

VOLUME IV

CHAPTER 11

TECHNICAL DATA AND INFORMATION MANAGEMENT

REFERENCES.

- (a) NAVSUP P2003 - Navy Stock List of Forms and Publications
- (b) TL130-A1-HBK-010 MSC Procedures Manual - Maintenance Support Center Library Procedures Manual
- (c) SECNAVINST 5510.36 - Department of the Navy Information Security Program Regulation
- (d) S0005-AA-GYD-030 - Guide for User Maintenance of NAVSEA Technical Manuals; NAVSEA Technical Manual Management Program
- (e) NAVSEA S8800-00-GIP-000 - Handbook for Fleet Maintenance Activity Technical Library Personnel
- (f) COMNAVAIRFORINST 4700.23 - Aircraft Carrier Maintenance Support Centers (MSC) Policy and Procedures
- (g) FGC 2200 - Outfit Logistics Support Requirements
- (h) SECNAVINST 5510.30 - Department of the Navy Personnel Security Program
- (i) SL720-AA-MAN-010 - Fleet Modernization Program (FMP) Management and Operations Manual
- (j) S9040-AC-IDX-010 - Ships 3-M Reference Information CD
- (k) NAVAIR 00-25-100 - Naval Air System Command Technical Manual Program

11.1 PURPOSE. This chapter defines the responsibilities of assigned departments with respect to the management of technical documentation and data and requires the establishment and operation of technical libraries.

11.1.1 Discussion. Technical data and information are critical for the proper operation, maintenance, troubleshooting and repair of all plant equipment. Improper maintenance or equipment remaining not repaired and inoperative can result from a lack of proper documentation in the form of technical manuals, ship's drawings and blueprints, Military Specifications and standards, etc.

11.2 TECHNICAL LIBRARIES. Maintenance Support Center (MSC) Technical Library personnel maintain a complete master technical library including technical manuals, drawing/aperture cards, Coordinated Shipboard Allowance Lists, provisioning Allowance Parts Lists (APL), computerized databases and any other technical documents or aids which support maintenance functions. The Technical Library Management or locally generated Library Management Database (LMD) and Technical Document Management Information System (TDMIS) computer programs will be used to maintain the library. In general, the technical library serves the following basic functions:

- a. Acquisition of new documents and data and the updating of existing materials.
- b. Cataloging, indexing and filing all documents, data and information materials to allow for effective use of library technical information.
- c. Accountability and control to ensure continuous integrity of the library collection and to enhance periodic inventories.
- d. Central control point for all technical documents received, held, used, transferred or disposed of by the repair department (Fleet Maintenance Activity (FMA) only) or command. For FMAs having a Nuclear Support Facility (NSF), all Naval Sea Systems Command Nuclear Propulsion Directorate (NAVSEA 08) controlled documents shall be controlled by the NSF. For MSCs aboard nuclear powered aircraft carriers, all NAVSEA 08 controlled documents shall be controlled by the Reactor Department Technical Publication Library. For MSCs having an Aviation Intermediate Maintenance Department (AIMD), all AIMD documents shall be controlled by the AIMD Librarian. The AIMD Library shall control all AIMD documents.

- e. Maintain modem/internet access to the following computer networks/websites whenever possible.
 - (1) Technical Document Management Information System (TDMIS).
<https://mercury.tdmis.navy.mil/default.cfm>
 - (2) Military Engineering Drawing Asset Locator System.
<https://www.dlis.dla.mil/medals>
 - (3) Naval Surface Forces, Atlantic Planning and Execution of Alterations and Repair (FMA and COMNAVSURFLANT and COMNAVSURFPAC commands only)
<https://www.spear.navy.mil> click on SPEAR info.
 - (4) Fleet Modernization Program Management Information System.
 - (5) Monthly Advance Change Notice Report.
<https://nsdsa.nmci.navy.mil/>
 - (6) Department of Defense Index for Military Specifications, Standards and Related Publications (DODSSP) <http://dodssp.daps.dla.mil>
 - (7) <https://assist.daps.dla.mil/>

11.2.1 Technical Library Supervisor. The Technical Library Supervisor is responsible for keeping current plans, prints, specifications, manuals and all other technical documents and information needed by ship and FMA departments and for managing the daily operation of the library. The Technical Library Supervisor shall:

- a. Have a sufficient understanding of technical library organization requirements in references (a) through (k) (as applicable) to supply the necessary technical information.
- b. Have at least a "Confidential" security clearance.
- c. Supervise personnel assigned to library.
- d. Operate the technical library in the following manner:
 - (1) Schedule and carry out a frequent and recurring on the job training program for all personnel assigned to the technical library staff or to satellite librarian positions. As a minimum, training shall include topics that provide guidance for performing each library or satellite library function. Satellite librarian training may be tailored to cover only those areas applicable to satellite libraries. Lesson plans shall be developed for each topic.
 - (2) Maintain and provide applicable and current plans, prints, specification, manuals and all other technical documents and information needed by the cognizant department. FMAs will also provide technical documents to tended units, other FMAs, non-FMA government activities or qualified Department of Defense contractor personnel.
 - (3) Maintain an inventory of technical publications/manuals and manufacturer instruction books and other technical/repair documents available in the technical library and/or any satellite libraries (Work Centers/division offices, etc.).

- (4) Develop a system for checking out/in and recall of library technical publications issued to individuals in order to maintain the integrity of the library and ensure revisions/changes are made as received and also to minimize lost materials due to unaccountability. The system should include a recall capability that would allow for the location and recall/reissue of materials after 90 days. FMAs issuing technical publications/documents to tended units should establish a 90-day or end of fleet maintenance availability recall whichever comes first.
- (5) Requisition technical documentation needed for maintenance and repair procedures but not already available on board. Maintain a separate file of material on order. Track the status of requisitioned documents until received. Initiate follow-up action for those documents where supply status has not been received for a 30-day period, unless previous supply status indicates no follow-up is required.
- (6) Ensure proper security for the contents of the technical library.
- (7) Exercise positive control over access to the Library Management or TDMIS database functions using locally generated procedures.
- (8) Maintain written procedures which describe how to perform each function carried out by the technical library (i.e., check-out/check-in of technical documents, updating library document files, operating reproduction equipment, performing updates, requisitioning, inventories and audits of library documents, etc.).
- (9) Ensure maintenance calls/contracts are made for all viewing, reproduction, computer and powered document retrieval systems/equipment used to carry out library functions. The program shall include devices associated with this equipment.
- (10) Perform an inventory of technical publications/manuals and manufacturer's instruction books.
 - (a) Ships are to perform a semiannual inventory of technical publications/manuals and manufacturer's instruction books and other maintenance/repair documents available in the technical library and satellite libraries (work center/division offices).
 - (b) Shore facilities and submarine tenders are to perform an inventory of technical publications/manuals and manufacturer's instruction books and other maintenance/repair documents available in the technical library and satellite libraries (work center/division offices) every 12 months.
- (11) Ensure manuals within library's inventory contain applicable Advance Change Notices (ACN), or IRACs. Verify each manual against the ACN report issued by Naval Sea Systems Command (NAVSEA) Data Support Activity, Port Hueneme, CA, and the NATEC IRAC Tracker Report.
- (12) Perform an annual data verification (configuration audit) of technical manuals and other repair documents available in the technical library and satellite libraries. Afloat libraries should perform verifications as often as operational constraints permit, within 6 months of major deployments, is recommended if verifications are not conducted annually.
 - (a) Verify each NAVSEA/Space and Naval Warfare Systems Command technical manual held with the data listed in TDMIS using LMD for manual or automated verification. Verify Naval Supply Systems Command (NAVSUP) manuals with the modem Internet access.
 - (b) Verify NAVSUP manuals against reference (a) (i.e., NAVSUP 600 CD) or by performing a process verification file with LMD/TDMIS.

- (c) Compare each technical manual held with the ACN Report provided from NSDSA, Port Huenme, CA. This should be performed monthly.
 - (d) Compare each technical manual held with the Automatic Distribution List (501 Report) to ensure library is receiving the technical manual automatically. This function may be completed by performing the TDMIS 501 Automatic Distribution Process with LMD or by requesting a 501 Report from NSDSA.
 - (e) Compare each technical manual held with the Technical Manual Deficiency Evaluation Report file to make sure information received from Technical Manual Deficiency Evaluation Report submissions is reflected in applicable technical manuals.
 - (f) Make sure each technical manual is in good material condition (i.e., does not have loose or unrepaired torn pages, is readable and has an outside cover).
 - (g) For Naval Air Systems Command manuals, submit an Automatic Distribution Requirements List annually to NATEC to update distribution and verify manuals in accordance with reference (b).
- (13) Keep a record of semiannual inventories, annual data verifications and noted deficiencies for 24 months. The annual verification should include an assessment of recorded deficiencies in the technical data management program to determine areas that require improvement.
- (14) Establish procedures to incorporate changes/revisions to technical documents held within library or satellite libraries as soon as practical after receipt. Updates involving the safety of personnel or equipment (ACNs) shall be entered within 48 hours of receipt. Routine changes shall be installed before publication use or within 30 days of receipt, whichever occurs first.
- (15) Establish procedures that assure positive control of all technical documents held by the library. If Process Instructions or documents listed in <http://dodssp.daps.dla.mil> or any alteration text documents are held in Satellite library inventories, verify that these documents are up-to-date at least semiannually, and upon receipt of an updated index.
- (16) Establish procedures for issuing technical documents to Department of Defense contractor personnel using guidance provided in references (c) and (d) (FMA only).
- (17) Be the department point-of-contact for the Integrated Logistics Overhaul team with respect to technical documentation.

11.2.1.1 Technical Library Non-Supervisory Personnel. The Technical Library non-supervisory personnel will carry out the daily operations of the technical library as directed by the Technical Library Supervisor. The Technical Library non-supervisory personnel shall:

- a. Be a reliable and motivated petty officer (E5 or above for FMA/MSC or full time civilian equivalent).
- b. Military should be assigned for at least 12 months.
- c. Personnel assigned as satellite librarians will be reliable and motivated petty officers appointed in writing and assigned for at least 9 months. Satellite librarians in work centers holding confidential material will have at least a "Confidential" security clearance.

11.2.2 Technical Library Materials. The technical library has a wide variety of technical information and data in many different forms and formats. In general, eight broad categories of information exist which are described in reference (e).

11.2.2.1 Indices. Indices serve as reference or information sources that name systems, supplies and other information sources. Examples of indices include:

- a. Ships Drawing Index (SDI).
- b. Index of Technical Publications (ITP).
- c. TDMIS.
- d. Navy publications, forms and instructions (Reference (a)).
- e. DODSSP/ASSIST <https://assist.daps.dla.mil/quicksearch>
- f. Advanced Technical Information Systems (ATIS)

11.2.2.2 Technical Manuals. Technical manuals outline inspection and repair procedures for shipboard systems. Examples of technical manuals include:

- a. Ship's Information Books.
- b. General Information Books.
- c. Naval Ships' Technical Manual (NSTM).
- d. Propulsion Operating Guide.
- e. General Specifications for Overhaul.
- f. Equipment Technical Manuals.
- g. Organizational Maintenance and Management System - Next Generation (OMMS-NG).
- h. Ordnance Publications.
- i. Ordnance Data.

11.2.2.3 Drawings. Drawings have engineering and design requirements needed to repair equipment to original specifications. Drawings are also used to find the location of shipboard systems and system equipment and components. Drawings stored in technical libraries include:

- a. Ship's construction drawings.
- b. Ship Alteration installation drawings.
- c. Selected Record Drawings.
- d. Ship's Equipment Drawings.
- e. Vendor/Manufacturer's Drawings.
- f. Booklet of General Drawings.

11.2.2.4 Handbooks and Cataloging. Handbooks have detailed information about specific systems or equipment and may also list equipment repair procedures. Examples of handbooks include the following:

- a. Micro-Electronic Device Date Handbook.
- b. Identification Markings for Fasteners.
- c. Gasket Material (Non-metallic).
- d. Guide for Sampling Inspections.
- e. Shipyard welding procedures.

11.2.2.5 Military Specifications and Standards. Military specifications and standards are specific, detailed requirements for equipment or material. DODSSP/ASSIST <https://assist.daps.dla.mil/quicksearch>

11.2.2.6 Documents and Lists. Documents and lists are catalogs of parts, equipment or publications and alteration records. The following are examples of documents and lists typically found in technical libraries:

- a. Navy Management Data List (NAVSUP Publication 4100).
- b. Navy Directive List.
- c. Introduction to Federal Supply Catalogs and Related Publications (NAVSUP Publication 4400).
- d. Ship Alterations, Machinery Alterations and Ordnance Alterations.
- e. Planning Yard Work Instructions and Alterations Equivalent to Repair.
- f. Technical Data Management Information Systems (TDMIS).

11.2.2.7 Instructions, Technical Publications and Bulletins. These publications give guidelines for the operation of equipment, introduce new equipment and may have lists of available items. Instructions, technical publications and bulletins commonly stocked in technical libraries include:

- a. General Services Administration Supply Catalog.
- b. Electronics Information Bulletins.
- c. Field Change Bulletins.
- d. N AVSEA Instructions.
- e. Type Commander Instructions.
- f. Technical Directives.

11.2.2.8 Repair Standards. These standards are detailed repair procedures for the troubleshooting and overhaul of specific equipment and guidance for standard processes. Examples of repair standards include:

- a. Technical Repair Standard.
- b. Maintenance Standard.
- c. Intermediate Maintenance Standard.
- d. Industrial Process Instruction.

11.3 INDEX OF TECHNICAL PUBLICATIONS AND SHIP'S DRAWING INDEX. Due to the wide variety of types of materials that may be included in a technical library, it may be confusing as to what are the minimum titles and requirements needed for a particular ship. The ITP and SDI have been developed for each ship and list the titles and drawings applicable to the ship.

11.3.1 Index of Technical Publications. The ITP is a guide to facilitate the identification of technical manuals used on board a ship. The ITP is tailored to the configuration of a specific ship and lists technical manuals needed to operate, maintain and repair ship systems and equipment. It also lists any other general and ship related manuals needed by Ship's Force. The ITP will:

- a. Contain a list of the technical manuals needed on board a ship.
- b. Identify technical manuals for specific systems and equipment.
- c. List the systems and equipment supported by a specific technical manual.
- d. Include information about each technical manual.
- e. Be in electronic (EXCEL) format and sorted by APL/Repairable Identification Code and Hierarchical Structure Code.

11.3.2 Ship's Drawing Index. The SDI is a list of ship drawings and related design reference information that shows the actual current configuration of the ship. SDIs are required by General Specifications for Shipbuilding for all ships over 200 feet in length.

- a. The original SDI is prepared by the shipbuilder and approved by Supervisor of Shipbuilding. After acceptance of the ship by the Navy, the SDI is sent to the selected planning yard which is assigned as custodian of the index.
- b. Corrections to the SDI are made by the industrial activity to reflect work performed during Chief of Naval Operations Maintenance Availabilities and fleet maintenance availabilities. Original SDIs are to be corrected by the planning yard to reflect changes reported by the ship or other activities when changes are made between regular overhauls.
- c. SDI information includes:
 - (1) Drawing title.
 - (2) NAVSEA drawing number and revision.
 - (3) Builder or contractor drawing numbers of Hull Mechanical and Electrical drawings applicable to the individual ship.

11.4 MAINTENANCE SUPPORT CENTERS.

- a. (Aircraft Carriers only) MSCs provide a centralized organization to aid the Work Center technicians by incorporating Integrated Logistics Support problem solving methods. MSC personnel operate from a central facility with reference material and resources of Integrated Logistics Support troubleshooting readily available. The MSC will function within the policy and procedural guidelines of references (f) and (g).
- b. The MSC develops and maintains an accurate equipment/component configuration database, identification of required technical support (e.g., repair part APLs, drawings, technical manuals, test equipment, Planned Maintenance System, etc.), and the solutions for repair part support problems.

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