP-000-0150
General Maintenance	SE000-00-EIM-160

These handbooks are being updated and upon completion of revision will all be assigned the SE Series number. The stock numbers will remain the same.

GENERAL INFORMATION HANDBOOKS.—There are seven general information handbooks of the EIMB series. These handbooks are discussed in the following paragraphs.

1. *General EIMB Handbook,* NAVSEA 0967-LP-000-0100. The purpose of this handbook is to provide policies and instructions pertinent to the proper use of the Electronics Installation and Maintenance Handbook (EIMB) series. The handbook is published for the guidance of all personnel in the naval establishment responsible for or engaged in the

installation, maintenance; and repair of electronic equipment.

The information contained in the handbook has been carefully selected and arranged so that it is easily identified and retrieved.

The handbook consists of the following:

Section 1—Introduction

Section 2—Administration

Section 3—Safety and Accident Prevention

Section 4—Publications and their Handling

Section 5—EIB/EIMB Indexes

When properly used, the General handbook is a quick source of information for installation and maintenance personnel. Valuable data pertaining to administration, supply, publications, and safety matters, that could be found previously only after considerable research in more than one EIMB handbook have been collected and carefully arranged in a logical sequence within the General handbook. In addition, the EIMB Subject Index (Index C), located in Section 5 of the handbook, provides another handy reference for identifying the specific EIMB handbook(s) in which all information of a particular subject is located.

2. *Installation Standards EIMB Handbook* NAVSEA 0967-LP-000-0110. This handbook promulgates approved shipboard installation standards, techniques, and practices of NAVSEA electronic equipment. The information contained in this handbook has been extracted from numerous publications, instructions, and pamphlets obtained from military and commercial sources. It represents the best current knowledge in the electronic installation and maintenance field. The handbook has been arranged so that material is presented as nearly as possible in the chronological order of installation events, starting with receipt of equipment from source of supply, to standard installation practices preliminary to placing the equipment into service. Periodic revisions and additions will be made to ensure that the handbook always reflects the best current techniques and keeps abreast of new developments. This handbook is intended for installation personnel.

3. *Electronic Circuits EIMB Handbook,* NAVSEA 0967-LP-000-0120. This handbook provides electronic circuitry theory and descriptions for basic passive and active (both vacuum tube and semiconductor) circuits. The contents of the handbook have been carefully selected and prepared to serve the requirements of naval personnel in the electronics field. The handbook, as sectionalized, permits the addition of new circuits to keep the handbook abreast of current electronic developments. This method permits the addition of new electron-tube, semiconductor, and allied circuits, as well as the revision of existing circuits. Each circuit description includes information on the circuit application, its important characteristics, an analysis of circuit theory and operation, and failure analysis based upon output signal indications. This handbook is intended primarily for shipboard electronic training personnel and as electronic reference material.

4. *Test Methods and Practices EIMB Handbook,* NAVSEA 0967-LP-000-0130. This handbook provides electronic technicians with reference information on the fundamentals of test methods and basic measurements, step-by-step procedures for testing typical electronic equipments and circuits, and functional descriptions of the theory of operation of the test equipment used and circuits tested.

5. *Reference Data EIMB Handbook,* NAVSEA 0967-LP-000-0140. This handbook contains an encyclopedic arrangement of useful and informative references of pertinent definitions, abbreviations, formulas, and other general data related to electronic installations and maintenance. This handbook of reference data is intended for use by all Navy electronics personnel.

6. *EMI Reduction EIMB Handbook,* NAVSEA 0967-LP-000-0150. This handbook contains NAVSEA-approved techniques and procedures for the elimination or reduction of electromagnetic interference created by own-forces electromagnetic radiating devices. This handbook is intended for electronic technicians involved in the installation and maintenance of electronic and electrical systems and equipment.

The above six handbooks will be assigned an SE Series NAVSEA number upon revision. They will retain the same stock number.

7. *General Maintenance EIMB Handbook,* SE000-00-EIM-160. This handbook contains routine maintenance concepts, techniques, and procedures common to all electronic and electrical equipment. Preventive maintenance programs, equipment-level and system-level maintenance philosophies, and maintenance of subsystems and repair parts are discussed. This handbook is intended for use by all technicians involved in the maintenance of electronic and electrical equipment.

EQUIPMENT-ORIENTED HANDBOOKS.—There are six equipment-oriented handbooks of the EIMB series. These handbooks contain general servicing information for the basic equipment category (i.e., radar), general servicing information for specific equipment (i.e., AN/SPS-10D), the Field Change Identification Guide (FCIG) which provides field change information for all equipment of the basic equipment category, and circuit functional descriptions common to the equipment of the basic equipment category. The six equipment-oriented handbooks are:

Communications EIMB	NAVSEA SE000-00-EIM-010
Radar EIMB	NAVSEA 0967-LP-000-0020
Sonar EIMB	NAVSEA SE000-00-EIM-030
Test Equipment EIMB	NAVSEA SE000-00-EIM-040
Radiac EIMB	NAVSEA 0967-LP-000-0050
Countermeasures EIMB	NAVSEA 0967-LP-000-0070

DISTRIBUTION.—The distribution of the EIMB handbooks and handbook changes is a joint effort by NAVSEA (NAVSEA 05L31) and the Naval Publications and Forms Center (NPFC), Philadelphia. Requests for changes or additions to the distribution list are processed by NAVSEA 05L31 and are forwarded to NPFC, Philadelphia, to incorporate the changes or additions into the master distribution file. Periodic revisions to this file are made so that it complies with changes to the Standard Navy Distribution List (SNDL).

Activities not already on the EIMB distribution list and those requiring changes to the list should submit correspondence to NAVSEA 05L31 in accordance with Subsection 4-6 of the General EIMB Handbook.

Electronics Information Bulletin

The Electronics Information Bulletin (EIB) (NAVSEA S0111-XX-EIB-XXX), (the group of two xx's is the year, the group of three xxx's is the EIB number), published biweekly, is forwarded to all naval ships and to naval electronics installation and maintenance activities. It contains advance information on field changes, installation techniques, beneficial suggestions adopted by various yards and bases, and new publications. The information is both authoritative and directive in nature, and reference may be made to a particular issue as the authority for adoption of ideas contained therein. In general, it is devoted to information which is of primary benefit to the activities to which it is distributed. Confidential issues are published when sufficient classified data warrants. Material in the EIB that is of general interest to all activities is also published in other media such as NAVSEA *deckplate* and the Electronics Installation and Maintenance Book. EIB information of a lasting nature is periodically transferred to the EIMB series.

Technical Manuals

Technical manuals carry information essential to the proper operation, maintenance, and repair of the equipment to which they apply. Two copies of the technical manual for a particular equipment are normally supplied with the equipment. The question often arises as to how many identical manuals should be retained onboard for a given number of identical equipments. Only one manual is required to be retained regardless of the number of identical equipments. A maximum of five identical manuals may be retained, without further justification, for any quantity of identical equipments. Any excess manuals that are ready for reissue should be forwarded to NPFC marked for stock. In addition, the command supplies file copies to activities concerned with

installation and maintenance of the equipment or with training electronics personnel. Supplies of manuals remaining after initial distribution are stored at forms and publications supply distribution points for issue to individual activities. Where the supply of manuals is extremely limited, special justification may be required to obtain copies.

Requirements for technical manuals are included as a part of the contract for equipment, the number of manuals varying with the contract. Consequently the quantity of manuals is always limited, and for this reason distribution is normally limited to recipients of the equipment and to those activities required to service it. A sufficient quantity is obtained to supply the usual file requirements of Navy and Marine Corps electronics schools.

Technical manuals occasionally contain errors. To permit correction of these, revisions, changes, and Advance Change Notices (ACN) are provided. When available, they are listed in the EIB. The technical background of corrections may also be published in the EIB. All changes and ACNs, including updates due to installed field changes, must be made in the manuals, regardless of the time and effort required. If the corrections are not made, many man-hours may be lost, for example, in attempting to repair an equipment by using an obsolete schematic.

The EMO should encourage personnel to send in Technical Manual Deficiency Evaluation Reports (TMDERs). All technical manual errors should be reported. The *Guide for User Maintenance of NAVSEA Technical Manuals,* NAVSEA S005-AA-GYD-030/TMMP provides information concerning identifying, ordering, deficiency reporting, and updating technical manuals.

Miscellaneous Publications

SHIPBOARD ANTENNA SYSTEMS.—The shipboard antenna systems books serve as a source of information for those concerned with the installation and maintenance of shipboard antennas. Information contained in these manuals supplements, but does not supersede, existing specifications. There are five manuals as follows:

- NAVSEA 0967-LP-177-3010 Shipboard Antenna Systems, Vol. 1, Communications Antenna Fundamentals

- NAVSEA 0967-LP-177-3020 Shipboard Antenna Systems, Vol. 2, Installation Details, Communications Antenna Systems

- NAVSEA 0967-LP-177-3030 Shipboard Antenna Systems, Vol. 3, Antenna Couplers, Communications Antenna Systems

- NAVSEA 0967-LP-177-3040 Shipboard Antenna Systems, Vol. 4, Testing and Maintenance, Communications Antenna Systems

- NAVSEA 0967-LP-177-3050 Shipboard Antenna Systems, Vol. 5, Antenna Data Sheets

EMISSIONS AND BANDWIDTH HANDBOOK, NAVSHIPS 0967-LP-308-0010.—This handbook is concerned with the emissions and bandwidths of radio signals used for communications purposes in the U.S. Navy. It discusses and describes communications signals, various other emissions (both natural and man-made), frequency allocation and assignment, electromagnetic interference, and methods and specific techniques used to suppress electromagnetic interference. This publication is written for electronics technicians, and is highly recommended.

SINGLE SIDEBAND COMMUNICATIONS, NAVSHIPS 0967-LP-307-7010.—This handbook highlights the important concepts of single sidebands (SSB) to aid shipboard operators in getting the best communications from any of the SSB and associated equipment. The handbook identifies and clarifies the areas where operators have had difficulty in developing an understanding of SSB. It is recommended for reading by all technicians and operators associated with SSB equipment.

PRINCIPLES OF MODEMS, NAVSHIPS 0967-LP-291-6010.—This document explains, in

basic nontechnical language, the various methods by which modulation and demodulation of signal-carrying electric currents are accomplished, and some of the characteristics of the methods that determine their applicability to various system designs. A glossary of terms commonly used in conjunction with modulator-demodulator (MODEM) application is included, as well as a bibliography to assist those who desire a more thorough technical treatment of the subject.

PRINCIPLES OF TELEGRAPHY (TELETYPEWRITER), NAVSHIPS 0967-LP-255-0010.—This handbook is devoted to the principles and practices of telegraphy as applied to the teletypewriter. It is designed as an introductory text for students and engineers who are concerned with practical systems and equipment within the military service, and is recommended reading for Navy electronic technicians and operators associated with telegraphy.

Although the four foregoing publications are sufficiently old as to have been published by NAVSHIPS (the predecessor of NAVSEA), the information they contain is good basic information.

MINIATURE/MICROMINIATURE (2M) ELECTRONIC REPAIR PROGRAM, NAVSEA TE000-AA-HBK-010/2M, TE000-AA-HBK-020/2M, and TE000-AA-HBK-030/2M.—The primary purpose of these documents is to establish uniform procedures and techniques for repairing high-reliability electronic assemblies to ensure the continuance of the original quality and reliability of the electronic component, and, at the same time, to afford a basis for developing the skills of new personnel and controlling the end results of their repair actions. Personnel must be properly trained and certified to effect high-quality, reliable repairs to state-of-the-art electronic printed circuits and modules. The Naval Sea Systems Command has developed a program under guidelines established by the Chief of Naval Operations and at the direction of the Chief of Naval Material. This program, the NAVSEA Miniature/Microminiature (2M) Electronic Repair Program (NAVSEAINST 4790.17), provides for proper training in the art of miniature and microminiature repair, includes the authorization and provisioning of proper tools and equipment, and is followed by a personnel and activity certification program conducted by fleet and type commanders.

MICROELECTRONIC DEVICE DATA HANDBOOK, MILHDBK-175( ).—This handbook provides general information on microelectronic devices and their application. It provides valuable information and guidance to personnel concerned with the design, development, and production of equipment and systems employing microcircuits. Emphasis is placed upon considerations affecting reliability of systems employing microelectronic devices.

MILITARY COMMUNICATION SYSTEM TECHNICAL STANDARDS, MIL-STD-188( ).—This standard provides technical design standards for military communication systems. The standards are intended for guidance in research and development of new equipment as well as in preparation of operating standards and engineering installation standards for communication systems. The objective of this standard is to enable engineering, installation, and operation of military communication systems to be accomplished without undue difficulty from equipment interface problems and problems of incompatibility between systems and equipment.

SHIPBOARD BONDING, GROUNDING, AND OTHER TECHNIQUES FOR ELECTROMAGNETIC COMPATIBILITY AND SAFETY, MIL-STD-1310( ) (NAVY).—The requirements of this standard apply to all new shipboard installations and to that part of existing installations that is being modified. It is not the intent of this standard to update existing installations that are programmed for modification or to change work accomplished according to previous requirements. The procedures and methods specified in this standard shall be utilized only whenever it is required to (1) bond, ground, insulate or use nonmetallic materials so as to provide electromagnetic compatibility, (2) provide personnel safety from electrical shock hazards, (3) safeguard electrical

transmissions of classified information, (4) to provide a d.c. reference ground.

INSTALLATION CRITERIA FOR SHIPBOARD SECURE ELECTRICAL INFORMATION PROCESSING SYSTEMS MIL-STD-1680 (SHIPS).—This standard sets forth the design and installation criteria applicable to shipboard secure electrical information processing systems including detailed hardware and equipment requirements and the applicable inspection and reporting procedures and documentation. It is of utmost importance that installation and maintenance managers of these processing systems be well versed in the contents of this standard.

CATALOGS, LISTS, INDEXES, AND DIRECTORIES

Catalogs, lists, indexes, and directories of electronic equipment are discussed in the following paragraphs.

1. *Equipment Identification Code (EIC) Master Index.* This index provides a listing of Equipment Identification Codes (EICs) in two sections. Section I is a listing of EIC numbers in numerical sequence and identifies the equipment nomenclature assigned to each EIC number. Section II is the complement of Section I. It lists nomenclature in alphabetical-numerical sequence and identifies the EIC numbers assigned to equipment. The EIC Master Index is published by the Maintenance Support Office, Mechanicsburg, Pennsylvania, and is usually located in the ship's maintenance office.

2. *Directory of Electronic Equipment,* NAVSHIPS 0967-LP-420-000 Series. The purpose of this directory (by equipment type; e.g., radar, communications and so on) is to provide descriptive and illustrative data for electronic equipment procured by the Department of the Navy. Again, these directories are dated (NAVSHIPS) but good information may be found in them.

3. *Electrical/Electronic Test Equipment Index for Support Requirements of Shipboard Electronic, Electrical, IC, Weapons and Reactor Systems* NAVSEA ST000-AA-IDX-010. This Index has been prepared as a guide to assist maintenance personnel in identifying portable electrical/electronic test equipment (PEETE) required for support of prime electronic, electrical, IC, weapons, and reactor instrumentation systems. It may also be used as an aid to establish priorities for the calibration of PEETE. Normally, it should be used in conjunction with the Ships Portable Electrical/Electronic Test Equipment Requirements List (SPETERL). Data in this Index is subject to revision periodically as new equipment/systems become available, and new requirements are generated. Hence, incongruities may exist between data in this Index and the SPETERL, depending upon issue date of the latter. Under present procedures, these incongruities will be eliminated automatically in subsequent issues of the SPETERL. This Index does NOT, in any way, supersede or modify the SPETERL, nor does it authorize procurement of, or requisition of, items not listed on the SPETERL.

4. *Portable Test Equipment Stowage Guide,* NAVSEA 0969-LP-019-5000. This publication has been prepared as a guide to assist ship installation and design activities in determining adequate storage facilities for electronic test equipment. The nomenclature of the general-purpose test equipment presently in use aboard ships for the operation, maintenance, and repair of electronic equipment and systems is arranged in this publication to include military test equipment by AN designating symbols and commercial test equipment by manufacturer's designating symbols. The nomenclature, name, functional description, dimensions, weight, and volume of each general-purpose test equipment is listed.

5. *Electronic Test Equipment,* MIL-HDBK-172( ). This publication consists of two volumes: Volume 1, UNCLASSIFIED; Volume 2, CONFIDENTIAL. It presents data and information on the technical, physical, and operational characteristics as well as logistics information of electronic test equipment used in the Department of Defense. It is intended primarily for use by standardization, design development, and procurement activities of the Department of Defense, and by technical planning and coordinating logistics personnel involved in supply and maintenance of military technical equipment operations.

6. *United States Radar Equipment (U),* MIL-HDBK-162( ). This handbook is divided into two volumes, one classified and one unclassified. The handbooks contain technical and functional descriptions, logistical information, installation considerations, and reference data on radar equipment used in the Department of Defense. Ground, airborne, and shipboard radar equipment is included. The book provides, in concise and convenient form, factual data to familiarize maintenance and engineering military personnel, as well as government contractors, with technical and physical characteristics of radar equipment. It is designed to supplement departmental manuals and directives and is intended for use to the greatest extent possible, in the standardization of the design, development, procurement, and application of military radar equipment.

7. *Electronic Test Equipment Application Guide,* NAVSEA 0969-LP-019-7000. The primary purpose of this publication is to supply manufacturers of major electronic equipment with technical information concerning electronic test equipment currently used in the Navy. It is a guide for the selection and application of test equipment which is to be used in conjunction with prime equipment. It includes descriptions of the primary function of individual equipment, electrical and mechanical characteristics, mounting methods, accessories supplied, and shipping data.

8. *Index, Electronic Equipment and Systems Installation Control Drawings.* The Installation Control Drawing Index consists of three volumes. Volume 1, NAVSEA 0967-LP-034-4010, consists of a listing of control drawings arranged both alphanumerically by nomenclature and numerically by drawing number. Volume 2, NAVSEA 0967-LP-034-4020, provides a cross-reference between old drawing numbers to new drawing numbers. Volume 3, NAVSEA 0967-LP-034-4030, consists of a listing of mono-detail drawings arranged both alphanumerically by nomenclature and numerically by drawing number. Table 12-2 is an alphabetical listing of useful references which are applicable fleet-wide. You should also have a thorough knowledge of amplifying instructions which may be published by fleet or force commanders for your particular unit.

Table 12-2.—Alphabetical Reference List

Afloat Shopping Guide, Section 1-7	NAVSUPPUB 4400
Afloat Supply Procedures	NAVSUPPUB 485
AN/SPS-40 Series Radar Liquid Cooling System	NAVSEA 0948-LP-115-5010
Basic Liquid Cooling Systems for Shipboard Electronics, Technicians Handbook	NAVSEA 0948-LP-122-8010
Bibliography for Advancement Study	NAVEDTRA 10052( )
CANTRAC Catalog of Navy Training Courses	NAVEDTRA 10500
CARGO Consolidated Afloat Requisitioning Guide Overseas (Fleet Load List)	NAVSUPPUB 4998-( )
Central Dry Air Systems Surface Ships	NAVSEA 0949-LP-056-8010
Consolidated List of Recurring Reports Required	OPNAVINST 5214.1( )
COSAL Use and Maintenance Manual	SPCCINST 4441.170
COSAL Coordinated Shipboard Allowance List (Ship Tailored, HM&E, ORD, ELEX)	SPCC Mechanicsburg, Pa.
DECKPLATE - The NAVSEA Publication (bi-monthly) highlighting current technical news	NAVSEA 0900-LP-000-2156
Department of the Navy Information Security Program Regulation	OPNAVINST 5510.1( )
Description and Application Guide For NAVSEA Standard Technical Manual Identification Numbering System	S0000-00-IDX-000
Disposal of Navy and Marine Corps Records	SECNAVINST P5212.5
DOD Index of Specifications of Standards Pt. I (Alphabet), Pt. II (Numeric)	None Assigned
Driver (Traffic Safety for the Military Driver)	NAVSAFECEN
EIB Electronics Information Bulletin (bi-weekly)	NAVSEA S0111-XX-EIB-XXX
EIMB Electronics Installation and Maintenance Book (13 Vols.)	NAVSEA 0967-LP-000-0XXX
Electrical/Electronic Test Equipment Index For Support Requirements of Shipboard Electronic, Electrical, IC, Weapons, and Reactor Systems	NAVSEA ST000-AA-IDX-010
Electromagnetic Radiation Hazards: Volume I, Hazards to Personnel, Fuel and Other Flammable Material Volume II, Part 1, Hazards to Ordnance Volume II, Part 2, Hazards to Classified Ordnance Systems	NAVSEA OP 3565/NAVAIR 16-1-529/ NAVELEX 0967-LP-624-6010
Electronics Test Equipment Application Guide	NAVSEA 0969-LP-019-7000
Electronic Test Equipment Calibration Program Indoctrination Handbook NAVMAT P-9491	0518-LP-394-5000
Enlisted Distribution and Verification Report (EDVR)	NAVMILPERSCOMINST 1080.1
Equipment Identification Code (EIC) Master Index	MSO 4790.E2579
FATHOM (Surface Ship and Submarine Safety Review)	NAVSAFECEN
Federal Supply Code for Manufacturers, US and Canada (Microfiche) FSCM	DOD H4-1 (Name to Code) DOD H4-2 (Code to Name) DOD H4-3 (Excl. US & Can.)
FSC Groups and Classes Part I Numeric Index to Classes, Part 2 Alphabetic Index, Part 3	DOD H2-1 DOD H2-2 DOD H2-3
GPETE MIL-HDBK-265 (Navy)	MIL-HDBK-265 (Navy)
GSA Supply Catalog	Dated mo/yr
Guide for User Maintenance of NAVSEA Technical Manuals	NAVSEA S005-AA-GYD-030/TMMP
Handbook on PQS Management & Implementation Procedures	NAVEDTRA 43100-1( )

Table 12-2.—Alphabetical Reference List—Continued

Installation Criteria for Shipboard Secure Electrical Information Processing Systems	MIL-STD-1680( )
Introduction to Federal Supply Catalogs and Related Publications	NAVSUP 4000
LIFELINE (The Navy Safety Journal)	NAVSAFECEN
LINK (Enlisted Personnel Distribution Bulletin)	NAVPERS 15980
List of Training Manuals and Correspondence Courses	NAVEDTRA 10061-( )
Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NEC)	NAVPERS 18068( )
Manufacturer Designating Symbols	NAVSEA 0967-LP-190-4010
Master Cross Reference List Part 1	MCRL-N-1
Part 2	MCRL-N-1
Metrology Antomated System For Uniform Recall and Reporting (MEASURE)	OPNAV 43P6
MIAPL-Master Index of Allowance Parts List	SPCC
METRL Metrology Requirements List	NAVELEX 0969-LP-133-2010
METRL (FCA) Metrology Requirements List, Field Calibration Activity Program;	NAVELEX 0969-133-2020
Miniature/Microminiature 2M Electronic Repair Program; responsibilities and procedures for	NAVSEAINST 4790.17
Repair Handbook	NAVSEA TE000-AA-HBK-010/2M
Workmanship Standards	NAVSEA TE000-AA-HBK-020/2M
MINIMIZE Designation and Identification of Reports	OPNAVINST 5214.3
Naval Combat Readiness Criteria	OPNAVINST 3501.2
NAVSHIPS' Technical Manual	Selected Chapters
ML-N Navy Management Data List	NAVSUP 4100
Navy Stock List of Publications & Forms	NAVSUPPUB 2002
Navy Field Calibration Activities; Calibration Facility Requirements	NAVELEX 0967-LP-457-1010
Operational Reports	NWP-7
Portable Test Equipment Stowage Guide	NAVSEA 0969-LP-019-5000
Safety Precautions Afloat	OPNAVINST 5100.19
SECAS Program Manual, Shipboard Operations	NAVSEA T0752-AA-MAN-XXX
Security Classification and Cognizant Activity of Electronic Equipment	MIL-HDBK-140( )
SEMO Correspondence Course	NAVEDTRA 13132-( )
Ships Maintenance and Material Management (3-M) Manual (Volumes I, II, and III)	OPNAVINST 4790.4
Ships 3-M Reports	NAMSOINST 4790.2
Shipboard Bonding, Grounding, and Other Techniques For Electromagnetic Compability and Safety	MIL-STD-1310( )
Ship Equipment Configuration Accounting System (SECAS); policy	NAVMATINST 4130.5
SPETERL Ship Portable Electrical/Electronic Test Equipment Requirements List (Ship Tailored Allowance List)	NAVSEC Code 06C13
Standard General Purpose Electronic Test Equipment (GPETE)	MIL-STD-1364( )
Standard Organization & Regulations of The United States Navy	OPNAVINST 3120.32( )
Standard Subject Identification Codes (SSIC)	SECNAVINST 5210.11( )
UMMIPS Uniform Material Movement and Issue Priority System	OPNAVINST 4614.1( )
United States Navy Uniform Regulations	NAVPERS 156658