



APPENDIX C

SHIP SELECTED RECORDS

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SHIP SELECTED RECORDS

C.1. SCOPE

Ship Selected Records (SSRs) comprise hull level system technical documentation, specifically designated by the Chief of Naval Operations (CNO), which is maintained current throughout the life of the ship. SSRs consist of three major categories; Selected Record Drawings (SRDs), Selected Record Data, and Allowance Lists. Each of these major SSR categories contains information of significant value to ships operations, maintenance, modernization, training, and logistics requirements.

This appendix is applicable to other than Reactor Plant SSR requirements. The identification and description of specific SSRs in each category as well as detailed specifications and procedures for other than Reactor Plant SSR maintenance are discussed in Section 4-11 of this manual. Reactor Plant SSR requirements are contained in Section 4-12 of this manual.

The Planning Yard (PY) is responsible for all SSRs. It maintains a master file containing a final reproducible copy of SSR and updates the Selected Record Drawings and Data. The PY/Technical Manual Maintenance Activity (TMMA) shall maintain a current list of all SSR Technical Manuals (TMs). The PY/In-Service Engineering Agent (ISEA) shall maintain a current list of all SSR drawings. NAVICP shall maintain the master file of the allowance lists.

The Naval Supervising Activity (NSA) is responsible for marking-up PY provided SSRs of surface nuclear ships and submarines undergoing availabilities to reflect installed configuration changes and all changes reported by forces afloat. This mark-up is provided to the PY who, with the support of the appropriate TMMA/ISEA updates the final reproducible copy and prints and distributes at the End Of Availability (EOA+3).

Additions and deletions to the SSR listed herein can only be made with the approval of CNO. Recommendations for additions or deletions to the SSR listings shall be submitted to CNO via the Naval Sea Systems Command (NAVSEA). Upon approval by CNO, NAVSEA will promulgate appropriate changes.

C.2. APPLICABLE DOCUMENTS

MIL-DTL-24784	Manuals, Technical; General Acquisition and Development Requirements
MIL-M-38761/2	Microfilm and Tabulating Cards used for Recording Engineering Drawings and Associated Data
MIL-STD 1916	DOD Preferred Methods For Acceptance of Product
NAVSEA 0902-LP-018-2010	General Overhaul Specifications for Deep Diving SSN/SSBN Submarines
NAVSEA 0902-LP-002-2000	Consolidated Index, Drawing, Conversion
NAVSEA 0924-LP-062-0010	Submarine Safety Requirements Manual
NAVSEA SL105-AA-PRO	ILO Policy and Procedures Manual (010 through 070 Series)

NAVSEA S0000-00-IDX-000/TMINS	Description and Application Guide for NAVSEA Standard Technical Manual Identification Numbering System (TMINS)
NAVSEAINST 4160.3	Technical Manual Management Program (TMMP)
NAVSHIPS 0900-LP-002-2000	Ship Work Breakdown Structure
OPNAVINST 4441.12, Series	Retail Supply Support of Naval Activities and Operating Forces
OPNAVINST 4790.4	Ship's Maintenance and Material Management (3-M) Manual; Promulgation of
Plan for Managing Logistic Technical Data (LTD) Products and Services in Support of NAVSEA Task 145	
Plan for Managing Logistic Technical Data (LTD) Products and Services in Support of SSN 688 Class Submarine Depot Modernization Periods (DMPs)	
NAVSEA S9AA0-AB-GOS-010	General Specifications for Overhaul of Surface Ships
T0005-AA-GYD-020/PTII-MAN-MOD ACT	Procedures for Maintaining Non-Reactor Plant System Manuals and Equipment/Component Technical Manuals.
T0005-AA-GYD-010/PTI-MAN	Holder (Part I - Responsibilities)
Technical Specification 9090-700	Ships Configuration and Logistics Support Information System.
Technical Specification 9090-800	Selected Record Drawings, Appendix A
Technical Specification 9090-810	Damage Control Drawings Computer Aided Drafting Requirements
Technical Specification 9090-820	Preparation and Revision of Damage Control Books and Diagrams for U.S. Navy Surface Ships;
Technical Specification 9090-821	Promulgation of Preparation and Revision of Damage Control Books and Diagrams for U.S. Navy

C.3 REQUIREMENTS

C.3.1 SELECTED RECORD DRAWINGS (SRDs)

C.3.1.1 General. SRDs consist of important basic hull, mechanical, equipment, and related information about the ship and are selected for their value for operational, maintenance, modernization, training, and consulting purposes to individual ship's forces, Fleet commands, shipyard personnel, PY personnel, training centers, and other naval activities. The drawings designated as SRDs are to be maintained current and up-to-date throughout the life of the ship.

Appendix A of NAVSEA Technical Specification 9090-800 identifies the hull-level requirements by ship class for the drawings currently designated as SRDs. Recommendations for additions or deletions to the list of SRDs shall be submitted to the CNO via NAVSEA. Upon approval by CNO, NAVSEA will promulgate a change to the specification.

C.3.1.2 Expanded Drawing Baselines. The number of SRDs required for each ship varies with

the ship class. The required size of the drawing baseline has been increased for most ships. The PYs will produce the additional drawings on a ship-by-ship basis as tasked by the Ship Program Manager (SPM). The PY shall assume the full maintenance responsibility in accordance with Section 4 of this manual for each ship's total SRD suite upon completion of the expanded baseline. Thereafter, the PY will document configuration changes occurring during the ship's availabilities and operational intervals. For other ships, the maintenance and update action shall be performed in accordance with Section 4 of this manual.

C.3.2 SELECTED RECORD DATA

C.3.2.1 General. Selected Record Data is that important basic technical information relative to certain shipboard arrangements, equipment, and systems under the cognizance of NAVSEA that is selected for its value for operational, maintenance, modernization, training, and consulting purposes, to an individual ship's force, fleet commands, PYs, NSAs, training commands, and other naval activities. The data items designated as Selected Record Data are to be maintained current and up-to-date throughout the life of the ship concerned.

Table C-I is a listing of data currently designated as Selected Record Data. Recommendations for additions or deletions to the List of Selected Record Data shall be submitted to the CNO via NAVSEA. Upon approval by CNO, NAVSEA will promulgate a change to Table C-I.

C.3.2.2 Updating Selected Record Data. The requirements of individual activities relative to maintaining and updating Selected Record Data shall be in accordance with Section 4 of this manual. NAVSEAINST 4160.3 provides NAVSEA policy for the maintenance of NAVSEA TMs. Specific requirements for Selected Record Data are detailed in Table C-I. Maintenance of Selected Record Data for SSN 21 Class, SSN 688 Class AND SSN 774 Class submarines shall be in accordance with the procedures of T0005-AA-GYD-020/PTII-MAN-MOD ACT, T0005-AA-GYD-010/PTI-MAN, the plans for managing LTD Technical Products and Services in support of NAVSEA Task 145, and SSN 21 Class, SSN 688 Class and SSN 774 Class submarine Depot Modernization Periods (DMPs).

TABLE C-I. Selected Record Data.

KEY:

Column 1 - Surface Ships (Non-nuclear powered)

Column 2 - Surface Ships (Nuclear powered)

Column 3 - SSN Submarines

DATA TITLE	1	2	3
Ship Information Book (SIB) or General Information Book (GIB) or Ship System Manual (SSM) or System Operation and Onboard Maintenance Manual (SOOMM)	X	X	X
Technical Manuals for Systems (MIL-M-15071 Type III Manuals)	X	X	X
Damage Control Books and Plates (not applicable to SSN Classes)	X	X	X
Combat System Technical Operations Manual (CSTOM) (5)	(1)		
Combat System Alignment Manual (CSAM) (4)	X	X	
Training Aid Booklet (TAB) or Propulsion Operating Guide (POG)	X	X	X
Ship's Drawing Index (SDI) or Modified Ship's Drawing Index (MSDI)	X	X	X
Index of Technical Publications (ITP)	X	X	X
Engineering Operational Sequencing System (EOSS) (3)	X		
Propulsion Plant Manuals (for 1200 PSI Ships) (3)	X		
Steam and Electric Plant Manuals (for nuclear-powered ships) and TM's IAW NAVSEAINST 9890.29		X	(2)
Submarine Safety Certification Boundary (SSCB) Book			X
Ship Valves Technical Manual		X	X
Ship Service Motors and Controllers Technical Manual		X	X
Technical Manuals for Components in Systems Listed Below:			
Main Steam System		X	X
Auxiliary Steam System		X	X
High Pressure Steam System		X	X
Combat System Operational Sequencing System (CSOSS) (4)	(5)		
Aviation Fuel Operational Sequencing System (AFOSS) (3)	X	X	
Cargo Fuel Operational Sequencing System (CFOSS) (3)	X		
Fuel Operational Sequencing System (FOSS) (3)	X		
Sewage Disposal Operational Sequencing System (SDOSS) (3)	X	X	
Ballasting Operational Sequencing System (BOSS) (3)	(7)		
Catapult Operational Sequencing System (CATOSS) (3)	(8)		
Weapons Elevator Operational Procedures System (WEOPS) (3)	(9)		
Auxiliary Operational Sequencing System (AUXOSS) (3)	X	X	
Condensate System		X	X
Feed System		X	X
Main Sea Water Cooling System		X	X
Auxiliary Sea Water Cooling System		X	X
Steam Operated Distilling System		X	X
Hydraulic System (Main, Vital and External)		X	X
Steering and Diving Gear Hydraulic System			X
Main Oxygen System			X
Trim and Drain System			X
High Pressure Air System		X	X
High Pressure Ballast Tank Blow System			X
60 Hz A.C. Power Distribution System		X	X

DATA TITLE	1	2	3
400 Hz A.C. Power Distribution System			X
D.C. Propulsion Power Distribution System			X
Low Pressure Steam Drain System		X	X
Fresh Water Drain Collection System		X	X
Steam Plant Control System (including Steam Plant Control Panel and Benchboard)		X	X
Ships Service Circulating Water System		X	X
Engine Room Fresh Water Coolant System		X	X
Ships-Service Power Sources including: SSTGs		X	X
SSTGs		X	X
Diesel Generators		X	X
Batteries		X	X
Magnetic Material Control Drawing		(6)	
Electromagnetic Interference (EMI) Control Booklet		(6)	
Hull/Structural Repair Configuration Control Document		(6)	
Electric Plant Temperature Monitoring System			X
Electric Plant Control System (including Electric Plant Control Panel and Benchboards)			X
Propulsion Turbines, Reduction Gears, and Associated Control System		X	X
Main Lube Oil System		X	X
SSTG Lube Oil System		X	X
Shaft Lube Oil System		X	X
Clutch Control Oil System		X	X
Lube Oil Fill, Transfer and Purification System		X	X
Propulsion Plant Temperature Monitoring System		X	X
Propulsion Speed Indicator System		X	X
Steam Plant Alarm System		X	X
Steam Plant Salinity Indicator System		X	X
Electric Propulsion System		X	X
Air Conditioning System (those portions associated with reactor compartment and other propulsion spaces)		X	X
Service Air Systems (those portions associated with the Propulsion Plant)		X	X
Control Air Systems (those portions associated with the Propulsion Plant)		X	X
Steam Plant Pneumatic Control Air System		X	X
Emergency Propulsion Motor		X	X
Depth Detecting System			X

NOTES:

- (1) CG-47, DD-963, and FFG-7 Classes
- (2) SSN 21, SSN 688 and SSN 774 Classes
- (3) Under the technical cognizance of NSWCCD-SSES Philadelphia
- (4) Under the technical cognizance of NSWC Port Hueneme
- (5) CG-47, DD-963, and DDG-51 Classes
- (6) MCMs and MHCs
- (7) LHAs, LHDs, LPDs, and LSDs.
- (8) CVs and CVNs
- (9) Combatant ships with weapon elevators only

C.3.2.2.1 Numbering of Selected Record Data. NAVSEA TM numbers, revision numbers and change numbers, as applicable, shall be utilized in accordance with NAVSEA S0000-00-IDX-000/TMINS for Selected Record Data. NAVSEA numbers may be obtained from the Naval Sea Data Support Activity (NSDSA). Each volume of a multi-volume document shall be considered as an individual document and numbered accordingly. A unique NAVSEA number shall be assigned, on an individual basis, to each Selected Record Data item listed below:

- a. Ship Information Book (SIB), General Information Book (GIB) or Ship System Manuals (SSMs) or System Operation and Onboard Maintenance Manual
- b. Technical Manuals for Systems (MIL-DTL-24784) Type III Manuals
- c. Damage Control Books and Plates (not applicable to SSN classes)
- d. Training Aid Booklet (TAB) or Propulsion Operating Guide (POG)
- e. Ship's Drawing Index (SDI) or Modified Ship's Drawing Index (MSDI)
- f. Index of Technical Publications (ITP)
- g. Steam and Electrical Plant Manuals (for nuclear powered ships) and Technical Manuals (TMs)
- h. Submarine Safety Certification Boundary (SSCB) Book
- i. Ships Valves Technical Manual
- j. Ship Service Motors and Controllers Technical Manual
- k. Other Type III System Manuals

C.3.2.2.2 Updating Existing Selected Record Data. The PY will provide the NSA two sets of SSRs (Drawings and Data) reproducibles updated to the authorized EOA configuration, upon request from the NSA/IA at about A-4. The NSA is required to mark-up the reproducibles to show changes authorized for installation subsequent to the PY update, data submitted by Ship's Force in the pre-availability package or during the availability, and to incorporate all changes required to interface with other update actions. The NSA will provide one set of marked-up SSRs to the PY and an identical set to the ship as interim SSRs. Between availabilities, the PY will update data masters in accordance with Section 4 of this manual.

Tabular data are to be updated as required. Illustrations are to be updated by overlay or replacement and limited to one text page. Plate diagrams are to be updated as required.

A change is comprised of corrected pages to the basic manual. It consists of information that updates the manual without requiring rewriting or reorganization of the technical content of the basic manual. Changes are to be issued when 25 percent or less of the pages in the document are affected. All changes require change numbers assigned by NSDSA. (see C.3.2.2.1.)

A revision is a subsequent edition of a document which supersedes the preceding edition. A revision shall be issued when more than 25 percent of the pages contained in a document have been changed. A revision shall incorporate all existing changes, and is identified by the Technical Manual Identification Numbering System (TMINS) number obtained from the NSDSA. (see C.3.2.2.1 and C.3.2.2.3.)

For SSN 21 Class, SSN 688 Class AND SSN 774 Class submarines, NSAs are required to submit appropriate change documents (Manual Change Requests (MCRs) or Technical Manual

Deficiency/Evaluation Reports (TMDERs)) to the PY. These change documents will then be processed in accordance with T0005-AA-GYD-020/PTII-MAN-MOD ACT and changes to the TMs shall be produced to meet the availability schedule.

C.3.2.2.3 New Selected Record Data. When alterations have been accomplished that would normally require correction of Selected Record Data as listed in Table C-I, but where these data have not been previously prepared, or where changes to Table C-I are promulgated, the following procedures shall be adhered to:

- a. Unless otherwise authorized, where only a class data item exists, the data item will be corrected to reflect specific ship conditions. The data item will be assigned a unique NAVSEA number (see C.3.2.2.1 above) and designated as the Selected Record Data applicable to the subject ship only. Acquisition of the new data item shall be in accordance with NAVSEAINST 4160.3.
- b. When a specific Selected Record Data item does not exist, or when such data are missing and not available from the PY, or ship, a new original data item is to be prepared (Type I TMs excepted) by the PY.
- c. Whenever the original of a Selected Record Data item (less Type I TMs), because of age, extensive correction, or other reasons, deteriorates, so that legible prints cannot be made, a new data item must be prepared retaining the same NAVSEA number. Problems with Type I TM originals will be processed in accordance with NAVSEAINST 4160.3.

C.3.2.3 Selected Record Data Characteristics. The following paragraphs describe specific Selected Record Data items together with their general updating requirements.

C.3.2.3.1 Ship Information Books (SIBs), General Information Books (GIBs) and Ship System Manuals (SSMs). The SIB and its older counterpart, the GIB, provide a source of technical information concerning shipboard arrangements and systems. The SSN 21 Class, SSN 688 Class AND SSN 774 Class SSM is the primary intra-system and inter-system information and operations manual for all areas except the reactor and propulsion plants.

- a. **Updating SIBs/GIBs/SSMs.** The SIB, GIB and SSM will be updated after any availability during which alterations are accomplished which affected the system, functions, or procedures therein, in accordance with the following guidelines:
 1. In the event that equal or better information is readily available on board a ship in other SRDs, Selected Record Data, or publications, the information should not be duplicated in the SIB/GIB. Instead, the SIB/GIB should be simply annotated to indicate that a change has been accomplished, and reference the source of updated information.
 2. A shipcheck may be required to verify the accuracy of the SIB/GIB following work performed by an NSA.
 3. SIBs for all deep diving SSN submarines shall be updated in accordance with NAVSEA 0902-LP-018-2010 unless otherwise specified under applicable NAVSEA contract.
 4. The SSM shall be updated in accordance with T0005-AA-GYD-020/PTII-MAN-MOD ACT and T0005-AA-GYD-010/PTI-MAN.
- b. **SIB/GIB for Surface Ships.** The SIB for surface ships will normally consist of the following separately bound volumes or portions of volumes. Only those volumes of a ship's

SIB/GIB currently provided will be updated as Selected Record Data. No volume of a SIB is to be added or deleted except by direction of NAVSEA.

1. Volume 1. Hull and Hull Mechanical Systems
2. Volume 2. Machinery Plant
 - Part 1. Propulsion Plant, General Design, and Operating Procedures
 - Part 2. Auxiliary Machinery, Piping, Air Conditioning, Ventilation, and Heating Systems
3. Volume 3. Power and Lighting Systems
 - Part 1. General Description and Design Information of Systems
 - Part 2. General Description of Electric Equipment and Electrically Operated Auxiliaries
4. Volume 4. Electronics Systems
5. Volume 5. Interior Communications Systems
 - Part 1. Interior Communications Systems
 - Part 2. Sound-Powered Telephone Systems, Voice Tubes, and Message Passing Facilities
6. Volume 6. Weapons Control Systems
7. Volume 7. Ballasting Systems

c. **SIB for SSN 637 Class Submarines.** The SIB shall consist of separately bound volumes. No volume is to be added or deleted except by direction of NAVSEA.

- Volume 1. General Information
- Volume 2. Tactical Facilities
- Volume 3. Ship Control System
- Volume 4. Steam and Diesel Propulsion
- Volume 5. Electrical Power System
- Volume 6. Ship Service System
- Volume 7. Hull, Mechanical and Ship Emergency Systems

d. **SSMs for SSN 21 Class, SSN 688 Class AND SSN 774 Class Submarines.** The SSM is organized into seven volumes to facilitate their use. These volumes are broken down into parent chapters, Operating Procedures (OPs), Casualty Procedures (CPs) and Operating Instructions (OIs).

- Volume 1. General Information
- Volume 2. Combat Systems
- Volume 3. Ship Control Systems
- Volume 4. Ship Service Systems
- Volume 5. Principles of Casualty and Damage Control
- Volume 6.
 - Part 1 - System Operating Procedures (OPs)
 - Part 2 - Casualty Procedures (CPs)
 - Part 3 - Operating Instructions (OIs)
- Volume 7. Principles of Ship Control

C.3.2.3.2 **Damage Control Books.** Damage Control Books shall be prepared, corrected, and duplicated in accordance with Section 086 of NAVSEA S9AA0-AB-GOS-010 General Specifications for Overhaul of Surface Ships, and NAVSEA Technical Specifications 9090-810,

9090-820 and 9090-821. The SSN 21 Class, SSN 688 Class and SSN 774 Class submarine does not have a Damage Control Book. For SSN 21 Class, SSN 688 Class and SSN 774 Class, this information is contained in Volumes 5 through 7 of the SSMs (see Section 4 of this manual).

C.3.2.3.3 Training Aid Booklets (TABs). TABs are pocket-sized volumes using functional diagrams and drawings of the ship to depict piping, electrical, and electronic systems. TABs consist of two volumes: (1) Volume 1, Piping Systems, and (2) Volume 2, Electrical and Electronic Systems. For SSN 21 Class, SSN 688 Class and SSN 774 Class submarines, TABs are a collection of selected illustrations taken from the SSM and is furnished for use in conjunction with the SSM. TABs are issued to ship's force for precommissioning training, for personnel qualification, and for operational reference purposes. TABs are generally provided only for submarines. Only those TABs provided for submarines will be updated as Selected Record Data. At EOA+6.

C.3.2.3.4 Posted Information Plates (PIPs). PIPs are selected illustrations and instructions taken from the SSM and equipment technical manuals for SSN 21 Class, SSN 688 Class and SSN 774 Class submarines. They are furnished for training and identification purposes. There are approximately 200 PIPs laminated and affixed directly to or located near the piece of equipment, component, or system involved.

C.3.2.3.5 Propulsion Operating Guide (POG). POGs are pocket-sized documents providing information in summary form of start-up, normal operations, shut-down, damage/casualty control, and trouble shooting procedures and data for the propulsion plant and major auxiliary systems. They are used for familiarization, training, and operation of the main systems by ship's personnel.

C.3.2.3.6 Technical Manuals (TMs). TMs separately describe equipment (Type I manuals) and systems (Type II manuals) where such equipment or systems are of sufficient importance and complexity as to require separate documentation.

While TMs are important items of documentation, not all such TMs are considered as SSR. Only those TMs specifically identified in Table C-I fall within the category of documentation identified as SSR. For the methods of documenting and maintaining TMs that do not qualify as SSR refer to Section 8 of this manual.

Unless otherwise directed by the SPM, only those TMs identified as SSR will be routinely updated under Design Services Allocation (DSA) funding. Manuals to be updated will be identified in Ship Alteration (SHIPALT) Authorization Letters. Activities concerned should review SHIPALT Authorization Letters and advise the SPM of manuals meeting the criteria identified in Table C-I believed to require updating because of actual or planned accomplishment of SHIPALTs and not specifically identified for updating.

When, at any time, a Type I TM is known or suspected to be deficient, the deficiencies should be immediately brought to the attention of NSDSA for initiation of corrective action, in accordance with NAVSEAINST 4160.3.

TMs will be prepared and updated in accordance with NAVSEAINST 4160.3 and the Military Specification used for original preparation.

C.3.2.3.7 Index of Technical Publications (ITP). The ITP is a guide to facilitate the identification of TMs used onboard a ship. The ITP is tailored to the configuration of a specific ship. It lists TMs needed to operate, maintain, and repair a ship's systems and equipment. It also lists any other general and ship related TMs needed by the crew.

The ITP is produced from the Technical Documentation Management Information System (TDMIS), NAVSEA's automated technical manual management information system. TDMIS is operated and maintained by NSDSA. Requests for copies of the ITP should be forwarded to NSDSA with a copy of the request provided to the Type Commander (TYCOM).

For SSN 21 Class, SSN 688 Class and SSN 774 Class submarines, the ITP lists all technical publications related to the operation and maintenance of onboard equipment. It does not include Defense Communications Material Systems (DCMS) equipment TMs, nor does it include tactical, administrative, medical, supply or training publications. The ITP includes the effective changes and revisions of each publication with the exception of Reactor Plant Manuals. Specific onboard allowances can be found in the "Hull Applicability-Quantity Required" lines. The ITP shall include an introduction describing the contents and instructions on its use. Inquiries concerning requests for copies of ITP reports should be made to NSDSA. At 30 days prior to Fast Cruise, the PY shall provide the ship a copy of the preliminary ITP. At EOA+3 the PY shall provide the ship with a final ITP updated to reflect the ship's post-availability configuration. For a more detailed discussion of the ITP refer to Section 8 of this manual.

C.3.2.3.8 Ship Drawing Index (SDI) and Modified Ship Drawing Index (MSDI). The SDI and MSDI are lists of ship's drawing and related design reference information compiled in accordance with Section 085 of NAVSEA S9AA0-AB-GOS-010 General Specifications for Overhaul of Surface Ships and recorded on NAVSHIPS Forms 9020/17 and 9029/19 as shown in Figure 4 of OPNAVINST 4790.4. SDIs or portions thereof prepared in Automated Data Processing (ADP) format are to be considered as part of the Master SDI. Submarine SDIs shall be maintained in accordance with NAVSEA 0902-LP-018-2010.

A MSDI has been supplied to some ships not originally intended to receive a standard SDI. The MSDI lists only the title, NAVSEA drawing and numbers of applicable drawings revisions. For the purpose of this manual, the terms SDI and MSDI are synonymous.

- a. **SDI Content.** The SDI is a listing of all drawings applicable to the ship including Reactor Plant drawings (see C.3.2.3.8.f.). Working drawings, systems diagrams, SRDs having a NAVSEA drawing number assigned, all manufacturing equipment drawings designated as certification data sheets, equipment drawing lists, and assembly drawings which list detail drawings shall be included in the SDI. Alteration drawing numbers, SHIPALT Number, NAVSEA drawing numbers of drawings used to prove systems and/or equipment installed or otherwise affected by the overhaul, will be included. Alteration drawings will not be listed until after the alteration has been accomplished.
- b. **Updating the SDI.** The updated SDI will be provided by the PY to the NSA for correction to reflect subsequent changes through the availability. Since the SDI is the

sole source of identification of all drawings applicable to a ship, the NSA and the PY will ensure that all applicable drawings are included in the SDI. Corrections may be made by typewritten mark-up of the SDI pages and/or appropriate correction to SDIs in ADP format. Ships, or other activities updating the SDI during an availability, other than a regular overhaul, will mark-up the appropriate page(s) of the ship's SDI. A marked-up "Ship's Master Copy" of the SDI will be forwarded to the PY with a request for correction and appropriate distribution. Particular attention shall be directed to ensuring the accomplishment and verification of SDI corrections required as a result of equipment and configuration changes accomplished during restricted availabilities, tender availabilities and voyage repairs. The NSAs are responsible for furnishing all new drawing identification arising from work other than authorized SHIPALTs, such as vendor drawings for items or material installed as part of the ship availability repair packages. The NSA will mark-up the copy of the SDI to indicate the EOA configuration and deliver it to the PY by EOA. The updated SDI will be returned to the ship within 60 days of receipt.

- c. **Arrangement and Status of SDI Data.** (Not applicable to Part II of nuclear powered surface ship, SSN 637/Maintenance Trainer System (MTS) and AS Tenders with nuclear support facility SDI see C.3.2.3.8.f.). The SDI shall have a TM number assigned in accordance with Section 086 of NAVSEA S9AA0-AB-GOS-010 General Specifications for Overhaul of Surface Ships. Revision control shall be in accordance with NAVSEA S0000-00-IDX-000/TMINS. The title page shall indicate the name of the ship and the hull number. Each page of the SDI shall contain the hull number to which it applies, in accordance with MIL-M-38761/2. Pages of the SDI shall be numbered consecutively. All drawings having the same "S" group or 3-digit Consolidated Index Group (NAVSEA 0902-LP-002-2000) Number of NAVSHIPS 0900-LP-002-2000, as applicable, shall be listed on one or more sheets as necessary, grouped by subject matter and listed consecutively. Where more than one page is required in order to add new drawings under a particular group, the supplemental pages shall be numbered the same as the original page, followed by an alphabetical suffix (e.g., 42a, 42b, 42c, etc.). A notation shall be made at the bottom of each page which has been revised, indicating the revision number and date of revision. Each page of the original SDI shall be stamped "ORIGINAL" in green ink. The SDI shall be marked-up to clearly indicate which drawings are SRDs. SDIs that have not been marked-up in the above manner are to be appropriately annotated by PY prior to the providing to the NSA for the next scheduled availability.
- d. **Superseding or Modifying Existing Drawings in the SDI.** When existing drawings applicable to a ship are superseded by new drawings; or are no longer applicable to the ship, the listing of the cancelled or superseded drawing should be lined out, but not obliterated or rendered illegible. The number of the superseding drawings should be entered in the last column of the SDI, in line with the lined out or superseded drawing. When existing drawings applicable to a ship are modified by new drawings, the new drawings shall be listed in the last column in the SDI in line with the modified existing drawings. For ADP prepared SDIs superseded or cancelled drawings are to be listed in an addendum at the end of SDI.
- e. **Conversion and Update of SDIs to ADP Format.** For those ships having SDI in ADP

format, the PY will provide a copy of the SDI in ADP format (access database on CD) to the NSA for correction to reflect changes required to the SDI resulting from work accomplished during the availability, and changes previously accomplished and identified by Ship's Force. After EOA, the corrected SDI will be returned to the PY. Between availabilities, the PY will correct the SDI to reflect changes reported by the ship or other activities when changes are accomplished between availabilities. For those ships not having SDI in ADP format, the NSA will, as directed by the SPM, prepare the SDI in ADP format. Upon completion of the availability, the NSA will transfer the SDI in the new ADP format to the PY. The NSA will also provide a copy of the SDI in ADP format (usually magnetic tape) to the NAVSEA Microfilm Repository, Portsmouth Naval Shipyard.

- f. **Special SDI Requirements for Nuclear-Powered Ships.** Requirements relative to Nuclear-Powered Ships SDI are contained in Section 4 of this manual. For Nuclear Powered Surface Ships, SSN 637 Class submarines, and tenders with nuclear support facilities, the SDI is two parts:
1. Part I - Non-Reactor Plant SDI: Lists all drawings except Reactor Plant systems drawings which are in Part II. In particular, Part I of the SDI does include Reactor Plant Equipment vendor drawings. Part I of the SDI is maintained by the Hull PY.
 2. Part II - Reactor Plant Supplement to the SDI (Cumulative Booklet): Lists all Reactor Plant systems drawings. Part II of the SDI is maintained by the Reactor Plant PY in accordance with Section 4 of this manual.

C.3.2.3.9 **Submarine Safety Certification Boundary (SSCB) Book.** The SSCB identifies, in diagrammatic form, the boundaries of material certification as delineated in NAVSEA 0924-LP-062-0010. The SSCB shall be the single source document which identifies all the material certification boundaries for a submarine.

C.3.2.3.10 **Ship Service Motors and Controllers Manual (SSMC).** SSMC manuals provide descriptions, troubleshooting procedures, technical data, and scheduled and corrective maintenance procedures for all ship service motors and controllers.

C.3.2.3.11 **Ship Valves Technical Manual (SVTM).** The SVTM provides descriptive and maintenance-related information on all labeled non-Reactor Plant valves and selected small piping system components installed in the ship. The associated User Information Manual provides consolidated index cross-reference data to allow the user to locate valves in the SVTM.

C.3.2.3.12 **Combat System Technical Operations Manual (CSTOM).** CSTOM TMs will be updated by NSWC, Code 4B00 (non-AEGIS), or Code 4C00 (AEGIS), in response to direct funding by the cognizant SPM. NSAs do not have responsibility for CSTOM maintenance.

C.3.2.3.13 **Propulsion Plant Manuals (for 1200 PSI ships).** The NSA is responsible for updating and forwarding preliminary change data to Naval Surface Warfare Center, Carderock Division-Ship Systems Engineering Station (NSWCCD-SSSES), who will issue the final change to the Propulsion Plant Manual.

C.3.2.3.14 **Engineering Operational Sequencing System (EOSS).** NSWCCD-SSES is responsible for maintaining EOSS documentation under the direction of NAVSEA 04M. EOSS is the single authoritative source of operational and casualty control information relative to surface ship engineering plant operation. EOSS is updated to reflect SHIPALT configuration changes to propulsion and support equipments and systems. EOSS includes Engineering Operational Procedures (EOPs), Engineering Operational Casualty Control (EOCC), and operational procedures for selected support systems.

C.3.2.3.15 **Combat System Alignment Manual (CSAM).** CSAM TMs will be updated by NSWCC, Code 4B00, in response to direct funding by the cognizant SPM. NSAs do not have responsibility for CSAM maintenance.

C.3.2.3.16 **Combat System Operational Sequencing System (CSOSS).** NSWCC Dahlgren is responsible for maintaining CSOSS documentation under the direction of NAVSEA 05 for non-AEGIS ships and NAVSEA PMS400 for AEGIS ships. NSAs do not have responsibility for CSOSS maintenance.

C.3.2.3.17 **Aviation Fuel Operational Sequencing System (AFOSS).** The AFOSS documentation will be updated by NSWCCD-SSES in response to tasking by the SPM. PYs and NSAs do not have responsibility for AFOSS development or maintenance.

C.3.2.3.18 **Cargo Fuel Operational Sequencing System (CFOSS).** The CFOSS documentation will be updated by NSWCCD-SSES in response to tasking by the SPM. PYs and NSAs do not have responsibility for CFOSS development or maintenance.

C.3.2.3.19 **Fuel Operational Sequencing System (FOSS).** The FOSS documentation will be updated by NSWCCD-SSES in response to tasking by the SPM. PYs and NSAs do not have responsibility for FOSS development or maintenance.

C.3.2.3.20 **Sewage Disposal Operational Sequencing System (SDOSS).** The SDOSS documentation will be updated by NSWCCD-SSES in response to tasking by the SPM. PYs and NSAs do not have responsibility for SDOSS development or maintenance.

C.3.2.3.21 **Ballasting Operational Sequencing Systems (BOSS).** The BOSS documentation will be updated by NAVSSES in response to tasking by the NAVSEA SPM. PYs and NSAs/IAs do not have responsibility for BOSS development or maintenance.

C.3.2.3.22 **Catapult Operational Sequencing System (CATOSS).** The CATOSS documentation will be updated by NAVSSES 9431 in response to tasking by the NAVSEA SPM. PYs and NSAs/IAs do not have responsibility for CATOSS development or maintenance.

C.3.2.3.23 **Weapons Elevator Operational Procedures System (WEOPS).** The WEOPS documentation will be updated by NAVSEA 05L4 in response to tasking by the NAVSEA SPM. PYs and NSAs/IAs do not have responsibility for WEOPS development or maintenance.

C.3.2.3.24 **Auxiliary Operational Sequencing System (AUXOSS).** The AUXOSS

documentation will be updated by NSWCCD-SSES in response to tasking by the NAVSEA SPM. PYs and NSAs/IAs do not have responsibility for AUXOSS development or maintenance

C.3.2.4 Inactive Ship Selected Record Data Preparation. When inactive ships are being reactivated for assignment to the active fleet, the SSRs listed in Table C-I are to be corrected by the activity performing the activation. Such corrections will be a proper charge against Activation Funds.

C.3.2.5 Funding and Expenditures. Corrections to Planned Maintenance System (PMS) documentation required in accordance with OPNAVINST 4790.4 are not chargeable to DSA. When inactive ships are being reactivated for assignment to the active fleet, the Selected Record Data listed in Table C-I are to be corrected or prepared as appropriate by the activity performing the activation. Such corrections will be a proper charge against Activation Funds.

C.3.3 ALLOWANCE LISTS

C.3.3.1 General. The Shipboard Non-Tactical ADP Program (SNAP) contains the ship's configuration, allowance and onboard inventories in computerized form. The Coordinated Shipboard Allowance List (COSAL) is based upon information contained in the Weapon Systems File (WSF) and maintained and published by Naval Inventory Control Point-Mechanicsburg (NAVICP-M). Within the COSAL, all repair parts and equipment for individual components are listed in Allowance Parts Lists (APLs) or Allowance Equipment Lists (AELs). The quantity of each repair part and/or equipment item authorized to be carried onboard is determined by a computation for each item listed in the Stock Number Sequence List (SNSL). The computed quantities meet the operational endurance requirements specified by OPNAVINST 4441.12 for the type of ship involved.

The publication of an updated COSAL for ships undergoing availabilities is authorized by the TYCOM. Since automated ships maintain all Maintenance and Material Management (3-M) requirements, ships inventory and requisitioning functions in the SNAP database, the COSAL is considered a backup document required in case of catastrophic computer failure.

Ship's configuration records are maintained ashore by the Ship Configuration and Logistics Support Information System (SCLISIS) in accordance with Technical Specification 9090-700. Because configuration determines logistics and allowance support, there is a direct correlation between the data in the configuration database and the data in the WSF and the COSAL. A more detailed description of SCLISIS and the relationship of SCLISIS with the Fleet Modernization Program (FMP) are found in Technical Specification 9090-700, and Section 8 of this manual. During a ship's availability, the SPM may authorize the performance a logistics review to ensure that only the appropriate logistics support is onboard by EOA. These reviews are known as Integrated Logistics Overhauls (ILOs) or Integrated Logistics Reviews (ILRs). The procedures for conducting an ILO/ILR are addressed in NAVSEA SL105-AA-PRO-010 through 070 series. One of the products of an ILO/ILR review is an updated SNAP database. An availability that involves a full ILO produces an updated SNAP database and an updated COSAL.

During the operating cycle, the SNAP database is updated once a month by way of an electronic transmission from NAVICP-M to the ship. However, a new COSAL is published only during

selected availabilities and only at the direction of the TYCOM.

The SPM is responsible for tasking and funding the PY to perform Configuration Overhaul Planning (COP). COP represents the genesis of configuration record changes that are planned to be made during a ship's availability. COP is submitted to the ship's Configuration Data Manager (CDM). The CDM uses the planning data as a tool for the quality review of its database, as a data feed to the NSA and ILO site and as a baseline from which the ILO site begins their reviews. COP must not be viewed as a primarily logistics support effort. Proper preparation of COP allows timely Configuration Management. Proper logistics support is directly dependent upon that management. Responsibilities and timeframes for generating COP are addressed in Section 8 of this manual.

The NSA has the responsibility for updating the COSAL. However, this effort is accomplished by the direct interface with the CDM and the ILO site doing the logistics review (refer to OPNAVINST 4441.12, NAVSEA SL105-AA-PRO-010 through 070 series, and Section 8 of this manual).

C.3.3.2 COSAL/Configuration Efforts Not Covered Under DSA. The following COSAL maintenance efforts are not authorized under DSA funding.

- a. Support of the supply availability material processing points (Shipyard Supply Department, Fleet and Industrial Supply Center (FISC), etc.), which include material handling, necessary supervision, technical assistance, packaging and re-preservation, transportation/per diem, and other necessary material costs (normally Naval Supply Systems Command ((NAVSUP) funded).
- b. Shipboard configuration validation assistance services, for installations other than those planned for or installed as part of the overhaul or availability (incident to Title "K", "K-P", "D", or "F" SHIPALT installation). However, a sample of 10 percent of the Configuration Change Forms (CCFs) submitted by the ILO Teams will be validated by the NSA. If the results of the validation of the CCFs do not comply with MIL-STD-105, then follow-on validation of samples, in accordance with MIL-STD-105 will be chargeable to the appropriate TYCOM.