



DEPARTMENT OF THE NAVY
COMMANDER, MILITARY SEALIFT COMMAND
914 CHARLES MORRIS CT SE
WASHINGTON NAVY YARD DC 20398-5540

IN REPLY REFER TO:

COMSCINST 4790.3C
N4

23 MAY 2011

COMSC INSTRUCTION 4790.3C

Subj: EQUIPMENT CONFIGURATION DATA MANAGEMENT, LIFE CYCLE AND LOGISTICS SUPPORT FOR THE MILITARY SEALIFT COMMAND (MSC)

Ref: (a) COMSCINST 4700.2H
(b) COMSCINST 4700.14B

Encl: (1) MSC Configuration Data Management Program Manual

1. Purpose. To provide the policies and procedures necessary to maintain an accurate equipment configuration and life cycle logistics support data baseline, define the mission and functions of the MSC Configuration Data Manager (CDM), and conduct MSC ships' industrial Availability Support (AS). This instruction is a major revision and should be read in its entirety.

2. Cancellation. COMSCINST 4790.3B.

3. Background.

a. Reference (a) defines the method for establishing, evaluating and approving Transportation Alteration (TRANSALT) requests for MSC Ships. Reference (b) provides general guidance for the Program Managers (PMs) and Area Commanders to plan MSC ship availabilities. MSC's ability to effectively plan for alterations, perform shipboard maintenance, and provide necessary logistics support is directly dependent upon efficient control of and ready access to the configuration and logistics data for its ships, systems, and equipment. To also achieve fleet readiness goals, accurate and complete configuration and logistics support data must be available to ship's managers, logisticians and, engineers at Commander, Military Sealift Command (COMSC) Headquarters, Military Sealift Fleet Support Command (MSFSC), and supporting activities.

b. MSC ships' operations typically entail frequent service orders, voyage repairs and industrial availabilities of relatively short duration (30 - 45 days). Furthermore, the predominantly commercial, contractor furnished and non Navy-standard nature of MSC shipboard equipments makes the task of maintaining accurate configuration information much more

23 MAY 2011

difficult. Accordingly, COMSC has established its configuration accounting procedures to respond to these needs without levying an unacceptable burden on shipboard recordkeeping by using an AS process that conforms closely to MSC fleet maintenance practices and operating schedules.

c. Guidelines that establish program objectives, roles, responsibilities, and clear lines of accountability must be established over the Configuration Status Accounting (CSA) process to ensure that only the most current and accurate information becomes resident in the fleet's database. A single activity must be designated as the sole data input authority for changing the configuration file. This activity is the CDM. To maintain CSA discipline, the COMSC Logistics Director (N4) has been designated as the CDM for MSC, charged with establishing and administering the MSC Configuration Data Management Program (CDMP).

4. Program Objectives. The CDMP has three principal objectives:

a. Develop and maintain an accurate fleet configuration baseline at a reasonable cost.

b. Support attainment of the required level of operational readiness.

c. Achieve steady improvements in fleet logistics support.

5. Scope. MSC policies and procedures contained in enclosure (1) apply to all MSC government owned and operated ships and equipment sets. This instruction does not change configuration management responsibilities for contract operated ships where procedures will continue to be governed by their existing contracts and Program Managers.

6. Discussion. The CDMP integrates ship CSA and logistics elements under the MSC CDM to support the MSC fleet's operational and business requirements. The CDM detailed responsibilities are more specifically defined in this manual, but it is useful to establish definitions here of frequently used terms.

a. Configuration. The description of a specific ship in terms of her systems, equipment, components, and their relative arrangements with each other as set forth in the technical documentation (i.e. drawings, technical manuals and ship's

23 MAY 2011

specifications) and the logistics support to maintain the systems/equipments/components.

b. Logistics Support. Logistics Support includes training, technical manuals, drawings, tools, test equipment, spare parts, and maintenance related consumables. If any hardware item on a ship requires one or more of these logistics support items, it is considered "configuration worthy" and must be included in the configuration record of the ship.

c. Configuration and Logistics Information Program (CLIP). CLIP is the data processing program used by COMSC N4 to integrate the CDM and logistics support functions. As the integrated source of MSC ship configuration data, it is the tool to eliminate database format and content inconsistencies. The shipboard version of CLIP, called ShipCLIP, replicates data to/from ashore to provide near real-time configuration and logistics data to the ship and MSC shore activities. ShipCLIP interfaces with Shipboard Automated Maintenance Management (SAMM) to identify and maintain the technical and logistic data required to operate, maintain, repair, and overhaul shipboard equipment.

d. Shipboard Automated Maintenance Management (SAMM). SAMM is the MSC Engineering Officer's primary shipboard maintenance management program. SAMM is designed to assist in both optimizing equipment performance and ensuring that the appropriate level of vessel readiness is maintained. SAMM does this by establishing a schedule of required preventive maintenance actions for each piece of maintainable shipboard equipment and by documenting and tracking equipment maintenance history. Through the implementation of SAMM, MSC provides realistic and consistent fleet-wide standards for shipboard maintenance of machinery. SAMM was developed to provide the MSC ship's Chief Engineer with an automated method of tracking ship maintenance and repair requirements. Additionally, it can be used to assist the Chief Engineer in maintaining the appropriate engineering repair forms (e.g., Voyage Repair Request (VRR)) for MSC vessels.

e. Port Engineer (PENG) System. The PENG System is designed to provide a comprehensive overview and management of a ship's availability. It tracks estimated and actual cost information for each work item. In addition to the basic work items, all Requests for Proposal (RFP) and condition reports are managed and monitored within the system. Deficiency Reports and Production Schedule Delinquent Progress Notifications (PSDPNs)

23 MAY 2011

are maintained along with their respective responses. At any point during the availability, the system generates Situation Reports (SITREP) that summarize the contract's status and progress.

f. Corrective Maintenance and Logistics System (CMLS).

Corrective Maintenance and Logistics System (CMLS) is a set of automated, logistics-related modules within the MSC IS Portal. CMLS supports work item and work package development and tracking of material requirements for work items and all other requirements. It also allows MSC to evaluate parts consumption related to maintenance and repair. It includes modules for Requisition Processing and Tracking, Feedback Processing and Tracking, MSC Inventory, and Commodities. These applications streamline processes for logisticians, improving the effectiveness of planned maintenance and corrective maintenance activities.

g. Configuration Data Managers Database - Open Architecture (CDMD-OA).

As the Navy's central configuration database repository, CDMD-OA contains the technical characteristics and logistics data on all equipments in the Navy's inventory as well as the maintenance worthy repair parts and equipage associated with that equipment. CDMD-OA also contains MSC ship equipment configuration data for all Navy and MSC Allowance Parts List (M-APL) equipment. Many MSC temporary Allowance Parts Lists (X-Repairable Identification Code (RIC)) are not included in CDMD-OA because of Navy policy and software/programming prohibitions.

h. Lead Allowance Parts List (LAPL). The MSC maintenance philosophy is reflected in the LAPL, which lists the types of items determined to be maintenance significant. The LAPL provides a generic list of these parts, as well as the item's maintenance level, repair ability, and recoverability. The LAPLs are the source document for developing new M-APLs or X-RICs.

7. Action. COMSC has the primary responsibility to implement a configuration data management program for the MSC fleet. To carry out this responsibility and provide day-to-day oversight and administration, the following specific responsibilities are assigned:

a. Logistics Director (N4). The Logistics Director is designated the CDM for MSC. The CDM will:

23 MAY 2011

(1) Promulgate the Military Sealift Command CDMP Manual, which establishes the detailed policies and procedures for MSC's CSA and AS Programs.

(2) Provide additional policy and procedural guidance to the MSC fleet, as required, to implement a sound CDMP.

(3) Provide procedures, system, and direction to the MSC AS and Logistics Support teams who collectively implement the CDMP.

(4) Establish and administer the Worldwide Logistics Support Services contract. Perform quality assurance for contract support services.

(5) Coordinate with the MSC Ship Program Managers to ensure proper logistics support is in place for equipment installed on MSC ships.

(6) Maintain the MSC life cycle logistics support data, including Hierarchical Structure Codes (HSCs), equipment, equipage, parts, assets, and MSC Lead Allowance Parts Lists (MLAPLs).

(7) Execute the specific tasks contained in the CDMP Manual.

b. MSC Ship Program Managers (PM). The PMs are responsible for Configuration Management (CM) throughout the life cycle for their assigned ships and must coordinate with the CDM on all actions that will impact the configuration baseline of MSC ships. Accordingly, the PMs will:

(1) Provide logistics support data on equipment alterations/modifications, including proposed and approved TRANSALT data and provisioning technical data for newly installed equipment as specified in reference (a).

(2) Coordinate logistics support requirements for equipment/alterations with the CDM.

(3) Document equipment configuration changes completed during all industrial availabilities using forms provided in reference (a).

(4) Coordinate the establishment of policies to assure adequate and timely logistics support with the CDM.

23 MAY 2011

c. Contracting Directors. The MSC Headquarters, MSFSC Contracting Directors, and Ship Contract Operators support the MSC ship maintenance effort by executing commercial yard availability contracts. Contracting representatives assist the Port Engineer in completing repair requirements to meet each ship's operational commitments. Contracting Directors will provide contract data for all commercial shipyard repair contracts and their respective amendments, including RFPs, to CDMP representatives.

d. MSFSC/Program Logistics Representatives. Under the direction of COMSC, MSFSC provides support and oversight of shipboard configuration management and readiness support programs for government owned, government operated (GOGO) ships assigned. MSFSC will:

(1) Promote support for and implement the CDMP in the MSC fleet.

(2) Coordinate shipboard AS Team and visit schedules with the PM/CDM for GOGO ships.

(3) Monitor the quality of configuration status accounting data in the Fleet.

(4) Execute the specific tasks assigned in the CDMP Manual.

e. MSC GOGO Ships. Every MSC GOGO ship will have a shipboard Configuration Manager who is designated by and reports to the Chief Engineer. MSFSC, through the Principal Port Engineer (PPE), will provide assistance to the Configuration Manager as necessary. Chief Engineers will:

(1) Report all configuration changes as they occur.

(2) Promptly review feedback from CDM and correct errors on Configuration Change Reports.

(3) Provide assistance and support to the AS Teams during the performance of their tasks on the ship.

(4) Execute the specific tasks assigned in the CDMP Manual.

23 MAY 2011

f. MSC Contract Operated Ships. Every contract operated MSC ship will have a shipboard Configuration Manager who is designated by and reports to the Chief Engineer. Contract Operators will provide assistance to the Configuration Manager as necessary. Chief Engineers will:

(1) Report all configuration changes as they occur.

(2) Use the CDMP feedback process to identify recommended allowance changes or any other errors and omissions in equipment, parts, or technical data in the ship's configuration.

(3) Perform Industrial Availabilities in accordance with the contract.

g. Addressees will familiarize themselves with the CDMP Manual and comply with its processes and procedures.


M. H. BUZBY

Distribution:

Electronic only, via MSC Intranet Publications

<http://intranet.msc.navy.mil>

23 MAY 2011

(THIS PAGE IS INTENTIONALLY BLANK)

23 MAY 2011

MILITARY SEALIFT COMMAND

CONFIGURATION DATA MANAGEMENT PROGRAM MANUAL

FOREWORD

1. This manual will provide a basic familiarity with the MSC Configuration Data Management and Industrial Availability Support (AS) Programs. This guidance is applicable only to ships and units of the Military Sealift Command. The manual provides MSC policy on maintaining accurate and timely configuration accounting and conducting effective AS. It leads the reader logically through the applicable procedures, outlining the background, objectives, and organizational responsibilities of these programs.
2. On subjects or areas of interest that may require additional procedural detail, appropriate appendices are provided. More specific direction is available in NAVSUP P-485, NAVSEA TECH SPEC 9090-700 (Series), and the current editions of the seven volumes of the standard Navy Integrated Logistics Overhaul (ILO) Policy and Procedures Manual, NAVSEA SL105-AA-PRO-(#010 to #070). While these documents go into much greater detail than most users will require, they are the source of the basic approach and procedures contained herein.
3. As major procedural changes occur, COMSC will issue changes or revisions to this manual. Feedback from users of this manual is encouraged; recommendations should be sent to Commander, Military Sealift Command, Code N4, Washington Navy Yard, DC 20398-5540.

23 MAY 2011

(THIS PAGE IS INTENTIONALLY BLANK)

23 MAY 2011

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
FOREWORD	i
RECORD OF CHANGES	iii
TABLE OF CONTENTS	iv
TABLE OF APPENDICES	vi
TABLE OF FIGURES	viii
 CHAPTER 1 - OVERVIEW OF THE CDMP	
1.1 Introduction	1-1
1.2 The Configuration Data Manager (CDM)	1-2
1.3 The MSC Availability Support (AS) Concept	1-2
1.4 Summary	1-2
 CHAPTER 2 - CONFIGURATION CHANGE REPORTING	
2.1 Introduction	2-1
2.2 Ship's Configuration Manager	2-1
2.3 Supply Department	2-1
2.4 Configuration Change	2-2
2.4.1 Configuration Change Reporting System	2-2
2.5 Impact of Configuration Change Reporting	2-2
 CHAPTER 3 - ALLOWANCE CHANGES AND FLEET COSAL FEEDBACK REPORTS	
3.1 Introduction	3-1
3.2 Shipboard Configuration and Logistics Information Program (ShipCLIP)	3-1
3.3 Allowance Change Requests (ACRs)	3-2
3.4 Fleet COSAL Feedback Reports (FCFBRs)	3-2
 CHAPTER 4 - CONFIGURATION DATA MANAGEMENT	
4.1 Configuration Data Manager's Role	4-1
4.2 Configuration Data Management	4-1
4.3 CDM and Logistics Support Requirements	4-3
4.4 CDM Focus	4-3
4.5 Summary	4-4
 CHAPTER 5 - CONTINUOUS MAINTENANCE SUPPORT	
5.1 Introduction	5-1
5.2 GOGO Ship Industrial Maintenance	5-1
5.3 MSC IS Portal Corrective Maintenance Module	5-2
5.4 GOCO Ship Industrial Maintenance	5-3

23 MAY 2011

	<u>PAGE</u>
CHAPTER 6 - AVAILABILITY SUPPORT	
6.1 Introduction	6-1
6.2 The AS Concept	6-1
6.3 Factors Affecting the MSC AS Process	6-2
6.4 Work Package Development Support	6-4
6.5 Pre-Availability Work Package Review	6-4
6.6 Preliminary Logistics Readiness Assessment	6-5
6.7 Configuration Verification, Configuration Analysis and ShipCLIP Update	6-5
6.7.1 Configuration Verification	6-6
6.7.2 Configuration Analysis	6-6
6.8 Repair Parts Analysis	6-6
6.9 Technical Manual Analysis	6-8
6.10 Logistics Systems Use and Maintenance Training	6-8
6.11 Repair Parts Storeroom Bin Sampling	6-8
6.12 Availability Support Assist	6-9
6.13 Integrated Logistics Overhaul (ILO)	6-10
6.14 Service Orders	6-12
6.15 Fleet Assists (FA)	6-13
6.16 Summary	6-13
CHAPTER 7 - DIMINISHING RESOURCES MANAGEMENT	
7.1 Introduction	7-1
7.1.1 DLA 339 Technical Referral Process	7-1
7.1.2 Diminishing Resources Process for Non-Standard Items	7-4
CHAPTER 8 - DEFECTIVE/DEFICIENT MATERIAL	
8.1 Defective Material	8-1
8.2 Defective Material Summaries	8-1
8.3 Defective Material Reporting	8-1
CHAPTER 9 - LIFE CYCLE SUPPORTABILITY REVIEW	
9.1 Introduction	9-1
9.2 Procedure	9-1
9.3 Results	9-2

23 MAY 2011

TABLE OF APPENDICES

APPENDICES	<u>PAGE</u>	
APPENDIX A - CONFIGURATION CHANGE REPORTING		
A.1	INTRODUCTION	A-1
A.2	RESPONSIBILITIES	A-1
A.2.1	Ship's Configuration Manager	A-1
A.2.2	Supply Department	A-2
A.3	CONFIGURATION CHANGE	A-2
A.3.1	Configuration Change Reporting System	A-3
A.3.2	Impact of Configuration Change Reporting	A-3
A.4	FORMS AND FORMAT FOR REQUESTING SHIP'S CONFIGURATION CHANGES	A-5
APPENDIX B - PROCEDURES FOR SUBMISSION AND CONTROL OF ACRs AND FCFBRs		
B.1	INTRODUCTION	B-1
B.2	ShipCLIP	B-1
B.2.1	Requests for Changes to Allowances	B-2
B.2.2	Changes in Portable Equipment or Equipage Allowances	B-3
B.2.3	Changes in Spares Allowances	B-3
B.3	RESPONSIBILITIES	B-3
B.3.1	Ship Configuration Manager	B-4
B.3.1.2	Supply Department	B-4
B.4	FORMAT FOR REQUESTING ShipCLIP CHANGES	B-4
B.4.1	Allowance Change Request (ACR)	B-4
B.4.2	Ship Allowance Change Procedures	B-4
B.4.3	Fleet COSAL Feedback Report (FCFBR)	B-9
B.5	CROSS CLASS FEEDBACK	B-11
B.6	SUMMARY	B-13
APPENDIX C - CONFIGURATION DATA MANAGEMENT IMPLEMENTATION		
C.1	INTRODUCTION	C-1
C.1.1	Definitions	C-1
C.1.1.1	Functional Group Code (FGC)	C-1
C.1.1.2	Functionally Significant Item (FSI) Functional Nomenclature/Equipment Functional	C-1
C.1.1.3	Description (EFD)	
C.1.1.4	Hierarchical Structure Code (HSC)	C-1
C.1.1.5	Functional Configuration Baseline (FCB)	C-2
C.2	CONFIGURATION DATA MANAGEMENT CONCEPT	C-2

23 MAY 2011

C.3	INITIALIZATION	C-2
C.4	CDM ACTIONS UNDER THE INITIALIZATION PHASE	C-3
C.5	BASELINE VALIDATION	C-4
C.5.1	Baseline Validation Procedures	C-4
C.5.2	Priorities	C-4
C.5.3	Configuration Worthy Items	C-5
C.5.4	Critical Systems and Equipment	C-5
C.5.4.1	Critical System Criteria	C-5
C.5.4.2	Critical Equipment and Component Criteria	C-6
C.5.5	Critical System/Component List	C-6
C.5.6	Review/Correction of Configuration Data Base	C-6
C.5.7	Preparation for Shipboard Validation	C-7
C.5.8	Accomplishing the Baseline Validation	C-7
C.6	CDM/PM COORDINATED ACTIONS DURING INDUSTRIAL AVAILABILITIES	C-7
C.6.1	Policies	C-7
C.6.2	Responsibilities	C-8
C.7	CSA ACTIONS DURING SHIPS OPERATING PHASE	C-12
C.7.1	Configuration Change Request Forms (CCFs)	C-13
C.7.1.1	Responsibilities	C-13
C.7.2	Allowance Change Requests	C-16
C.7.2.1	Operating Phase Change Reporting Process	C-16
C.7.2.2	Responsibilities	C-17
C.8	LOGISTICS SUPPORT FOR CONFIGURATION CHANGES IDENTIFIED DURING THE OPERATING PHASE	C-19
C.9	DATA QUALITY REQUIREMENTS	C-19
C.10	SUMMARY	C-20

APPENDIX D - MSC INDUSTRIAL AVAILABILITY SUPPORT

D.1	EXECUTION OF INDUSTRIAL AVAILABILITY SUPPORT	D-1
-----	--	-----

APPENDIX E - ACRONYMS & ABBREVIATIONS

E.1	ACRONYMS & ABBREVIATIONS	E-1
-----	--------------------------	-----

23 MAY 2011

TABLE OF FIGURES

FIGURES		PAGE
1-1	Ship Configuration Data Flow	1-4
4-1	MSC Configuration Status Accounting Data Flow	4-2
4-2	Basic Configuration Data Management Functions	4-5
6-1	CLIP/CMLS - AS Relationship	6-3
6-2	Supply Chain Management Data Flow	6-14
7-1	DLA 339 Technical Referral Process	7-3
7-2	Diminishing Resources Process for Non-Standard Items	7-6
A-1	Configuration Change Form Processing Flow	A-4
B-1	Allowance Change Request (ACR) Process	B-8
B-2	Fleet COSAL Feedback Report (FCBFR) Process	B-10
B-3	CLIP/SHIPCLIP Update Process	B-12

23 MAY 2011

(THIS PAGE IS INTENTIONALLY BLANK)

23 MAY 2011

CHAPTER 1

OVERVIEW OF THE CDMP

1.1 INTRODUCTION

a. Commander, Military Sealift Command (COMSC) is responsible for ensuring the material readiness of its ships throughout their life cycle. To a great degree, COMSC's ability to successfully execute this responsibility is dependent on sound Configuration Management (CM). CM is composed of the following interrelated elements:

(1) Configuration Identification. Identifying a Configuration Item (CI) (e.g., a motor or a pump) and selecting the documents and processes that define, test, establish, and maintain its functional and physical characteristics.

(2) Configuration Control. Controlling changes to a baseline of a CI and its associated configuration identification documents.

(3) Configuration Status Accounting (CSA). Recording and reporting of proposed and implemented changes to a CI and its associated configuration identification documents.

(4) Configuration Audits. Checking of a CI for compliance with its configuration identification.

(5) Technical Reviews. Evaluating and monitoring the configuration during design, development, construction or production, and modernization.

b. Configuration Management is an important tool to ensure that changes to the ship's equipment arrangements, replacements, or additions are justifiable and supportable. Controlling the configuration of machinery, systems, and equipments improves their supportability by providing commonality of support requirements, repair parts, and other logistic elements. CM processes also ensure adequate technical documentation exists to support future operations and engineering requirements. In the MSC organization, the Program Manager (PM) is the Configuration Manager charged with executing the Configuration Control Function.

c. This responsibility includes both Configuration Identification and the performance of Configuration Technical

23 MAY 2011

Reviews. The Configuration Auditing and CSA processes are assigned to the Logistics Director (N4), and are accomplished through the MSC Configuration Data Management Program (CDMP). The CDMP additionally incorporates all action required to ensure that ship logistics support elements are accurate and match the configuration of equipment installed.

d. Since the logistics support for equipment alterations is an integral part of Configuration Control, the Functional Directorates, and MSFSC Logistics Type Desk (LTD) must coordinate closely with the GOGO ship Program Logistics Managers (PMLs). In this regard, they have been assigned the responsibility to conduct CSA during industrial assistance.

e. On MSC ships, the Chief Engineer, assisted by a designated ship's Configuration Manager, has the accountability for the ship's configuration. Ship personnel must report configuration changes discovered or completed during the operating phase.

1.2 THE CONFIGURATION DATA MANAGER (CDM)

To ensure that only accurate information is resident in the ships' configuration database, a single activity must be designated as the authority for configuration data input and effecting changes to the file. This activity is the CDM. COMSC Logistics Director (N4) is the designated CDM for the MSC fleet, charged with establishing the MSC CSA program.

1.3 THE MSC AVAILABILITY SUPPORT (AS) CONCEPT

MSC has adopted a unique Availability Support (AS) process tailored to the MSC operating environment. It effectively utilizes the data from the CSA database to align support elements and continuously review each ship's logistics support posture throughout the ship's life cycle.

1.4 SUMMARY

a. In short, the CDMP addresses the needs of MSC's unique operating schedules, maintenance philosophy, shipboard technician skill sets, and ship manning levels.

b. It complies with all directives from higher authority on CSA and logistics management and remains compatible with (and complements) existing Navy systems and procedures.

23 MAY 2011

c. The CDMP pulls all logistic elements into a single program for MSC fleet ships to follow while allowing for individual Program Manger (PM) unique requirements. Figure 1-1 provides a simplified block diagram of the closed loop configuration data flow, from the ship to the database and back under this concept of Configuration Data Management.

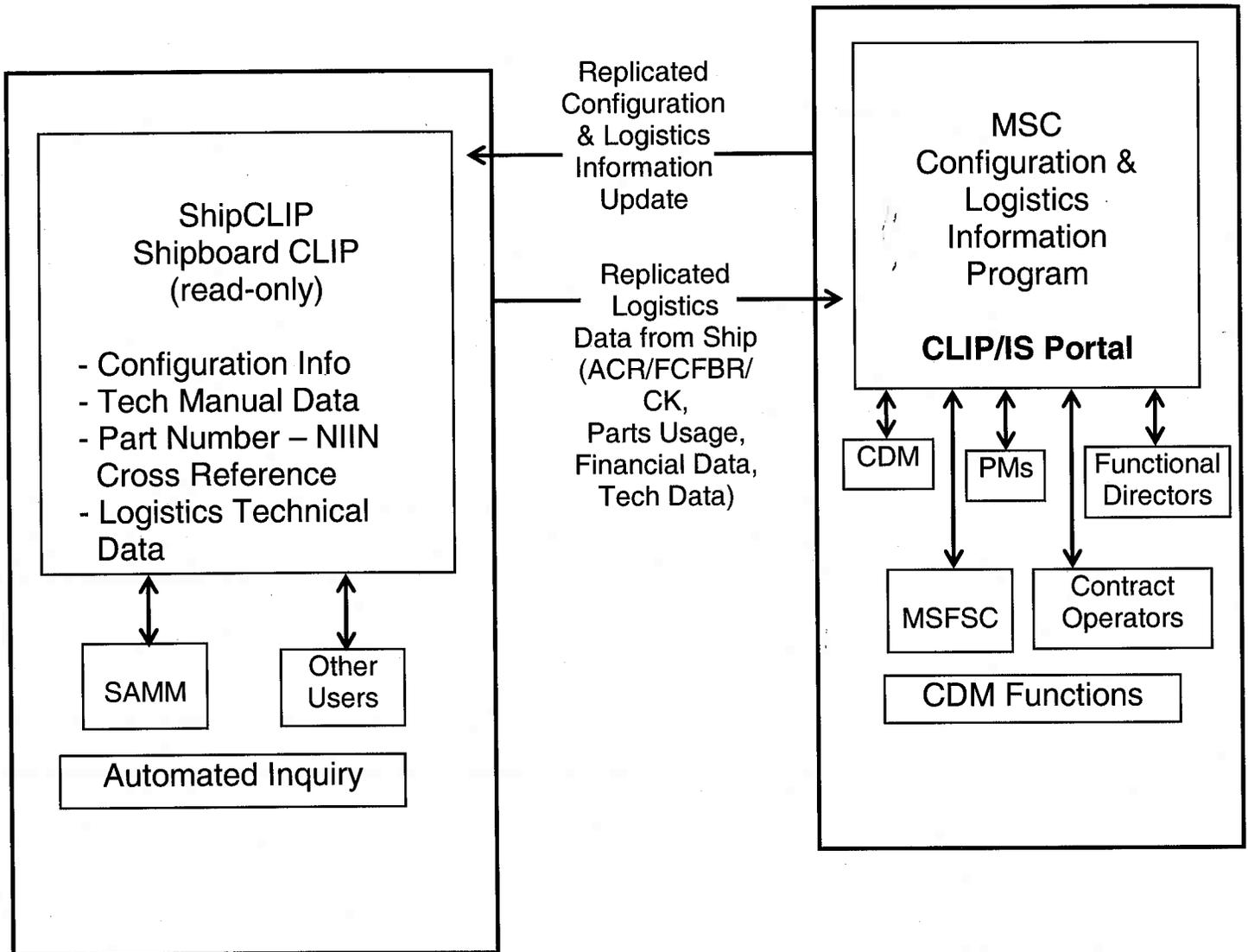


FIGURE 1-1, SHIP CONFIGURATION DATA FLOW

23 MAY 2011

CHAPTER 2

CONFIGURATION CHANGE REPORTING

2.1 INTRODUCTION

Timely reporting of configuration changes is the key to maintaining an accurate, up-to-date configuration data file. Ship's force personnel can contribute significantly to these efforts through dedicated configuration change reporting.

2.2 SHIP'S CONFIGURATION MANAGER

a. The ship's Chief Engineer establishes the necessary shipboard policy and assumes overall responsibility for the accomplishment of shipboard CM.

b. To ensure accomplishment of these requirements, the Chief Engineer will designate, in writing, a licensed engineer as the ship's Configuration Manager. The Configuration Manager is specifically responsible for reporting all configuration changes, including those accomplished by other than ship's force personnel. It is imperative that the Configuration Manager obtains all data necessary to accomplish configuration change reporting from any maintenance activity. The Configuration Manager is also responsible for coordinating shipboard efforts to correct discrepancies that may later be identified by the MSC CDM.

2.3 SUPPLY DEPARTMENT

On GOGO ships the Supply Officer is the ship's Configuration Data Manager and will ensure all configuration data is accurately reflected and updated in ShipCLIP system to ensure proper repair parts support for all installed equipment. Supply Department personnel will work with the Configuration Manager in filling out and submitting configuration changes. They must complete the required logistics data and validate existing entries applicable to the change and submit and monitor the change report. Additionally, supply personnel must take the appropriate action to ensure that repair parts, technical manuals, tools and/or test equipment changes are obtained expeditiously for PM approved configuration changes.

23 MAY 2011

2.4 CONFIGURATION CHANGE

A configuration change occurs whenever any system, equipment, component or unit is installed, removed, modified or relocated by any agent.

2.4.1 Configuration Change Reporting System

a. The Configuration Change Reporting System will accomplish this updating requirement. Basic features of this system are:

(1) A capability to rapidly process the configuration change data and generate appropriate logistics support changes for the ship.

(2) A single point to which change data can be reported and by which the data can be verified, made available to the appropriate logistics managers, and processed for entry into CLIP.

(3) An automated single reporting format that provides all required configuration change data.

b. Appendix A contains detailed instructions and responsibilities for reporting configuration changes using the MSC Configuration Change Reporting System. MSC's automated configuration data management and status accounting systems integrate configuration change reporting capability. ShipCLIP, CMLS, and CLIP users must comply with the responsibilities and change reporting requirements identified in Appendix A.

2.5 IMPACT OF CONFIGURATION CHANGE REPORTING

The importance of reporting configuration changes cannot be over-emphasized. The accurate and timely submission of information recorded in the ship equipment configuration database (CMLS, CLIP, and CDMD-OA) directly determines the quality of support provided to the Fleet. If configuration changes are not reported, vital support elements will not be on hand when needed. Although MSC provides off ship assistance, the ultimate responsibility for identifying and documenting configuration changes rests with the ship.

23 MAY 2011

CHAPTER 3**ALLOWANCE CHANGES AND FLEET COSAL FEEDBACK REPORTS****3.1 INTRODUCTION**

One of the primary objectives of the CDMP is continuous improvement in fleet logistics support, material support readiness and accuracy of recorded logistics support information for the MSC fleet. Attainment of these CDMP objectives is dependent upon accurate and timely feedback from fleet units to the CDM on ships' repair part allowances and technical information about installed equipment.

3.2 SHIPBOARD CONFIGURATION AND LOGISTICS INFORMATION PROGRAM (SHIPCLIP)

a. Logistics support for MSC ships is enhanced through the development and use of ShipCLIP. This program provides technical and supply information. Technical information in the form of equipment/component/part nomenclatures, operating characteristics, technical manuals, etc., as described in Allowance Parts Lists (APLs) or Allowance Equipage Lists (AELs). Supply information includes the items required to achieve maximum, self-supporting capability for an extended period of time. Authorized ship allowances for repair parts, tools, test equipment, and maintenance related materials are included in ShipCLIP, reflecting the Office of the Chief of Naval Operations (OPNAV) and MSC ship's allowance policy. They include allowance lists of repair parts, tools, and other support items required for the operation, overhaul, maintenance, or repair of installed equipments and components. These lists are computed, modified, or adjusted at varying intervals based upon changes of installed equipment or components, maintenance policies, failure rates, or operating conditions.

b. It is the shipboard technician's responsibility to ensure that ShipCLIP supports all equipments for which he/she has maintenance responsibility. The term technician here refers to anyone performing hands-on maintenance, repair, installation, or removal to equipment aboard the ship such as engineering staff, technical representatives or alteration installation teams. It is the Supply Department's responsibility to ensure errors detected by the technician are corrected, that necessary repair parts are documented in ShipCLIP, and that they are procured for shipboard or shore-based stock.

23 MAY 2011

Documentation of errors or deficiencies is extremely important. ShipCLIP is the bridge by which the part number identified in the ship's drawing or technical manual is linked to a part carried by the Supply Department. Procuring parts without concurrently updating references to the item in ShipCLIP shatters the bridge and results in a situation in which parts are available but cannot be identified by the technician.

c. ShipCLIP is an automated system that includes all of the logistics and technical information in CLIP. ShipCLIP replaces the paper Coordinated Shipboard Allowance List (COSAL).

3.3 ALLOWANCE CHANGE REQUESTS (ACRs)

a. Revisions to repair part and equipage allowances are sometimes required in order for shipboard systems to be properly supported. Because of MSC operating environments, allowances for both repair parts and equipments frequently require additional review and revision.

b. Actual repair part failure or replacement rates may be different than those initially estimated. Varying operating conditions may require different levels of support. Mission assignments may require the approval of additional equipment or support systems and improved technology may offer additional capabilities. These and other circumstances dictate that requests for changes to allowances must be submitted when recognized and must be promptly reviewed by an appropriate authority.

c. Specific procedures are to be used for requesting allowance changes. Instructions and responsibilities for completion of ACRs are provided in Appendix B. MSC's automated configuration data management and status accounting systems integrate capabilities to request allowance changes. CMLS, CLIP, and ShipCLIP users must still comply with the policies, procedures, and responsibilities in Appendix B.

3.4 FLEET COSAL FEEDBACK REPORTS (FCFBRs)

a. The APL is a vital link in the chain that leads from part number, to equipment, to technical manual, and finally to the repair part support allowed in ShipCLIP. The technicians' ability to identify, interpret, and apply the APL cannot be overemphasized.

23 MAY 2011

The technician must be able to tie the technical manual and APL or the equipment and APL together, and these documents must give technicians the same parts information. These documents are different in format and data content, but they are similar in that both should contain all the parts to the applicable equipment. However, there are numerous reasons for APL deficiencies that cause the technical and supply personnel problems. Some of the most common are:

(1) The part or item is not listed on the APL or AEL but is required for planned or corrective maintenance or considered to be a "maintenance significant" item.

(2) Suspected error in code assignments (Source, Maintenance and Recoverability Code, Allowance Note Code, etc.).

(3) Non-allowed part required for planned maintenance.

(4) Part number in technical manual does not agree with APL/AEL/X-RIC.

(5) APL/AEL/X-RIC incomplete; (missing characteristics data, technical manual, etc.).

(6) APL/AEL/X-RIC technical problem, such as incorrect Minimum Replacement Unit (MRU) assignment.

(7) Incorrect part or item listed in APL/AEL/X-RIC.

(8) Missing or incorrect component characteristics data.

b. Many of the technical codes are assigned by the ship construction logistics agent, by another activity, or on the basis of one-time technical decisions. These codes should be correct in most situations. If the technician believes the technical code for an individual item or the overall maintenance policy reflected by all of the codes on an APL/AEL/X-RIC are wrong, submit an FCFBR to initiate a correction to the problem. Detailed instructions and responsibilities for completion of the FCFBR are provided in Appendix B. MSC's automated configuration data management systems and status accounting integrate FCFBR submission capabilities. CMLS, CLIP, and ShipCLIP users must still comply with the policies, procedures, and responsibilities in Appendix B.

23 MAY 2011

c. A FCFBR may be used for all feedback requirements including configuration and allowance change requests. It should be considered the default form for all feedback reporting.

23 MAY 2011**CHAPTER 4****CONFIGURATION DATA MANAGEMENT****4.1 CONFIGURATION DATA MANAGER'S ROLE**

a. As the Military Sealift Command's CDM, the Logistics Director maintains the accuracy and completeness of all configuration and logistics support information in the CSA database. Even though many other activities, such as the ship PMs, Functional Directors, MSFSC, Port Engineers, commercial shipyards, AS Teams, or ships may originate configuration change inputs, the CDM retains sole responsibility for properly updating and monitoring the configuration information in the file. The CDM must maintain close working relationships with these activities to ensure that it obtains and loads correct and complete data in time to provide proper maintenance and logistics support for the newly installed modified equipments.

b. Since the CDM is responsible for coordinating all matters regarding the configuration data management process, it is the only activity authorized to add, delete, or change configuration and logistics support data in the file. Therefore, if the CDM suspects erroneous information or if it has received conflicting data, it must initiate and track the correcting action. The MSC CSA process is a closed loop system between the equipment installing activity and the configuration database, with the CDM acting as the gatekeeper and quality inspector. It is not a complicated process to establish and maintain, but requires a high degree of discipline and oversight to ensure maintenance of its accuracy. Figure 4-1 summarizes the flow of data in this process.

4.2 CONFIGURATION DATA MANAGEMENT

a. Since the CDM's primary responsibility is the life cycle management of configuration data, he/she must undertake a number of unique tasks. To accomplish these tasks, the CDM uses the MSC Configuration and Logistics Information Program (CLIP) as his/her primary tool. CLIPS operate as the working file to collect, control, and distribute configuration information.

23 MAY 2011

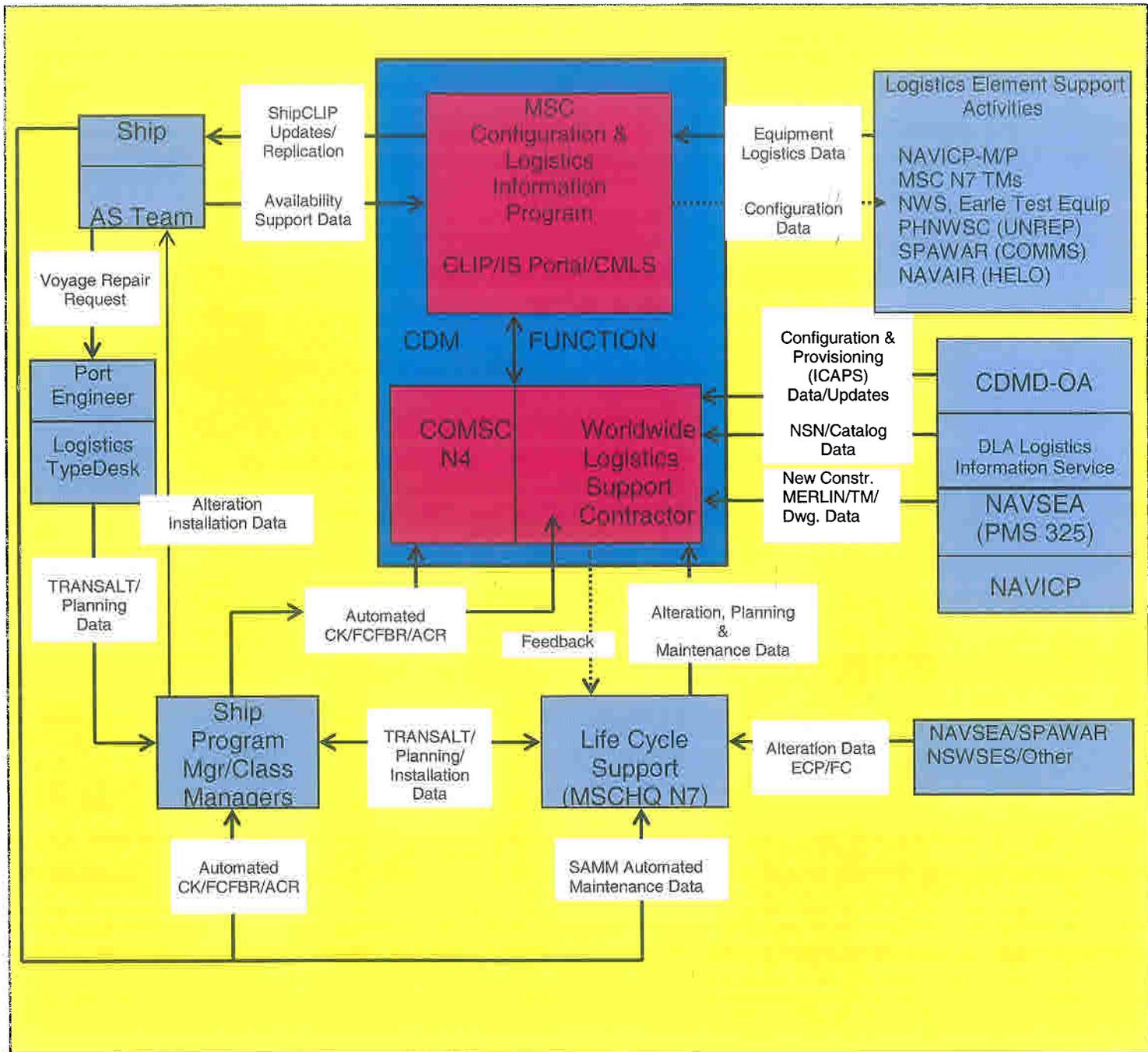


FIGURE 4-1, MSC CONFIGURATION STATUS ACCOUNTING DATA FLOW

23 MAY 2011

b. Generally, ships are phased into CLIP by class, although single ships may be phased in if merited. When a class or ship is phased in, one or more ships in the class undergo the Initialization and Baseline Verification and Validation process (described in Appendix C) to establish the Class Standard Database (CSDB). When the CSDB is verified, it is applied to the other ships of the class as they are brought into CLIP. Maintenance audits, technical reviews, and selective validations, during Availability Support and other shipboard visits, correct, and refine the CSDB to accurately reflect the configuration variances of each ship of the class.

4.3 CDM AND LOGISTICS SUPPORT REQUIREMENTS

Through the CDMP, the CDM is also tasked to continuously review logistics support requirements for equipment installed on MSC ships. This task is accomplished through the AS process, which verifies the accuracy of and uses the CDM's CSA database as the key to identifying required logistics support elements. MSC's AS process is described in Chapter 6 and Appendix D.

4.4 CDM FOCUS

The CDM's effort is focused to provide the most cost and time effective return for the resources expended. The program:

a. Enhances configuration data quality. The key to providing solutions to logistics support problems is to promote strict control and accountability for shipboard equipment configuration changes, establish a credible fleet configuration database, and maintain the integrity of this system through continuous quality control and monitoring.

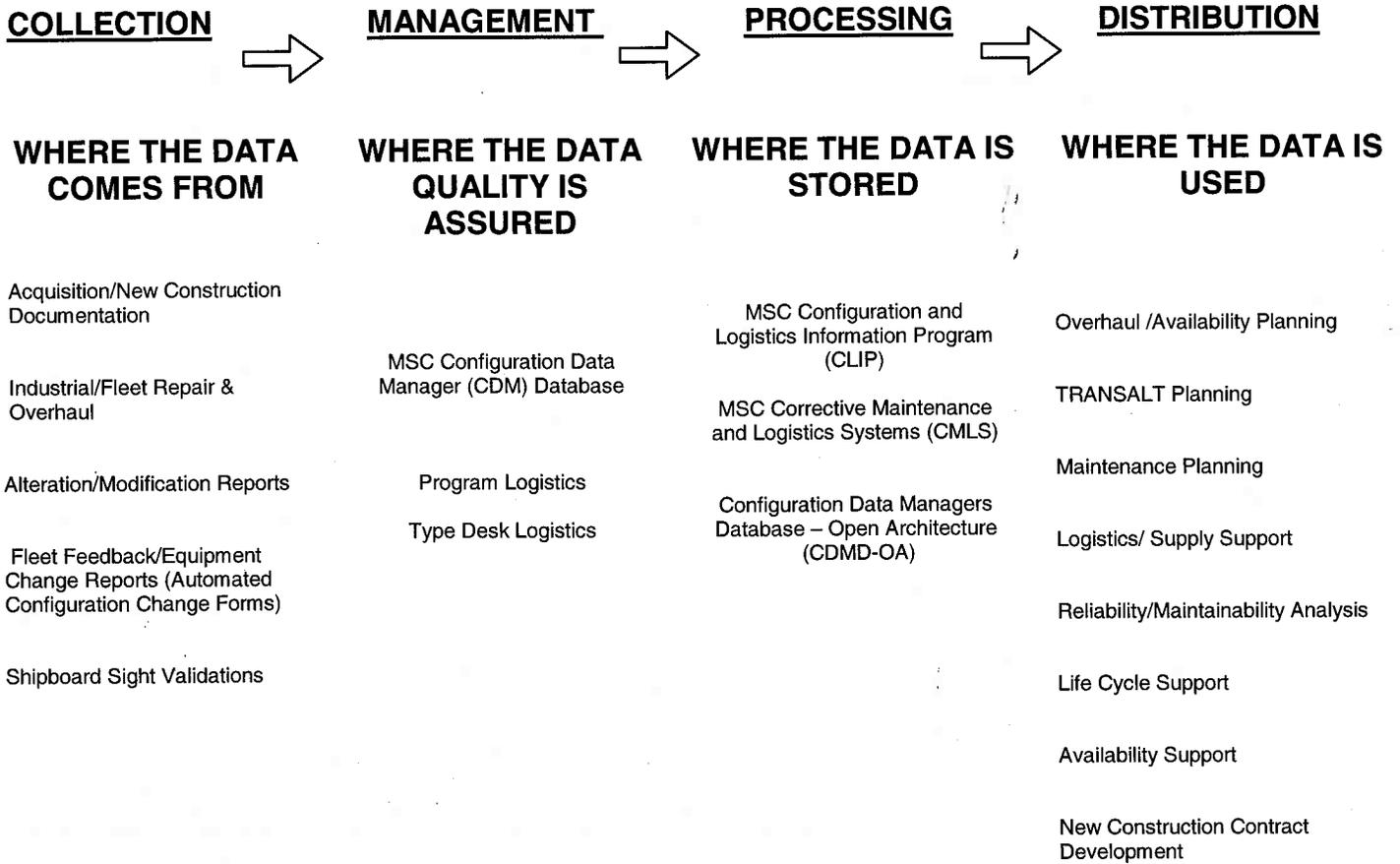
b. Concentrates maximum effort on identifying and resolving logistic deficiencies on critical equipments. It places management's attention on the 10% of systems that produce 90% of the problems rather than attacking all problems simultaneously.

c. Intensely manages critical and maintenance significant equipment. In conjunction with sub-paragraph b. above, ensures that critical and maintenance significant systems requiring shipboard preventive and corrective maintenance have the required parts, tools, manuals, and other support available when needed.

23 MAY 2011**4.5 SUMMARY**

Figure 4-2 depicts the CDM functional relationships, from source data collection, through data quality assurance and processing to the distribution of the products. The operation of the CDM function will generally be transparent to the MSC fleet. CDM data processing, technical research, and final quality assurance will be done at the Headquarters/Worldwide Logistics Support Contractor level. As MSC ship and shore processes become more automated, electronic data transmission/replication of ShipCLIP/CLIP/CMLS databases will expedite the CSA and feedback process. Due to advances in access to ship configuration and allowance data, the CDM may authorize Program and MSFSC staff to make changes directly on line. Procedures and policy for these changes will be established in the CDMD Field Guide. Appendix C to this manual explains the specific CDM actions in greater detail and should be used as a reference if additional information is required by the reader.

23 MAY 2011



PROVIDES SHIP CONFIGURATION PRODUCTS WITH STRUCTURED CONTENT TO SATISFY USER REQUIREMENTS

FIGURE 4-2, BASIC CONFIGURATION DATA MANAGEMENT FUNCTIONS

23 MAY 2011

CHAPTER 5

Continuous Maintenance Support

5.1 INTRODUCTION

The MSC ship repair and maintenance cycle is a dynamic process which involves extensive coordination and interaction between the ship and the shore staff to be effective and economical. COMSCINST 4700.14 (series) provides general guidance for PMs and Area Commanders to plan MSC ship availabilities. MSC also tracks ships' major equipment additions and deletions using the TRANSALT process in accordance with reference (a). During the Work Item development process, any references to TRANSALTs should be checked very closely and key information about the TRANSALT or a copy of the TRANSALT Approval & Completion Checklist (COMSC N720-4700-001-CC) should be obtained.

5.2 GOGO SHIP INDUSTRIAL MAINTENANCE

a. MSFSC class management teams provide direct support of industrial assistance in an integrated ship support team setting. MSFSC Class Managers are directly responsible for executing all Government Owned/Government Operated (GOGO) ship alterations and industrial maintenance. The MSFSC Class Management Team consists of a Class Manager, Type Desk Engineering Supervisor, Principal Port Engineer (PPE), Type Desk Logistics Manager, and contract logistics support. All of these are supported by Supply Chain Management (SCM) staff. Ships are assigned a PPE to provide off-ship maintenance support. The PPE will collaborate with the ship and other technical support staff to identify all of the critical maintenance requirements for the ships as required throughout the ships' life cycles. Priority and timing of maintenance are influenced by several key factors:

- Ship and Equipment Condition
- Off Ship Repair Support required by Shipped direct
- Status of Ship Life Cycle
- Ship Operating Schedule
- Maintenance Funds
- American Bureau of Shipping (ABS) Inspection Requirements
- U.S. Coast Guard regulatory requirements
- Material, Technical Services, and Documentation

23 MAY 2011

For GOGO ships, the Port Engineer will continuously build work items using these criteria. VRRs and Work Items are also created by external activities such as the Engineering and Information Systems Functional Directorates, Space and Warfare Systems Command for standard Navy communications equipments, Naval Ship Systems Engineering Station (NAVSSSES) for standard Navy Underway Replenishment equipment, and Naval Air Systems Command (NAVAIR) for aviation equipment. The Port Engineer may also re-use existing work items or use a work item created by another Port Engineer for the same type of repairs,

5.3 MSC IS PORTAL CORRECTIVE MAINTENANCE MODULE

a. The MSC IS Portal project brings the maintenance and a life-cycle logistics community together under a single support solution and improves the work item development and execution processes. The Corrective Maintenance (CM) module of the IS Portal provides an automated tool to support creation of work items, reuse or modification of work items, and execution of the industrial assistance efforts. CM allows a user to work with voyage repair requests (VRRs), work items, availabilities, and create feedbacks and parts requests. A VRR is correspondence from the Chief Engineer to the Port Engineer requesting assistance for repairs that are beyond the scope of the ship's force to accomplish.

b. The CDMP directly supports class management team in the work item and work package development processes using the IS Portal and the CMLS process. This process is continuous since the logistics support staff is directly integrated in the class management teams and as work items are created from Ships Force Work Lists (SFWL), VRRs, TRANSALTS, and existing work items.

c. For GOGO ships the logistics and configuration review process is completed as the work items are put together through the CM and CMLS systems. All work items created in CMLS will be reviewed for configuration of equipment and parts to equipment, ILS and spares support requirements. Goals of the review process using CMLS:

- Accurate HSCs, equipment assignments to HSCs, and equipment criticality
- Accurate equipment model and manufacturer identification
- Accurate equipment parts lists and acceptable alternate parts data

23 MAY 2011

- Accurate sources of supply, vendors, material availability and pricing

d. When equipment and material are government furnished, the LTD and on-site contract ILS support team will capture the configuration and logistics support data resulting from government acquisition. Detailed procedures and steps to record the work item and Government Furnished Equipment (GFE)/Government Furnished Material (GFM) processes are identified in the CMLS User Manual.

e. Completed work items in CM will have already been checked for equipment configuration, ILS requirements, and sparing impact, thus eliminating a need for duplicate review during the execution of the work. As work items are bundled into a work package, voyage repair period or pier side service orders, ILS and configuration data for GFE/GFM will already be collected through the government procurement process. The Availability Support Team must continue to focus on Contractor Furnished Equipment (CFE) and emergent changes and growth items. The industrial assistance vendor must supply the applicable purchase order or technical support data (TSD) for all CFE. TSD is the documentation that contains logistics and maintenance information relevant to life cycle support of the component or system. TSD includes technical manuals, drawings, equipment configuration data parts data, preventive maintenance procedures, preventive maintenance material requirements, and parts usage data associated with equipment repairs performed by contractors.

f. For all work items with CFE, the on-site availability representative will sight verify the actual installation nameplate and purchase order during the availability support process.

5.4 GOVERNMENT OWNED/CONTRACT OPERATED (GOCO) SHIP INDUSTRIAL MAINTENANCE

Contract operated ship work package development and review will be accomplished in accordance with the existing contract. For larger availabilities a PM logistics representative will be assigned on-site to collect and process required configuration and logistics changes. For smaller availabilities, the contract operator will provide the work package completion reports to the PM logistics representative to be processed once the availability is completed.

23 MAY 2011

GOCO ship support will be adjusted to support each program's unique operational, life cycle, and contract requirements.

23 MAY 2011

CHAPTER 6

AVAILABILITY SUPPORT

6.1 INTRODUCTION

The MSC AS process complements the CDM function. As the major component of the waterfront logistics support function, the AS process closes the loop of accurate and timely CSA and applies enhanced logistic management techniques to the shipboard environment. It is a vital link in providing the MSC CDM feedback on the CDMP's impact on material condition readiness and, ultimately, ship operational readiness.

6.2 THE AS CONCEPT

a. MSC's concept to maintain the best possible configuration and logistics support posture is to conduct AS tailored to individual PM/ship requirements and operating schedule. This tailored AS process is planned and funded by the PM; conducted by the Worldwide Logistics Support Contractor; and monitored by the CDM, PM logistics representatives and ship MSFSC Logistics Type Desks (LTDs) in close cooperation with the Headquarters PM engineering staff, MSFSC Class Managers, contract operators, and the ships. The tailored nature of the AS process allows the PMs for contract operated ships to participate as desired or allow the contract operator to provide information and support in accordance with the contract.

b. The MSC AS process focuses on verification of the ship's equipment configuration profile through sight validations, accurate CSA, and ensuring that appropriate repair parts support and technical documentation are provided to the ship during its operating cycle. The elements of the MSC AS process include: work item development, planned alteration documentation, pre-availability assessments, configuration verification and analysis, ShipCLIP Updates, technical manual analysis, repair parts analysis, and Logistics Systems use and maintenance training. In this AS process, these analyses may be split and accomplished in coordinated steps or stages but will always be structured to deal with the most current ship's needs, available support funding, and operational logistics support requirements. Other logistic assistance, complementing the AS, will be scheduled for accomplishment during voyage repairs or availabilities.

23 MAY 2011

c. Throughout the ship's operating cycle, the PML/CM will continuously review the status of its logistics support capability, based upon logistics metric performance and inputs from the ship, MSFSC Type Desks, and Contract Operators. As Figure 6-1 on the next page indicates, the AS process will be driven by the configuration audit and verification process, augmented by operational experience and the latest historical support posture for the ship's designated critical equipment. As a result of AS, necessary configuration and logistics support documentation will be generated and forwarded to the CDM for updating the MSC CLIP database and CDMD-OA with the most current configuration and initiating the appropriate logistics support requirements.

d. Finally, an overriding concern of the MSC AS process is quality. Using a statistical process controls methodology, as outlined in Military Standard 105 (MIL-STD-105), configuration data will be checked and reviewed before loading into the database.

6.3 FACTORS AFFECTING THE MSC AS PROCESS

a. To a large extent, the scope of the AS effort for a given ship is determined by its maintenance and also may be influenced by the following considerations:

- (1) Status of equipment validations
- (2) Status of ShipCLIP
- (3) Ship's operating record
- (4) Ship's schedule and length of the availability
- (5) Number and type of configuration changes planned for each availability
- (6) Personnel support resources
- (7) Funding
- (8) Physical location of ship during the availability
- (9) Ship's expected life cycle
- (10) Metrics performance (i.e. parts effectiveness)

23 MAY 2011

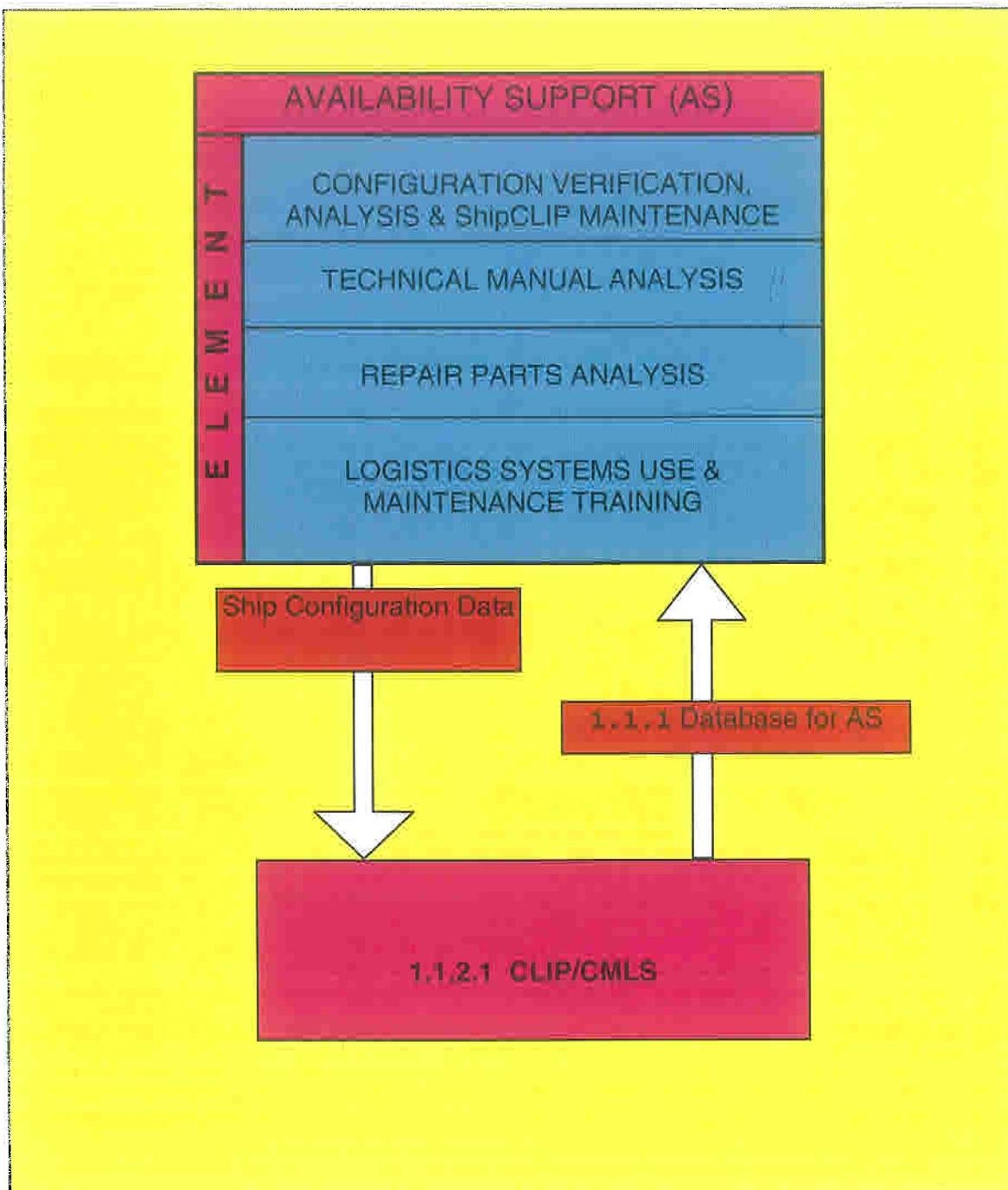


FIGURE 6-1, CLIP/CMLS - AS RELATIONSHIP

23 MAY 2011

b. The procedures for conducting an MSC AS are, by necessity, flexible. Changes to one aspect of the process may result in further changes to other aspects of the process. The key to success of MSC's AS is the quality of the database, proper coordination of shore-based assistance and a focus on ships operational equipment support capability. The following paragraphs briefly highlight the elements of AS and the critical actions included in each.

6.4 WORK PACKAGE DEVELOPMENT SUPPORT

The ship's Principal Port Engineer (PPE)/Port Engineer (PE) develops the Work Package for the availability. The Work Package contains a collection of Work Items generated by the ship and the approved TRANSALTs or other alterations which have been scheduled to be completed during a specified industrial availability. The PPE/PE determines the Government-furnished material (GFM) and Contractor-furnished Material (CFM) requirements and provides them to the MSFSC LTD who enters them into CMLS. The LTD then verifies configuration applicability to the vessel, performs the market survey for the GFM, provides important logistics information such as the time it will take to procure, the cost, and any recommended sources of supply and inputs the parts request in CMLS. The Supply Chain Management (SCM) representative then reviews the requisitions and enters the data into the Oracle-Financial Management System (FMS) where it is approved for funding by the Supervisory Project Engineer and MSFSC N8 Funds Certifier. MSFSC N10 processes it through documents uploaded to CMLS. MSFSC N10 attaches the contract to CMLS. Once the material is certified as received, SCM creates a receipt in FMS. SCM is responsible for tracking the outstanding items to completion.

6.5 PRE-AVAILABILITY WORK PACKAGE REVIEW

a. For every GOGO ship industrial maintenance availability, the planned equipment additions and deletions will be identified by performing a Pre-Availability Work Package review. The review will be conducted prior to the availability period, using the latest work package specifications generated for the availability. Planned alteration and schedule information will be obtained from the Engineering/Logistics Type Desk, Ship's Port Engineer, and other sources. The CM generated Planned Equipment Addition/Deletion report, which identifies all configuration-worthy equipment additions, deletions, or modifications planned for the next availability, is reviewed at this time.

23 MAY 2011

b. Contract-operated ship work package development and review will be accomplished in accordance with the contract. The contract operator will provide the proposed work package to the Program Office for review and approval prior to executing the work.

6.6 PRELIMINARY LOGISTICS READINESS ASSESSMENT

To determine the ship's most urgent needs and to provide the most effective focus for the MSC AS process, an assessment of the ship's logistics support posture by the PM is required. This assessment will be conducted prior to each availability at designated times within the AS cycle. Portions of this assessment are performed onboard the ship by the PM Representatives or the AS Team before the start of the next scheduled repair availability. Symptoms of configuration errors and inadequate logistics support can be discovered by analyzing a host of information sources; such as, equipment sight validation results, historical repair part demand data, MSC maintenance feedback reports, supply effectiveness reports, Casualty Report (CASREP) files, the stock record battery, storeroom inventory validity, status of pending Configuration and Allowance Change Requests, ShipCLIP maintenance action, logistics metrics, and previous inspection reports. This analysis can be completed with minimum disruption of the ship's routine. Yet, it ensures that the MSC AS process will concentrate on the ship's most apparent needs.

6.7 CONFIGURATION VERIFICATION, CONFIGURATION ANALYSIS AND ShipCLIP UPDATE

a. The Configuration Verification and Analysis portion of the MSC AS process is the key element in MSC's initiative to improve CSA. Due to the anticipated effectiveness of the MSC CSA process, ship stem-to-stern validations will no longer be required. However, at the PM's discretion, total ship validations may still be directed on a case-by-case basis, if conditions warrant, or as quality control measure of the program.

b. After the initial validation, most MSC ships transition into the CLIP system for CSA, permitting the CDM to maintain continuous, closed loop control over all future configuration transactions. For those ships not initially brought into the CLIP system, the CDM will act as the interface with CDMD-OA,

23 MAY 2011

transmitting and monitoring ship generated configuration data records and providing periodic status updates.

6.7.1 Configuration Verification. Configuration Verification is the process of confirming nameplate data through sight validations of the equipments installed onboard MSC ships during the operational cycle. The scope of the configuration verification process during AS Team visits may vary, depending upon the results of the preliminary logistics readiness assessment.

6.7.2 Configuration Analysis

a. Configuration Analysis is the process of comparing data collected in the configuration verification process with existing configuration records in the MSC CLIP database or CDMD-OA, Ship Selected Records, Technical Manuals, and other references. Before the Start of Availability (SOA), the PM will request an SOA configuration output document (Windows-based MSC Availability Support Program (WinMASP) drawdown) which reflects the latest configuration data for the ship. The CDM will coordinate production of ShipCLIP database updates as the needs of each ship dictate. In most cases, the MSC Configuration Analysis will commence before the ship actually enters the availability, a technique that can extend the limited time available to complete the MSC AS. Prior to SOA, work item development and work package review will provide the AS Team with an initial listing of planned equipment additions and deletions and any TRANSALTs to be accomplished during the availability. In some cases, such as Navy sponsored electronics alterations, planned equipment additions and deletions may already have been entered in the ships configuration data files before the above products are generated.

b. Using the latest configuration products and information from CLIP, the AS Team, with the assistance of the MSFSC Type Desk and ship's force personnel, performs analyses to review the ship's configuration data. Based on this analysis and the changes processed, the CDM will update the ship's ShipCLIP shortly after the end of the availability.

6.8 REPAIR PARTS ANALYSIS

a. The principal focus of repair parts analysis is to provide support for equipment installed during the availability and to previously non-supported equipments verified during the sight equipment validation process. Using the list of planned

23 MAY 2011

equipment additions and deletions and ShipCLIP repair parts allowance data, the AS Team will identify repair part allowance deficiencies and excesses. Frequently, new equipments furnished and installed by the availability contractor will include associated repair parts as a contract requirement. The AS Team must coordinate closely with a variety of sources including the PM, CDM, Type Desk, PE, Contract Operator, etc. to identify these parts, ensure their receipt, integrate them into the WinMASP database and initiate any required automated allowance documentation. Particular care must be exercised to ensure that any contractor furnished parts are turned over to the Supply Department since they represent the initial support allowance for the new equipment. In many cases, configuration analyses will also reveal installed equipments not supported in ShipCLIP. The AS Team will include requirements for the appropriate repair part support for these equipments in the shortage listing. The AS Team will also review the historical demand file and other files/reports to ensure that parts not carried but eligible for stocking based on frequency of demand are processed in accordance with the Program Manager's policy. The AS Team will provide a tailored listing of repair parts shortages to the ship for review. The ship's Chief Engineer, Configuration Manager, Supply Officer and LTD or PE will review the repair parts shortage listing, clearly identifying any item that is not recommended for shipboard stock. The AS Team will then revise the post-analysis allowances and submit the shortage listing directly to the PML or LTD for approval, funding, and batch processing upon completion of the analysis. The goal is to avoid an influx of extraordinary workload on the ship. Excess spare parts are also identified in the process. These are not offloaded until it is confirmed that the supported equipments have been physically removed from the ship and the offload is approved by the PM or LTD.

b. Inherent to the MSC AS process is the recognition that accurate repair part inventory records and storeroom location validity are required to support logistics readiness. However, due to time constraints and lack of proper facilities, the MSC AS process will not incorporate a repair parts offload as a method to correct inventory validity problems. The preliminary assessment includes procedures for measuring inventory validity. Problems noted during the assessment will be made known to the PM and/or LTD, who will determine the necessary remedial action when the inventory validity is not within minimum standards.

23 MAY 2011

6.9 TECHNICAL MANUAL ANALYSIS

This analysis will ensure that the ship's equipment configuration is adequately supported by accurate, up-to-date technical documentation. The AS Team will obtain the latest technical manual baseline from the MSC Technical Library and CLIP. The technical manual analysis will generally follow the standard Navy Integrated Logistics Overhaul (ILO) procedures if time and resources are available. An alternative methodology, outlined in the CDMP manual, may be more appropriate during limited scope assist visits. In contrast to standard ILO procedures, technical manuals will remain aboard the ship throughout the availability. Contractor personnel inventory the technical manuals either prior to or at the start of the availability and then focus on updating the ship's current technical manuals and providing support for incorrectly supported/previously installed unsupported equipment, newly installed equipment, critical systems, and other problem equipment. New or revised technical manuals will be ordered through the MSC Technical Library or the Navy.

6.10 LOGISTICS SYSTEMS USE AND MAINTENANCE TRAINING

The AS Team will conduct training on the use of ShipCLIP Configuration and Logistics Support, Supply Management, Haystack Parts, and Logistics Information Programs. In this manner, the improved degree of logistics readiness achieved by the MSC AS process can be perpetuated by ship's force personnel throughout the ship's operating cycle.

6.11 REPAIR PARTS STOREROOM BIN SAMPLING

a. The on-site logistics representative will conduct a random bin sampling of approximately 100-150 items in the ship's storerooms. The list of candidates is generated from ShipCLIP (or SMIS-SM, if applicable). Actual storeroom locations of selected items are compared to the location listed in ShipCLIP (or SMIS-SM, if applicable). The on-site logistics representative will verify the on-hand count, location, part number, manufacturer, stock number, serial number, appropriate shelf life data, and condition of the first 34 items on the list. This information is compared to what is listed in ShipCLIP (and SMIS-SM, if applicable). If three or more sample items have three errors each, the second sample of 34 items will also be verified in the storerooms. Results are included in the End of Availability (EOA) report, and the ship's Supply Officer

23 MAY 2011

is debriefed on what was found and what corrections must be made in ShipCLIP (or SMIS-SM, if applicable).

b. Item locations from ShipCLIP (or SMIS-SM, if applicable) are compared to the actual location of the items in the storeroom. The on-site logistics representative goes to the storeroom and randomly selects a total of 68 bin locations. The first 34 samples are compared to the supply management database for on-hand count, location, part number, manufacturer, stock number, serial number, appropriate shelf life data and condition of the item/material. If 3 or more sample items have 3 errors each, the second sample of 34 items will also be verified in the storerooms. Results are included in the EOA report, and the ship's Supply Officer is debriefed on what was found and what corrections must be made in ShipCLIP (or SMIS-SM, if applicable).

c. The AS Team will review the ship's list of Depot Level Repairable (DLR) items and confirm that these items are on board and in the proper location. The on-site logistics representative runs a utility in ShipCLIP (or SMIS-SM, if applicable) to create a DLR (7 Cog) Inventory List where the Location Format equals M. The on-site logistics representative randomly selects a minimum of 18 items and verifies on-hand count, location, part number, manufacturer, stock number, serial number, appropriate shelf life data, and condition of the item. This information is compared to what is listed in ShipCLIP (or SMIS-SM, if applicable). Results are included in the EOA report and the ship's Supply Officer is debriefed on what was found and what corrections must be made in ShipCLIP (or SMIS-SM, if applicable).

6.12 AVAILABILITY SUPPORT ASSIST

a. Typically, MSC ships have frequent, but brief, availabilities, where voyage repairs or equipment replacement will drive changes to the ship's equipment configuration.

b. In the past, the reporting of these changes, as well as the acquisition of supporting logistic information, was often done on a hit-or-miss basis. To correct this condition and to provide additional logistics support for ships in short industrial availabilities, the Availability Support (AS) Assist was developed. The AS Assist applies continuous attention to configuration changes occurring during the ship operating phase. The following are minimum objectives of the AS Assist.

23 MAY 2011

(1) Ensure that the ship is provided the required logistic elements (i.e., technical manuals, special tools, test equipment and repair parts) to allow maintenance and support of equipments added or replaced during the availability.

(2) Update the ship's logistic references (i.e., SAMM, ShipCLIP (and SMIS-SM, if applicable) to accurately reflect the EOA configuration.

(3) Ensure all industrial work, which results in a configuration change, is accurately reported to the CDM.

(4) Provide a means to verify, analyze and correct support problems of critical or mission supporting equipments, identified by the PM, Type Desks, CDM, PPE or the ship.

c. The Availability Support procedures are further discussed and identified in Appendix D, the CDMP Field Guide, and CLIP and WinMASP Users' Manuals.

6.13 INTEGRATED LOGISTICS OVERHAUL (ILO)

a. Though most availabilities conducted on MSC ships are short (30-45 days), there are times when an MSC vessel will undergo a longer industrial assist period such as a Service Life Extension Program (SLEP), regular overhaul (ROH), or complex overhaul (COH). An ILO is performed for ships undergoing these longer industrial assist periods. While the Availability Support Assist tends to focus on the work being completed during the specific availability, the ILO team will take advantage of the additional time available to perform more comprehensive tasks to ensure optimal logistics support for the vessel. Greater emphasis will be given to in-depth configuration and repair part analysis including the following:

(1) Select Validation Analysis. Based on recommendations of the ship's Chief Engineer/PM, the ILO Team will validate select systems aboard the ship. The ILO team will compare validation records to the ShipCLIP database and ensure that the proper APLs/AELs/X-RICs are loaded in ShipCLIP for the ship and the correct repair parts, tools, test equipment, and technical manuals are identified for the validated equipments. The ILO team will make the required corrections in WinMASP, CLIP, and ShipCLIP.

(2) Repair Part Inventory. The ILO Team will conduct a ship's repair part inventory validity check to determine if a

23 MAY 2011

wall-to-wall inventory is needed. This check will include 100% of DLRs as well as a 10% sample of shelf-life and hazardous material and all other repair parts. An accuracy rate of less than 95% overall will require a wall-to-wall inventory. If errors can be localized to a single storeroom, that storeroom will be re-inventoried and the entire sample recalculated to verify the 95% accuracy requirement. If a wall-to-wall inventory is directed, 98% validity must be achieved.

(3) Repair Parts Inventory vs. Demand analysis. The ILO Team will perform an analysis of the ship's repair parts, comparing the actual shipboard inventory to demand data extracted from ShipCLIP to determine proper repair parts allowances to support shipboard equipment. The ILO Team will identify parts that were previously not carried but are eligible for stocking based on demand frequency. The AS Team will provide a tailored listing of repair parts shortages to the ship for review. The ship's Chief Engineer, Configuration Manager, Supply Officer, and LTD or Port Engineer will review the repair parts shortage listing, clearly identifying any item that is not recommended for shipboard stock. The AS Team will then revise the post-analysis allowances and submit the shortage listing directly to the PML or LTD for approval, funding, and batch processing upon completion of the analysis. The ILO Team will assist in stowage of repair parts received during the overhaul and will update the ship requisition file and stock records in ShipCLIP when ILO shortages are delivered.

(4) SAMM analysis. The ILO Team will review the SAMM database to identify spare parts necessary for scheduled preventive maintenance actions. The ILO team will compare the resulting list of parts to the ship's ShipCLIP database to ensure all required parts appear on ship's APLs/AELs/X-RICs and are allowed. The AS Team will provide a tailored listing of repair parts shortages to the ship for review.

b. The ship's Chief Engineer, Configuration Manager, Supply Officer, and LTD or Port Engineer will review the repair parts shortage listing, clearly identifying any item that is not recommended for shipboard stock. The AS Team will then revise the post-analysis allowances and submit the shortage listing directly to the PML or LTD for approval, funding and batch processing upon completion of the analysis. The ILO team will update WinMASP/CLIP/ShipCLIP to reflect allowance changes. The ILO Team will assist in stowage of repair parts received during

the overhaul and will update the ship requisition file and stock records in ShipCLIP when repair parts are delivered.

6.14 SERVICE ORDERS

a. MSC ships often require repairs outside of major availabilities using a service order. Service Orders are executed by MSFSC and Ship Support Units (SSUs) to complete critical emergent repairs and finish work not completed in overhauls. Service orders will drive changes to the ship's equipment configuration. To provide logistics support for short industrial availabilities, a logistics on-site representative is often assigned to visit the ship during these periods. The on-site representative will focus on monitoring the industrial work accomplished and update ship configuration, technical data, and spare parts requirements as required. Ship concerns and problems will be identified and validations/technical data reviews performed as time and resources permit.

b. When an on-site logistics representative is not available, the ship will coordinate Service Order support through the assigned Ship Support Unit (SSU). Service Orders are executed by MSFSC and the SSU to complete critical emergent repairs and finish assistance. The ShipCLIP program can be used to report these actions using configuration changes or FCFBRs. Complete copies of all technical support documentation representing the ship's design equipment configuration should be submitted to the MSFSC LTD.

c. Initially a Service Order Requirement (SOR) is created by the Principal Port Engineer (PPE) or Electronics Engineer (ELE). The PPE/ELE provides this data to the LTD who enters it into CMLS. The LTD then verifies configuration applicability to the vessel, performs the market survey for the GFM, provides important logistics information such as the time it will take to procure, the cost, and any recommended sources of supply and inputs the parts request in CMLS. SCM then ensures that the SOR is processed through Oracle FMS, where it is approved for funding by the Supervisory Project Engineer. If the government purchase card can be used, the SOR is processed by SCM. The purchase card documentation is certified by the MSFSC delegated Approving Official (AO) and added to the monthly Purchase Order as a line item for bill payment by the MSFSC Comptroller in Oracle FMS. For SORs to be requisitioned through the Standard Procurement System (SPS), the SOR is processed through Oracle FMS, approved by the Supervisory Project Engineer and Funds Certifier, and processed by the MSFSC Contracting Directorate

23 MAY 2011

Directorate through documents uploaded to CMLS. The MSFSC Contracting Directorate attaches the contract to CMLS and places the order. When the service order is complete, the PPE/ELE sends an e-mail to the LTD certifying services received. SCM then creates a receipt in FMS for the service order. This process is depicted in Figure 6-2.

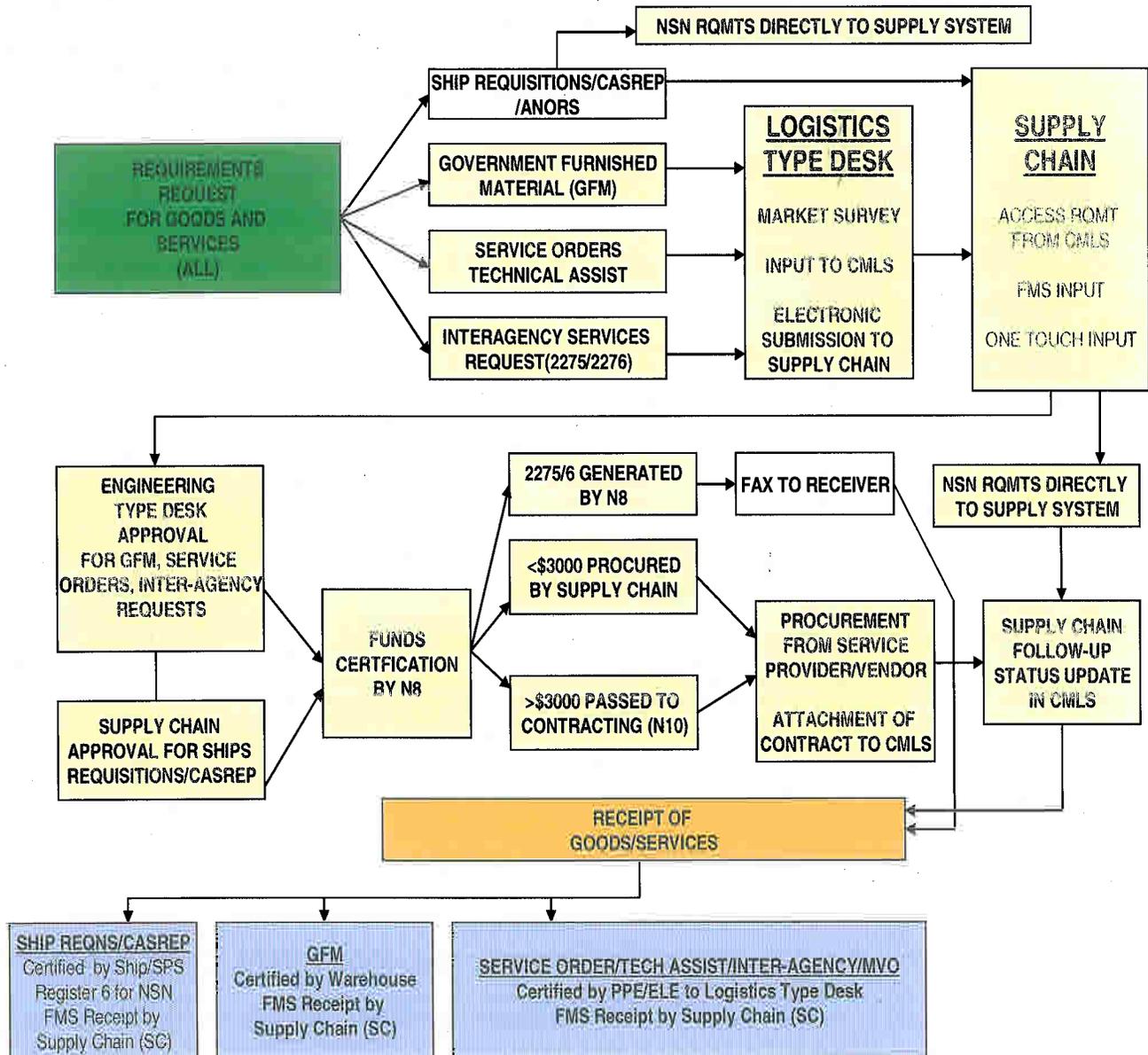
6.15 FLEET ASSISTS (FA)

Recognizing the challenges presented by the increased operating tempo of the MSC fleet and to complement the AS process to continuously improve both CSA and ships' logistics readiness, COMSC has established the Fleet Assist (FA) Program for GOGO ships. These brief, shipboard logistics assists will ensure that the MSC CDMP/AS concept of maximum shore-based support for fleet units remains viable and a logistics presence is available on the waterfront in the form of the FA performed by the PM/LTD or, at the PM's discretion, by the World Wide Logistics Support Contractor. The FA will provide shipboard supply and maintenance personnel with tailored assistance in solving specific logistics support problems (e.g., poor inventory validity, recordkeeping problems, identification of material, training).

6.16 SUMMARY

As evident in this brief introduction, the MSC CDMP is a comprehensive and ambitious program that promises a high value payoff in logistic enhancements and operational readiness. It requires a great deal of cooperation, coordination, and attention to detail from many interested parties to meet the program's objectives. The Configuration and Logistics Data Management Guide will provide necessary direction to the members of the MSC CDMP Team to perform their assigned responsibilities. As the program is implemented and matures, experience and common sense will drive changes and modifications. The CDMP is designed as a dynamic and responsive entity. Success will only be achieved if feedback is provided from the participants.

23 MAY 2011



SUPPLY CHAIN MANAGEMENT DATA FLOW - FIGURE 6-2

23 MAY 2011

CHAPTER 7**DIMINISHING SOURCES MANAGEMENT****7.1 INTRODUCTION**

a. Diminishing Manufacturing Sources and Material Shortages (DMSMS) is the loss, or impending loss, of manufacturers or suppliers of critical equipment, parts and raw materials. We lose a manufacturer when that manufacturer discontinues or plans to discontinue production of needed components or raw materials. This discontinuance can be caused by rapid changes in item or material technology, uneconomical production requirements, foreign competition, federal environmental or safety requirements, the manufacturer ceases doing business, obsolescence, and limited availability or increasing cost of items and raw materials used in the manufacturing process. DMSMS can occur in any phase of a program's life cycle, from early design phases through post-production support, and has the potential to severely impact the program/end item in terms of schedule and life cycle cost. These problems can affect readiness and operating cost if left unresolved by increasing repair times and the cost of resolving the materiel shortage.

b. DMSMS problems are an increasing concern due to the long life of MSC vessels, the decreased product life cycle for high technology components, and foreign sources of many MSC parts. The problem is further complicated by a reduction in the industrial base dedicated to production of military equipment. In addition, aging fleets of ships have lost their original supplier-base of constituent mechanical, hydraulic, and other component parts. The CDM supports the DMSMS process as part of the CDMP. The goal is to identify DMSMS information at the part and equipment level and to communicate the solutions to all users of the CDMP.

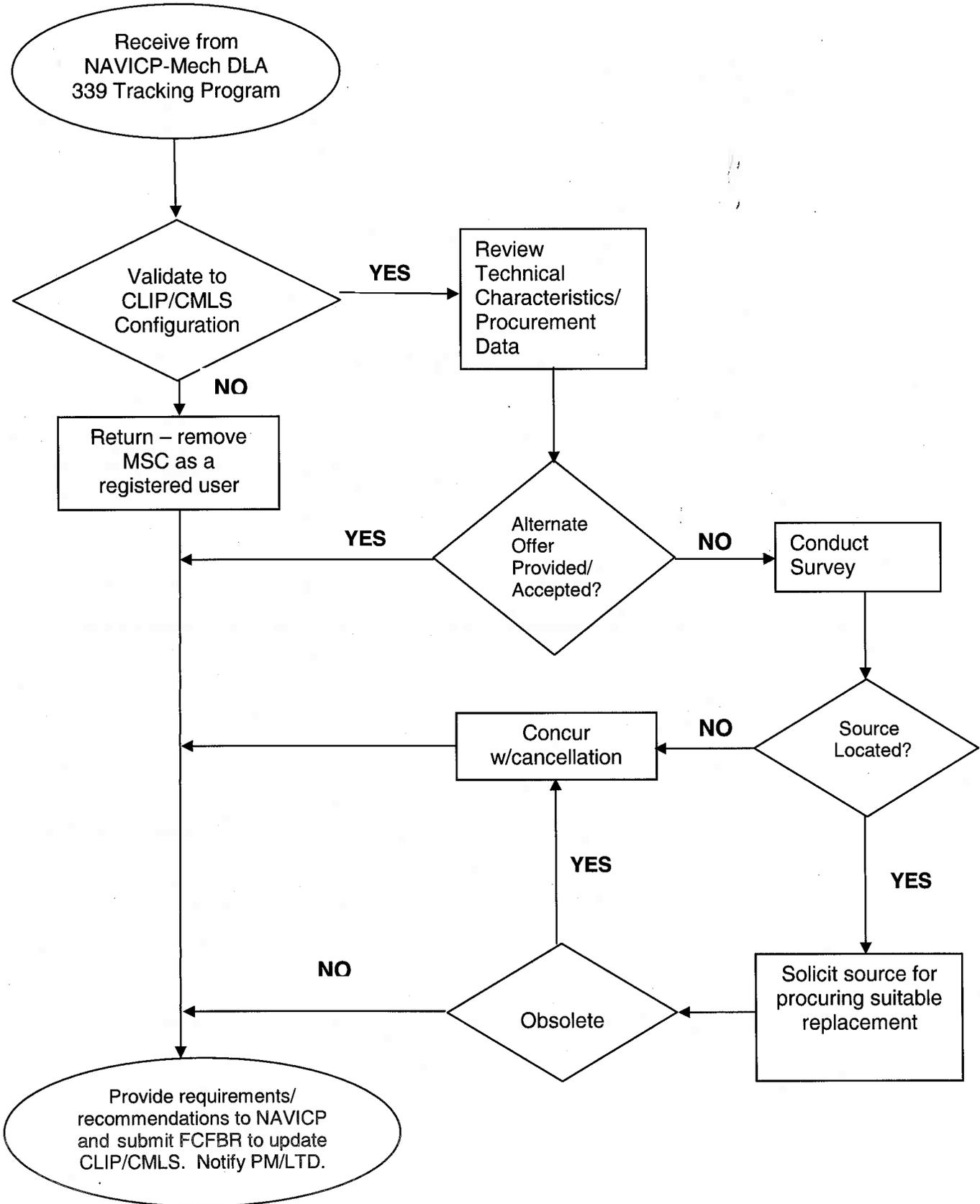
7.1.1 DLA 339 Technical Referral Process

a. When a ship submits a requisition for a National Stock Numbered part through the Supply System and the part is no longer available from a known source, a technical referral (DLA Form 339) is generated from the various Primary Inventory Control Points of the Defense Logistics Agency (DLA).

23 MAY 2011

The technical referral is provided to the Military Sealift Command (COMSC N4) through Navy Inventory Control Point (NAVICP) Mechanicsburg, PA, DLA Interface Branch. Cataloging data is then reviewed by COMSC N4 personnel to determine the adequacy of the existing technical data and to find additional data required to procure National Stock Numbered (NSN) items of production from responsible sources. A flow chart depicting this process is included as Figure 7-1.

FIGURE 7-1, DLA 339 Technical Referral Process



23 MAY 2011

b. The COMSC N4 reviewer will validate that the item is used by MSC by checking to see if the NSN is a configuration item listed in CLIP. If the item is not used by MSC, the reviewer will notify NAVICP that MSC is not a user and no further action is taken.

c. If MSC uses the item, the COMSC N4 reviewer will validate all government specifications supporting the DLA/NAVICP technical decision, then gather all necessary documentation related to the technical decision including all original DLA cataloging data; a copy of the applicable APL; related technical data contained in Haystack, CLIP, CMLS, technical manuals and ship drawings; and any specific data obtained from a shipboard equipment validation visit.

d. All engineering and procurement decisions should be based upon PM guidance, sound engineering practices and specifications, and commercial/government standards. The decisions will be documented in such a way that all the information used in making the decision is included in attached documentation, including a synopsis of how the decision was made, what information was used, and the sources of all quoted information. Every effort will be made to identify an alternate item of production, which is fit and functionally interchangeable.

e. The COMSC N4 reviewer must provide a synopsis of the recommended action, the OEM or the responsible source point of contact, and the alternate item of production if the original item of production is not available. When the decision is made to cancel the NSN due to obsolescence, the reviewer must document why the NSN is to be cancelled.

f. The COMSC N4 reviewer then contacts the Naval Sea Logistics Center (NAVSEALOGCEN) and coordinates the required actions for correcting the NAVICP APL data.

g. The COMSC N4 reviewer generates the corrective configuration change action by submitting a FCFBR to NAVICP which will correct the applicable APL, configuration, and CLIP/CMLS logistics data.

7.1.2 Diminishing Resources Process for Non-Standard Items

a. MSC is the Life Cycle Manager (LCM) for all government owned ships and equipment that we operate. With the exception of Navy ship transfers, under-way replenishment (UNREP),

23 MAY 2011

communication and aviation equipment, many types of equipment are not supported in the Supply System. As LCM, MSC must ensure that diminishing sources of parts and equipment support are captured internally and solutions documented properly the MSC Life Cycle Support databases. Diminishing sources are often first identified by the procurement process as parts are being sourced to complete repairs or maintenance or to replenish storerooms. All entities involved in servicing parts that discover an item with no source must document the issue on an FCFBR so that the re-procurement or obsolescence can be documented and resolved. Shore support activities, such as LTD, SCM, and contract operator Purchasing Officers who discover an unprocurable item or equipment, should submit an FCFBR.

b. The COMSC N4 reviewer will support all non-standard Diminishing Manufacturing Sources and Material Shortages (DMSMS) FCFBRs by executing the data-gathering action specified in paragraph 7.1.1.c

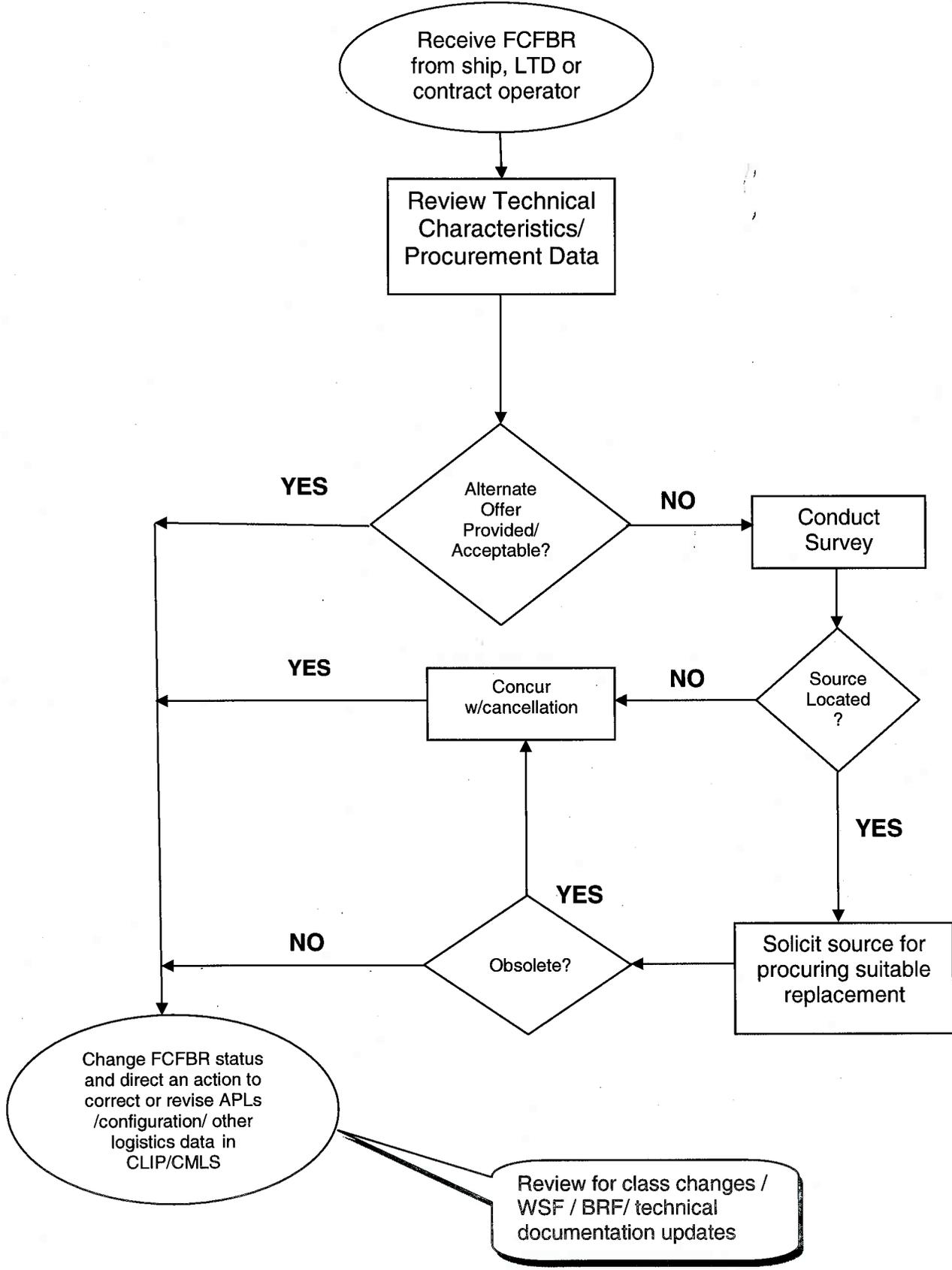
c. All engineering and procurement decisions should be based on PM guidance, sound engineering practices and specifications, and commercial/government standards. The decisions will be documented in such a way that all the information used in making the decision is included in attached documentation, including a synopsis of how the decision was made, what information was used, and the sources of all quoted information. Every effort will be made to identify an alternate item of production, which is fit and functionally interchangeable.

d. The COMSC N4 reviewer must provide a synopsis of the recommended action, the OEM or the responsible source point of contact, and the alternate item of production if the original item of production is not available. When the decision is made to cancel the NSN due to obsolescence, the reviewer must document why the NSN is to be cancelled.

e. The COMSC N4 reviewer will change the status of the FCFBR and direct an action to correct or revise APLs, configuration or other Logistics data in CLIP and CMLS. A flow chart depicting this process is provided as Figure 7-2.

23 MAY 2011

Figure 7-2, Diminishing Resources Process for Non-Standard Items



23 MAY 2011

CHAPTER 8

DEFECTIVE/DEFICIENT MATERIAL

8.1 DEFECTIVE MATERIAL

Material is considered defective when during its warranty period it fails to function properly due to design, materials, or manufacturing shortcomings. If the material is not covered by a warranty, it is considered defective if it fails to function properly when initially installed or for a period of time that is substantially less than is common for a similar item of production. A latent defect is defined as an imperfection in an item of production which affects the operability or service life and is not normally detected by reasonable inspection or routine test but which was present at the time of manufacture.

8.2 DEFECTIVE MATERIAL SUMMARIES

Defective Material Summaries (DMS) are issued by NAVICP (NAVICP-M85412) monthly in accordance with SECNAVINST 4855. The summary is a listing of NSNs, in National Item Identification Number (NIIN) sequence, that has a reported defect and should be inspected by the ship. COMSC N4 will download this report from the NAVICP website <https://www.extra.navicp.navy.mil/dms> each month and screen each item for hull applicability. If the item appears on any MSC vessel, COMSC N4 will issue a Naval message notifying ships to inspect the part. COMSC N4 will provide the ships with instructions for disposing of and replacing the defective material, if necessary. The affected MSC vessels will, if required, ship the defective material via traceable means to the proper disposal site and notify COMSC N4 via e-mail when the material is shipped.

8.3 DEFECTIVE MATERIAL REPORTING

a. MSC ships and shore support activities must identify defective material when it is discovered. Defective material reporting applies to stock numbered and non-stock numbered items. SECNAVINST 4855.3 (series) describes the Product Data Reporting and Evaluation Report Program (PDREP). This directive establishes a system for feedback of product quality deficiency data across Military Services, DLA, and U.S. General Services Administration (GSA) lines in order to conduct reporting, investigation, cause correction, and management of individual product quality deficiencies, as well as to identify problems,

23 MAY 2011

trends, and recurring deficiencies. It applies to product quality deficiencies detected on new or newly reworked Government-owned products, for premature equipment failures, and products in use that do not fulfill their expected purpose, operation, or service due to deficiencies in design, specification, materiel, manufacturing, and workmanship. It applies to products inspected and accepted at source, inspected at source and accepted at destination, or inspected and accepted at destination. It also applies to the special case of product inspected at source, shipped to destination for acceptance, and determined at destination to be unusable or unserviceable.

b. MSC ships that discover quality deficiencies will notify COMSC N4 who will process these reports into the PDREP website. The SF 368, Product Quality Deficiency Report, will be used for reporting product quality deficiencies. The preferred method of submission is via Product Data Reporting and Evaluation Program (PDREP) at: <http://www.nslcptsmh.csd.disa.mil/pdrep/pdrep.htm>. The Product Quality Deficiency Report may also be submitted via message, electronic facsimile, e-mail format, or other electronic transmission methods (i.e., Standard Automated Logistics Tools Set (SALTS) or Transaction Set 842 per DoD 4000.25-M)), or the Department of Defense Deficiency Reporting System (DoD DRS)).

c. As an alternative reporting method, ships or shore-based activities may create an FCFBR that identifies the defective material and identified problem, including the procurement order information and supplier. COMSC N4 will process these reports into the PDREP website. Upon notification of a problem, COMSC N4 will notify other MSC vessels via e-mail or Naval message to inspect the defective/deficient part. COMSC N4 will provide the ships with instructions for disposing of and replacing the defective material, if necessary. The affected MSC vessels will, if required, ship the defective material via traceable means to the proper disposal site and notify COMSC N4 via e-mail when the material is shipped.

23 MAY 2011

CHAPTER 9**LIFE CYCLE SUPPORTABILITY REVIEW****9.1 INTRODUCTION**

The purpose of a life cycle supportability review is to determine current and future logistics supportability levels for critical equipment onboard MSC vessels through ship surveys, mission critical equipment inventory, and assessment of logistics readiness. Careful analysis is performed on integral ship's systems to ensure this equipment can be maintained and repaired over the anticipated life cycle of the ship. COMSC N4's goal is to identify DMSMS upfront, before a problem develops, and to create and implement solutions in a proactive manner.

9.2 PROCEDURE

a. The first step in conducting a life cycle supportability review is to compile and coordinate information on all critical equipment aboard the ship including manufacturer's name, model number, serial number, Equipment Functional Description, and the location. Critical equipment is equipment with an MSC-derived critical risk factor of Mission Criticality Code (MCC) 3 or 4 higher (provided by COMSC N7). Equipment information may be collected from the ship's configuration database or through ship surveys to ensure accuracy and verification of equipment data to configuration in order to do further research.

b. Applying the techniques and evaluation criteria outlined in the DMSMS instructions pertaining to supportability of equipment: (1) determines if the current level of logistics support is adequate to meet ship's mission, (2) determines if future levels of logistics support are anticipated to be adequate to meet ship's mission in future years, (3) compares equipment age and operating cycle with the mean time between failures and equipment life expectancy (part of the N7 critical equipment calculations), and (4) estimates recommended programmed replacement dates.

c. COMSC N4 will review the Engineering Support Codes for MCC 3 and 4 Navy APLs. For all equipment with a "B" or "C" support code, COMSC N4 will research and contact the OEM and authorized distributors to ascertain if equipments and parts are truly no longer available. A code of "B" indicates that though

23 MAY 2011

there are currently spare parts available from both the supply system and from OEM sources, the end item is no longer in production and is usually obsolete without a direct replacement. A code of "C" indicates that the end item is obsolete and repair parts are no longer available from commercial OEM sources. Engineering Support Codes will be validated and equipment/parts sources will be updated as required in CMLS.

d. COMSC N4 will review MSC-created APLs to ensure the availability of end items and repair parts. COMSC N4 will research industrial and OEM sources to determine the availability of parts and equipment and will work to identify new or alternate sources for end items. COMSC N4 will make recommendations to the Engineering and Logistics Type Desks concerning the identification and replacement of end items for equipment that is considered to be unsupported by traditional commercial OEM sources. Corrections will be made in CLIP/CMLS, as required

9.3 RESULTS

Results of the supportability review will be recorded in the CDM and Life Cycle database. APLs, AELs and parts records will be annotated with obsolescence and planned replacement references. COMSC N4 will assist COMSC N7 with recommendations for replacement end items, as required.

23 MAY 2011

APPENDIX A**CONFIGURATION CHANGE REPORTING****A.1 INTRODUCTION**

a. Timely reporting of configuration changes is the key to maintaining an accurate, up-to-date configuration data file. The ship's force personnel can contribute significantly to these efforts through dedicated configuration change reporting.

b. The purpose of this appendix is to inform MSC activities on how to report shipboard configuration changes using MSC's automated configuration and status accounting systems, CMLS, CLIP and ShipCLIP, by completing and submitting the automated Configuration Change Form (CCF) (commonly known as a CK). Specific procedures to complete the form are contained in the ShipCLIP User's Manual.

c. In addition to the overview of the configuration change reporting system provided in the CDMP Manual, this Appendix describes general responsibilities for the management and performance of configuration change reporting:

A.2 RESPONSIBILITIES

The CDMP manual and its appendices address specific responsibilities under the Configuration Data Management Program. Since this appendix addresses the shipboard reporting procedures, the responsibilities of other activities are not included. The specific responsibilities of other agents in the configuration data management process may be found in Appendices C and D. Shipboard responsibilities are assigned as follows:

A.2.1 Ship's Configuration Manager

a. The ship's Chief Engineer establishes the necessary shipboard policy and assumes overall responsibility for the accomplishment of shipboard configuration management.

b. To ensure accomplishment of these requirements, the Chief Engineer will designate, in writing, a licensed engineer as the ship's Configuration Manager (CM). The CM is specifically responsible for reporting all configuration changes, including those accomplished by other than ship's force personnel. It is imperative that the CM obtain all data necessary to accomplish configuration change reporting from any

23 MAY 2011

CM is also responsible for coordinating shipboard efforts to correct discrepancies that may later be identified by the MSC CDM. For all equipment configuration changes, the CM will also ensure that ships' planned maintenance requirements, required tools, and test equipment is identified.

A.2.2 Supply Department

The Supply Officer is the ship's Configuration Data Manager and will ensure all configuration data is accurately reflected and updated in ShipCLIP system to ensure proper repair parts support for all installed equipment. Supply Department personnel will work with the CM in filling out and submitting the configuration changes, completing the required logistic data and validate existing entries in ShipCLIP. Additionally, supply personnel must take the appropriate action to ensure that the ship's ShipCLIP is updated and that repair parts, technical manuals, special tools and/or test equipment are obtained expeditiously for PM approved configuration changes.

A.3 CONFIGURATION CHANGE

A configuration change occurs whenever any system, equipment, component or unit is installed, removed, modified or relocated by any agent. Examples of events that cause configuration changes are:

- a. The substitution of an installed or in-use equipment/component with its onboard spare components;
- b. The receipt or turn-in of an electronic test equipment;
- c. The replacement of a unit/component with one with a different part number, particularly if either is serialized;
- d. The installation of any new equipment or component either as a separate unit or as an addition to an existing system;
- e. The relocation of any equipment or component, except portable equipment;
- f. The removal or withdrawal from service of any installed or in-use equipment, including test equipment;

23 MAY 2011

received (e.g., different manufacturer, model number, serial number); or

h. The modification of an installed or in-use equipment as a result of repairs, operating deficiencies, etc., when the modification changes the logistics support requirements of the equipment.

A.3.1 Configuration Change Reporting System The CDM's baseline validation establishes the ship's system/equipment configuration in CLIP, the MSC configuration database. However, a central database without an adequate and efficient process to record updates as changes occur will result in a stagnant file with little useful purpose. The configuration change reporting system will accomplish this updating requirement. Basic features of this system are:

a. A capability to rapidly process the configuration change data and generate appropriate logistics support changes for the ship.

b. A single point to which change data can be reported and by which the data can be verified, made available to the appropriate logistic managers, and processed for entry into the central file.

c. A single automated form that provides all required configuration change data.

A.3.2 Impact of Configuration Change Reporting. The importance of reporting configuration changes cannot be over-emphasized. The quality and currency of information recorded in the CLIP and CDMD-OA directly determines the quality of support to the Fleet. If configuration changes are not reported, vital support elements will not be on hand when needed. Without such support, the material readiness of a ship is adversely affected. Considering their impact on shipboard support systems, all configuration changes must be reported as promptly and accurately as possible. Although MSC provides off ship assistance, the ultimate responsibility for identifying and documenting configuration changes rests with the ship. Figure A-1 depicts this process.

23 MAY 2011

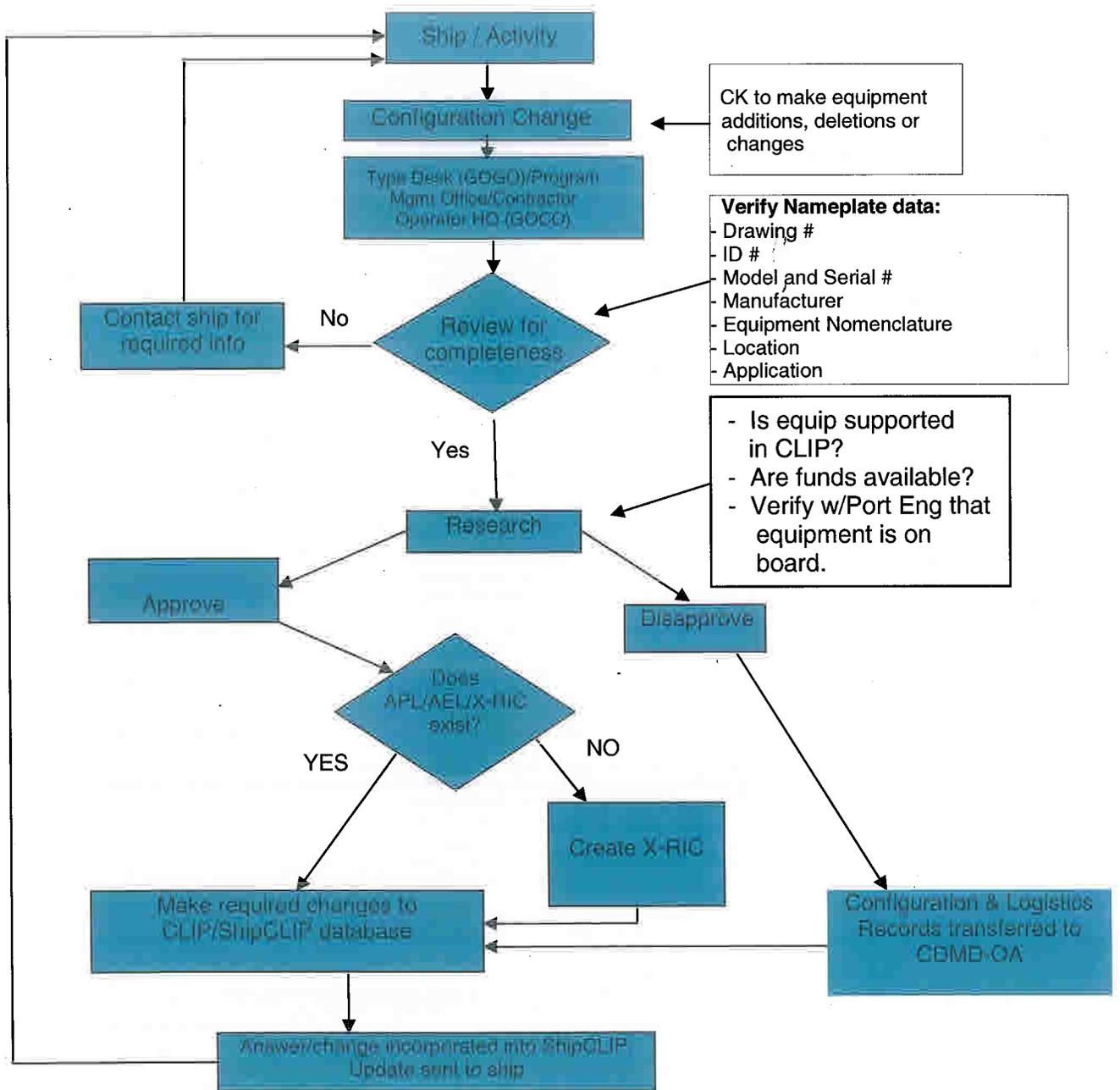


FIGURE A-1, CONFIGURATION CHANGE FORM PROCESSING FLOW

23 MAY 2011**A.4 FORMS AND FORMAT FOR REQUESTING SHIP'S CONFIGURATION CHANGES**

The ship's automated configuration change form is used to document and report all actions involving a completed configuration change. Specifically, the forms will be used to report the:

- a. Addition/installation of any new equipment;
- b. Deletion/removal of any installed or in-use equipment;
- c. Replacement/exchange of any installed or in-use equipment;
- d. Modification of any installed or in-use equipment;
- e. Relocation of any installed equipment;
- f. Accomplishment of any alteration directive (e.g., TRANSALT, BOATALT, MACHALT, etc.). (Note: These may not always result in a configuration change.)
- g. Correction to erroneous data found in ShipCLIP, CLIP, CMLS or CDMD-OA.

23 MAY 2011

APPENDIX B**PROCEDURES FOR SUBMISSION AND CONTROL OF ALLOWANCE
CHANGE REQUESTS (ACRs) AND FLEET COSAL FEEDBACK REPORTS (FCFBRs)****B.1 INTRODUCTION**

a. The success of the MSC CDMP is dependent on accurate and timely feedback from fleet units to the CDM on matters affecting ship's repair part allowances and technical information found in ShipCLIP/CLIP/CMLS. The purpose of this appendix is to issue procedures for submitting, controlling, and processing requests for changes to allowances of portable equipment and components, equipage, repair parts, and other direct support material for MSC ships.

b. These procedures will be used on all requests submitted for:

(1) Changes to range (parts not currently allowed) or depth (the quantity of parts currently allowed) of authorized allowances of spares, portable equipment or components, equipage, and

(2) Changes to technical or supply management data that may impact on the quantity or quality of allowances.

c. Reporting of authorized changes in ship's installed equipment configuration is handled via Configuration Change reporting (Appendix A) or the MSC standard alteration (TRANSALT) procedures in accordance with reference (a).

B.2 ShipCLIP

a. Authorized ship allowances are published in ShipCLIP, reflecting the ship's allowance policy of OPNAVINST 4441.12 (Series). ShipCLIP is both a technical and supply program that includes repair part and maintenance information for all installed equipment and components. It also includes allowance lists of repair parts, special tools, and other support items required for the operation, overhaul, maintenance, or repair of installed equipments and components. These lists are computed, modified, or adjusted at varying intervals based upon changes of installed equipment or components, revised maintenance policies, failure rates or operating conditions.

23 MAY 2011

b. ShipCLIP is an overall picture of a ship's support level. As such, it must be maintained actively if the ship is to have sufficient support for its mission. Because ShipCLIP provides the ship with unique data, and because it is the only source for determining the range and depth of items to be stocked onboard the ship, it is essential that any changes are incorporated quickly and accurately by the ship, MSC and NAVICP, Mechanicsburg.

c. The realities of day-to-day shipboard operations may not always be reflected in support documentation. Actual failure rates may or may not equal performance projections, changes in operational tempos may change system and equipment usage rates, or operators may become aware of system upgrades that improve the performance of their equipment before those improvements can be incorporated on a large scale. These, and many other circumstances, may cause the ship's crew to feel that a change (addition, deletion or modification) to an existing shipboard allowance is necessary. It is extremely important that the request for any change to shipboard allowance levels be identified and submitted when it is recognized and that the request is promptly reviewed and resolved.

d. ShipCLIP is a ship specific download of the MSC database CLIP. It contains all of the technical and logistics information pertinent to the vessel. Changes to the ShipCLIP database may originate from ships or other sources within the operational and logistic elements of MSC and the Navy but all are passed through the CDM.

B.2.1 Requests for Changes to Allowances. Requests for changes to the data and allowance content of ShipCLIP may be made by user activities for:

a. Increasing or decreasing the authorized range or depth of repair parts applicable to installed equipment, equipage or portable equipment. (Note: The provisions of NAVSUP P485 apply for stocking non-depot level repair (DLR) repair parts above authorized allowance under Selected Item Management (SIM).)

b. Increasing or decreasing the quantity of authorized equip age or portable equipment or components.

c. Adding a portable equipment or equipage item that is not currently authorized.

23 MAY 2011

d. Making corrections or additions to the technical and management data contained on Allowance Parts List (APLs) and Allowance Equipage Lists (AELs) included in ShipCLIP.

B.2.2 Changes in Portable Equipment or Equipage Allowances.

Requests to change the allowance of portable equipment and equipage must be reviewed by the appropriate technical organization and the Program Manager to ensure that:

a. The portable equipment, component, or equipage is approved and suitable for that particular ship and function.

b. Consideration is given to such factors as safety, engineering and any requirement for additional support systems and materials.

c. The requested change is reviewed with regard to applicability to other ships.

d. Required funds have been programmed or can be made available for the procurement of the requested equipment or component.

B.2.3 Changes in Spares Allowances. Requests for changes to allowances of supporting material for installed equipment and equipage must be reviewed by each level of management and appropriate technical and logistics activities for:

a. Applicability of the proposed change to other ships of the type or class.

b. Suitability to the established maintenance plan or requirement for a change thereto.

c. Availability of technical data upon which to make a decision.

d. Adequate storage space for additional parts requested.

e. Required funds have been programmed or can be made available for the procurement of the requested equipment or component.

B.3 RESPONSIBILITIES

The CDMP manual and its appendices address specific responsibilities under the Configuration Data Management

23 MAY 2011

Program. Since this appendix addresses the shipboard reporting procedures, the responsibilities of other activities are not included. Shipboard responsibilities are assigned as indicated below.

B.3.1 Ship Configuration Manager. The ship's Chief Engineer and his/her designated Configuration Manager have primary responsibility for ensuring that the configuration record for a ship is accurate and current.

B.3.1.2 Supply Department. Ships' Supply personnel are responsible for ensuring that the ship's ShipCLIP database accurately supports mission and maintenance requirements. Consistent with these responsibilities, ships may initiate changes necessary to adjust inadequate allowances or correct improper data in ShipCLIP.

B.4 FORMAT FOR REQUESTING ShipCLIP CHANGES

Depending upon the type of change involved, there are specific procedures or methods to be used for requesting ShipCLIP changes. These include the Allowance Change Request (ACR) and the Fleet COSAL Feedback Report (FCFBR). These types of change requests are discussed in the following paragraphs. NAVICPINST 4441.170 (series), Coordinated Shipboard Allowance List Use and Maintenance Manual, contains additional details and definitions of terms, if required. MSC's automated configuration and status accounting system, CLIP and ShipCLIP, integrate capabilities to complete requests for ShipCLIP changes using automated request forms in a menu driven process. CLIP and ShipCLIP users must still comply with these policies and procedures that are found in the ShipCLIP User's Manual.

B.4.1 Allowance Change Request (ACR). The automated ACR found in ShipCLIP is used to request additions, increases, deletions, or decreases to allowances of equipment or portable equipment such as Navigation items, Damage Control items, other ship work center items normally identified in Allowance Equipment Lists (AELs), and repair parts which are impairing maintenance capability.

B.4.2 Ship Allowance Change Procedures

a. Ships will originate an ACR to request a change in ShipCLIP portable equipment/equipment/repair part allowance and forward it to the CDM, via the PML, MSFSC LTD or Contract Operator Headquarters (HQ), as applicable. Each ACR must have

23 MAY 2011

the required information to allow the CDM to determine the responsible processing control point. Incomplete ACRs will be returned for additional information or approval. Figure B-1 depicts this process.

b. When replacement action or deletion of a portable equipment or component is involved, ships will ensure that turn-in and disposition action is carried out in accordance with PM or MSFSC Type Desk directives and applicable instructions.

c. Steps in the shipboard ACR process

(1) The four steps in the ACR process are:

(a) Identification of the requirement.

(b) Preparation and submission of the ACR package.

(c) Review of the ACR by the approving authority, disapproval/approval and, if necessary, modification of allowance documentation.

(d) Material procurement to satisfy approved requests.

(2) Specific actions occur within each step.

(a) Identification of the requirement

1. The ship's force is responsible for identifying potential allowance change requirements. This requires research to ensure that the requirement is not already covered by the existing ShipCLIP database. Specialized items, such as medical allowances and mission support equipment, are covered by their own allowance lists and should be consulted separately.

2. ACRs apply to items that are found on an Allowance Parts List (APL) (for repairable items) or on an Allowance Equipage List (AEL) (for equipage items). Requests for changes that affect the ship's configuration (addition or deletion of an installed system/equipment) are not requested via an ACR because they require the approval of the ship's CM. These requests should be referred to the ship's CM via a Configuration Change Request.

23 MAY 2011

(b) Preparation and submission of the ACR

1. The Master is ultimately responsible for ensuring that ACRs are prepared and submitted to correct allowance deficiencies. ACRs are submitted using automated ShipCLIP ACR form and providing all supporting technical data (e.g., APL/AEL number, technical manual data, vendor catalog data, usage data) necessary to justify the proposed change. The following guidance applies to all ACRs:

a. All requested changes to a particular APL/AEL should be included on one ACR. This eases the update of CDMD-OA and APL/AEL at NAVICP when the ACR is approved.

b. An ACR should apply to only one system or equipment, if an APL/AEL can be identified. If the APL/AEL cannot be identified, functional application must be identified. These steps ease the preparation of X-RICs and assignment of the Hierarchical Structure Code (HSC) and Service Application Code (SAC) - two important steps in the update of ShipCLIP.

c. ACRs are serialized and tracked in an automated ShipCLIP log to follow approval/disapproval and material procurement. Serial numbers are used only once and should consist of the Feedback Type (configuration change, ACR, FCBR), the ship's Unit Identification Code (UIC), the calendar date (YYMMDD) and a sequentially assigned number (e.g., ACRN22248090301S00001).

d. ACRs must be fully justified. All the necessary supporting documentation (e.g., technical manuals, instructions, vendor data, usage data, etc.) should be referenced and supplied as attachments if necessary. Many of these references will not be held by the reviewing activities. If they are provided as reference material, the review and approval process of the ACR can be dramatically shortened.

e. It is essential that all requested material be identified as completely as possible. If approved, the ACR will be used to initiate procurement; therefore, such data as the vendor's latest part number(s), the Commercial and Government Entity (CAGE) code, and any other identifying data should be provided to ensure that the exact item requested is completely identified. If an item has a part number only then a source of supply should be identified. If a particular make or model is required, justification needs to be provided explaining why substitutes are not acceptable.

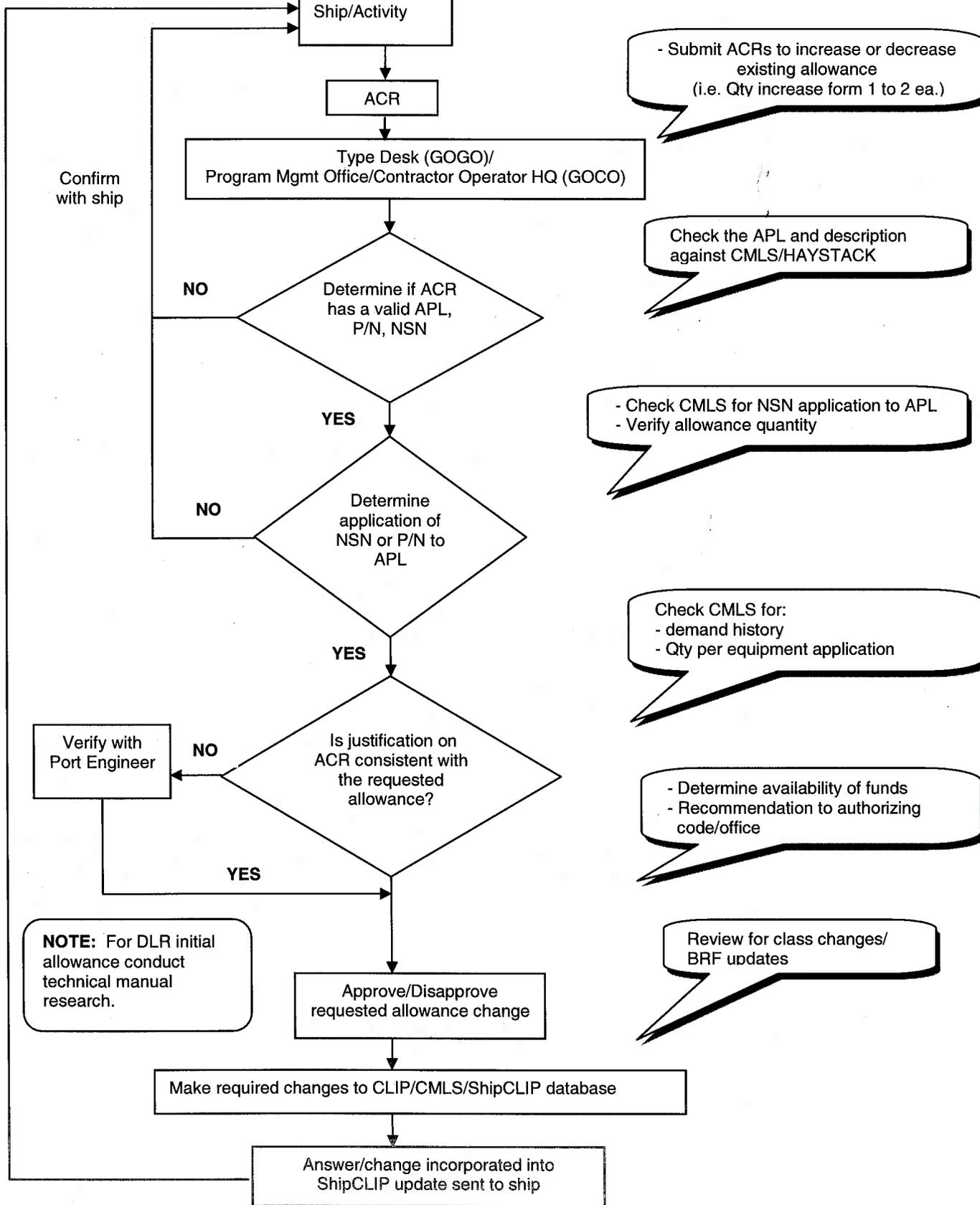
23 MAY 2011

2. The failure to provide full justification for the proposed change or complete documentation to support the request will result in a delay in the review of an ACR and could lead to its disapproval.

NOTE: If a requirement is critical (e.g., lack of material would constitute a safety hazard or generate a CASREP), then the ACR may be submitted by e-mail or Naval Message to the appropriate PML/LTD.

23 MAY 2011

FIGURE B-1, ALLOWANCE CHANGE REQUEST (ACR) PROCESS



23 MAY 2011**B.4.3 Fleet COSAL Feedback Report (FCFBR)**

a. The ShipCLIP FCFBR will be used to submit a request for correction to a technical problem in a published APL or AEL. It will be used to:

(1) Report errors or omissions such as wrong or missing manufacturer, nomenclature, technical manual number, stock number, etc.

(2) Report discrepancies between part numbers listed in technical manuals and those listed on an APL/AEL.

(3) Request that a new repair part be added to the range of repair parts listed on an APL. (Note: Parts added as a result of an approved FCFBR will appear in a subsequent APL but may or may not be granted an on board allowance, depending on the COSAL computational model used, population, and replacement rate. If it is necessary to carry the part on the ship request the allowance and include the justification on the FCFBR)

(4) Request the deletion of an item incorrectly listed on an APL that is not part of the equipment.

(5) Recommend changes in assigned Source, Maintenance and Recoverability (SM&R) codes, notes codes, etc., that are considered to be incorrect.

(6) Report errors in Circuit Symbol Number (CSN).

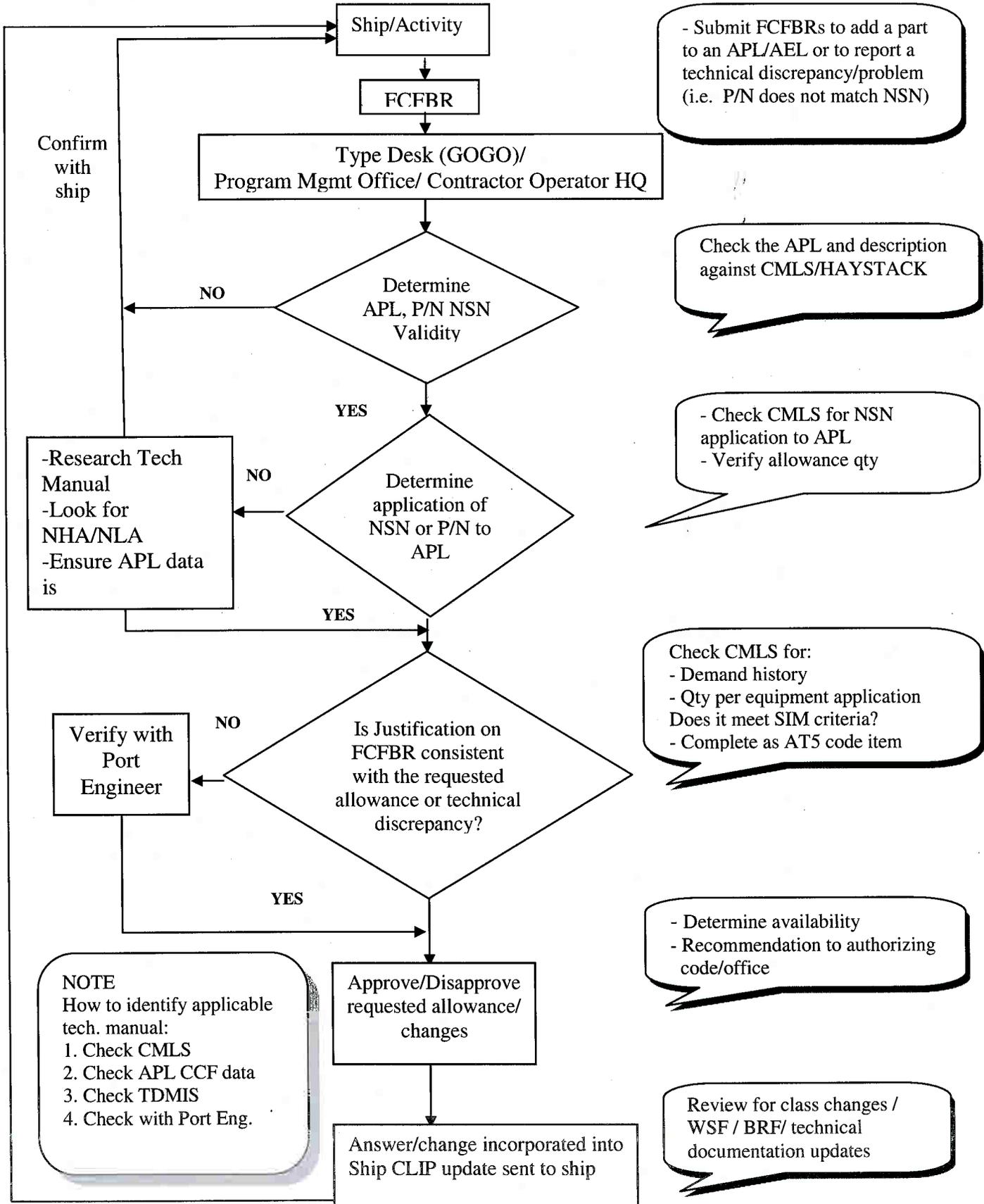
(7) May be used for all feedback requirements including configuration and allowance change requests.

b. Figure B-2 depicts the FCFBR process.

c. Forward the FCFBR via ShipCLIP to the CDM for review and action.

23 MAY 2011

FIGURE B-2, FLEET COSAL FEEDBACK REPORT (FCFBR) PROCESS



23 MAY 2011

B.5 CROSS CLASS FEEDBACK

From time to time, feedback will be submitted by one ship which applies to ships of another class. To ensure all ships receive proper supply support the following steps will be taken.

a. A report will be run to determine all ACRS and FCFBRs which meet the following criteria:

(1) The feedback was approved for the ship that originally submitted it.

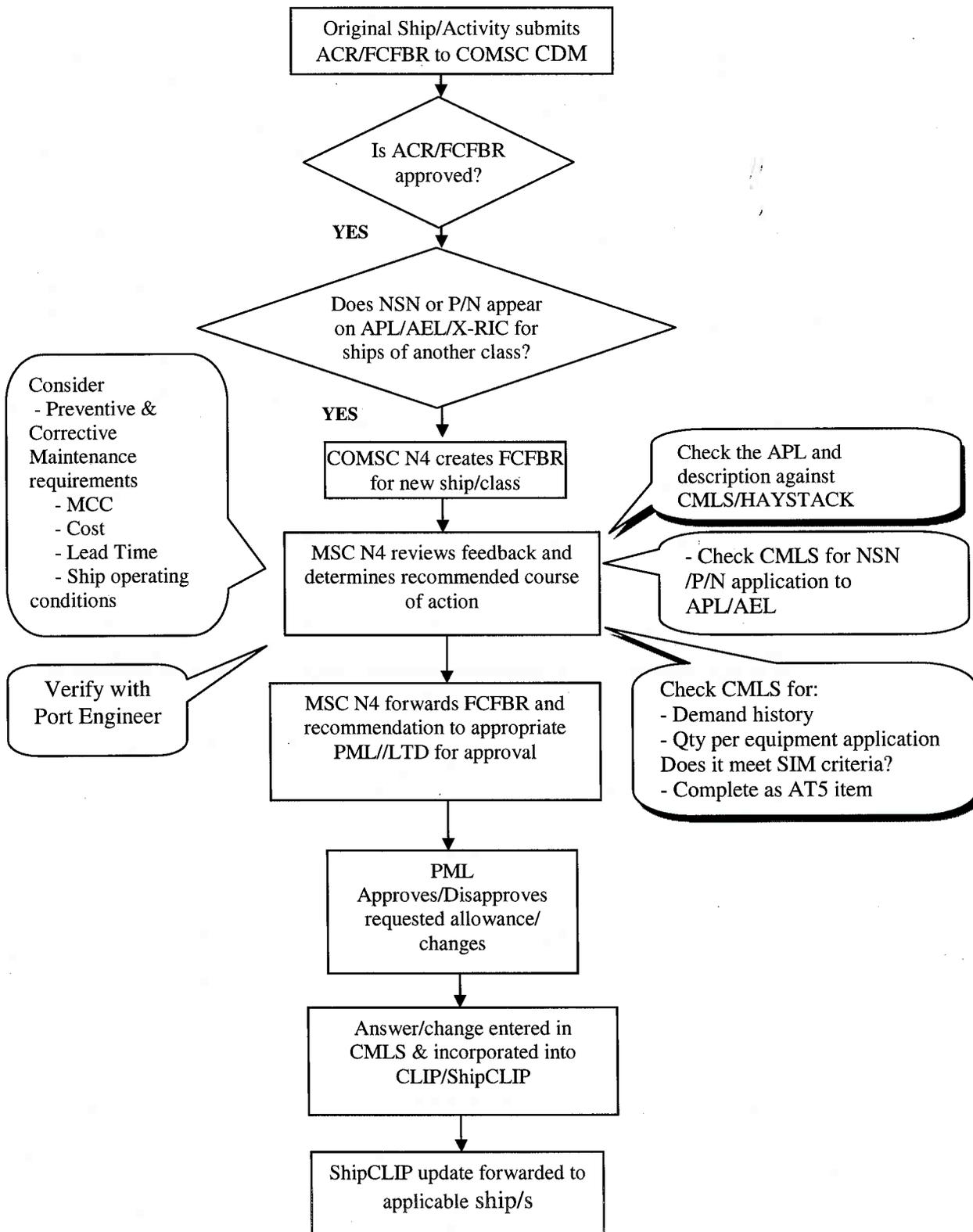
(2) The same APL/AEL/NIIN combination appears on another class of ship.

The COMSC N4 CDM will review this report and determine those feedback which should be applied to other ships and create FCFBRs for those new ships. COMSC N4 will then assign this feedback to subject matter experts within COMSC N4 for additional review.

b. The subject matter experts will ascertain if piece parts, maintenance actions, etc., described on the assigned feedback are relevant to ships of another class. Preventive and corrective maintenance requirements, cost, failure rate, ship's operating condition, parts lead time, etc. will be taken into consideration. COMSC N4 will determine a recommended course of action and forward the FCFBR to the appropriate PML/LTD for approval.

c. If the feedback and course of action is approved by the PML, COMSC N4 will update CLIP/ShipCLIP to reflect the correct information. Figure B-3 summarizes the data flow of this process.

FIGURE B-3, CLIP/SHIPCLIP UPDATE PROCESS



23 MAY 2011**B.6 SUMMARY**

ShipCLIP is a dynamic database; therefore, it is vital that its currency and accuracy be maintained through aggressive feedback from users. In this manner, shipboard maintenance and supply personnel will be able to use, analyze, and correct the ship's ShipCLIP. This process will ensure that the proper repair parts and operating space items are available to the maintenance technician to maintain the equipment at the optimum operational capability for an extended period of time.

23 MAY 2011**APPENDIX C****CONFIGURATION DATA MANAGEMENT IMPLEMENTATION****C.1 INTRODUCTION**

The CDM chapter in the CDMP Manual is a broad layman's view of the CDMP and discusses configuration management, conceptually. This appendix provides logistics managers and technical agents with additional details to implement the MSC configuration accounting program, defines basic terms, and explains the CDM's role in establishing and maintaining the MSC fleet configuration baseline.

C.1.1 Definitions. CM data is used by a variety of managers, ashore and afloat, with different backgrounds. To establish a common frame of reference, the following CM terms are defined.

C.1.1.1 Functional Group Code (FGC). A ten digit maximum number assigned during construction of new ships. The FGC concept is a comprehensive management information system capable of providing planned, current and/or total ship configuration data in a hierarchical breakdown of ship systems, subsystems, equipment, and components.

C.1.1.2 Functionally Significant Item (FSI). Any shipboard item or component that performs a function and is significant to the performance of a system. A FSI can be a system, subsystem, equipment, or component or a summary level of two or more FSIs.

C.1.1.3 Functional Nomenclature/Equipment Functional Description (EFD). The common name or nomenclature that identifies an item as a functional part of the system or equipment it supports. This nomenclature should be similar to that found in technical manuals and design drawings and should be common use terminology that will be quickly recognized and understood by shipboard and industrial users.

C.1.1.4 Hierarchical Structure Code (HSC). The HSC is the Top-Down Breakdown (TDBD) numbering system, such as the FGC, that defines the hierarchical structure of the configuration of the ship and its systems. The HSC is a key reference number used in planning all levels of maintenance, managing logistics support, organizing technical documentation and performing design work throughout the life of the ship. Additional details for HSC creation are contained in the NAVSEA Technical Specification 9090-700 (Series).

23 MAY 2011

C.1.1.5 Functional Configuration Baseline (FCB). A hierarchical top down breakdown (TDBD) listing of the FSIs on the ship. The FCB is arranged by the HSC/FGC and associates the FSI, Functional Nomenclature, the official Functional Nomenclature Abbreviation and the quantity to a unique FGC.

C.2 CONFIGURATION DATA MANAGEMENT CONCEPT

Configuration Data Management under the CDM can be viewed as a phased process. Three major phases constitute the typical ship profile in this process. First, and most important, since all subsequent effort will depend on it, is the "Initializing" phase, which "initiates" the ship or class into the program, establishes a baseline configuration and develops the "closed loop" reporting system for future changes. Second is the "Industrial Availability" phase, wherein 90-95 per cent of changes driving the configuration status accounting process occur.

Finally, the "Operational" phase is the normal day-to-day employment of the ship, carrying out its mission. Changes during this phase are few, with the exception of voyage repairs or emergency change-out of failed equipments. Nevertheless, documentation submission is frequently accelerated, as operational conditions may allow catching-up on paperwork. Under each of these phases the CDM has specific responsibilities for which it must plan and prepare. These tasks are described below.

C.3 INITIALIZATION

a. The CDM will transition ships or classes to CDM configuration management through Initialization. This procedure will normally be transparent to the ship since the task is accomplished between the database administrators and the CDM. Initialization's function is to reformat all future configuration change input into compatible data and to establish the administrative actions necessary to clean up the old files and prepare CDM-OA to accept only CDM originated information. A major component of initialization is the development of the Baseline Configuration, which will become the functional benchmark for future configuration accounting. The CDM also has to coordinate changes in information flow to ensure all configuration data will now flow through him. Finally, the CDM, in concert with the Ship Program Managers (PMs), will identify Critical Equipments which will become the focus of initial verification and data quality assurance.

23 MAY 2011

b. Once the baseline is established, the CDM will load validated equipment hierarchical structure coding into the CLIP system. This code is FGC compatible, modified to accept MSC terminology, and provides the common thread that will link all ships of the class into a single recognized configuration baseline. It is at this juncture that the comparison can be made to establish what should be onboard (functional configuration) with what is actually installed (physical configuration). The CDM can now monitor all future action that will modify the baseline data.

C.4 CDM ACTIONS UNDER THE INITIALIZATION PHASE

a. As previously noted, initialization is the process that loads the available ship's configuration, alteration, and logistics data into the CLIP Database. The CDM extracts the initialization data from the Platform Planning Yard CDM, normally using a "V09" download which is loaded into CLIP. Through automated processing, CLIP converts the data into the initialization format specified in NAVSEA Technical Specification 9090-700 (Series). Essentially, this format consists of the following record types:

- (1) Record Type 1 - Ship identification data
- (2) Record Type 2 - Equipment/component configuration data
- (3) Record Type 3 - Logistics data (when available)
- (4) Record Type 4 - Alteration data

b. CLIP will also arrange the above configuration data in the tiered level (hierarchical) structure described earlier. Initialization is a relatively simple automated process that converts existing CDMD-OA configuration data to a new format. It requires further verification to ensure that the newly initialized database is accurate and complete. Accordingly, the CDM must establish a ship functional profile, match existing configuration information with the profile and then physically verify the existence of that configured item. This verification is called the Baseline Validation. Since the process may vary widely from ship to ship, procedures for the initialization of a specific ship or ship class will be developed internally by the CDM working with the PMs and MSFSC Type Desks.

23 MAY 2011

C.5 BASELINE VALIDATION

a. Baseline Validation is the second step in phasing a ship or class into CLIP. After the database has been established, this process reviews and corrects the tiered level HSC structure of the initialization file, validates the ship's configuration, and verifies the associated logistics support data. Since initialization creates a file with little or no review and verification, the objectives of Baseline Validation are:

(1) Review and correct the tiered level HSC structure of the initialization file.

(2) Validate the configuration of the ship.

(3) Verify the logistical data supporting the above configuration.

C.5.1 Baseline Validation Procedures. The scope of Baseline Validations will follow the guidelines below, although these may vary at the discretion of the PM if circumstances dictate. A Baseline Validation normally includes a ship-check of the configuration of critical equipment (including alteration status) and the research necessary to identify/verify the correct logistics support (including applicable revisions) for the equipment. "Equipment" includes systems, subsystems, equipment, and configuration worthy components ("configuration worthy" is defined in paragraph C.5.3).

C.5.2 Priorities. While the objective of the Baseline Validation is to cover all ship configuration and logistic information, constraints on time and resources may necessitate a phased approach. The following priorities are normally followed:

a. First, Baseline Validation will encompass validation of critical equipment and related logistics information.

b. Next, the verification of equipment experiencing CASREPs and related logistics information.

c. Finally, other non-critical, maintenance worthy equipment, as directed by the PM. The minimum requirement for non-critical equipment is to accomplish a validation whenever there is an indication of inaccurate data in the ship's CLIP/CMLS Database.

23 MAY 2011

C.5.3 Configuration Worthy Items. To be effective, CLIP/CMLS must include all configuration worthy items on the ship. These are items that are deemed necessary for the operation, maintenance, modernization and support of a ship's systems or equipments. Specifically, an item is configuration worthy if:

a. It requires any one of the following elements of logistics support: spare parts, training, technical manuals, technical repair standards (TRSs), maintenance, drawings (installation drawings, Selected Record Drawings or configuration control drawings), special tools, test equipment or maintenance related consumables.

b. Configuration information (e.g., label plate data, technical characteristics data, component drawing) is required to support the appropriate maintenance level (organizational or depot) and modernization (planning and execution of availabilities).

c. It is needed to fully describe the functional hierarchy (tiered levels) of the ship's systems, equipment or components.

C.5.4 Critical Systems and Equipment. The definition of criticality often lies in the eyes of the beholder. The following is a guideline that satisfies the initial goal to provide a working definition, but it may be changed by appropriate technical authorities, (e.g., COMSC N7).

C.5.4.1 Critical System Criteria. A system is critical if it meets any of the following criteria:

a. Failure of the system would cause a severe degradation in mobility (loss of more than 50% of steering or propulsion).

b. Failure of the system would cause a severe degradation (loss of more than 50%) of a primary mission capability.

c. Failure of the system would cause a total loss of a secondary mission capability.

d. The system is required for survival of the ship (e.g., damage control, firefighting, self defense).

e. Failure of the system would cause an immediate, significant hazard to the safety of the crew.

23 MAY 2011

f. The system has a history of significant problems.

C.5.4.2 Critical Equipment and Component Criteria. An equipment or component is critical if it meets the following criteria:

a. It is a piece of "equipment" in a critical system. For example, pumps, compressors, dehydrators, generators, switchboards, are pieces of equipment.

b. Components that are a part of a piece of critical "equipment" are also critical. The components that are part of the equipment are generally those that would be removed with the equipment if the equipment were removed from its foundation for shop overhaul.

c. It is a component (of a system) that is vital to the operation of that system (e.g., main firemain segregation and branch isolation valves).

C.5.5 Critical System/Component List. COMSC N4, in conjunction with PMS and/or LTDs, will develop lists of Critical Systems/Equipments for each class of ship. A generic listing, developed by NAVSEASYS COM may be used as a guide. It is available in NAVSEA Technical Specification 9090-700 (Series).

C.5.6 Review/Correction of Configuration Database. This is the first step in a Baseline Validation. In reviewing and correcting the tiered level (hierarchical) structure of the Initialization database, the CDM will take the following steps:

a. Assemble updated Selected Record Drawings (SRDs), damage control diagrams, system level drawings, label plates, Ship Information Books (SIBs), system level technical manuals, and other documentation for the ship or class that define functional boundaries.

b. Ensure that the structure of the database is consistent with the above documents.

c. Assign Equipment Functional Descriptions (EFDs). This normally requires breaking down configuration records to a quantity of one. (Exceptions: lights, small circuit breakers, and small potable water valves do not warrant individual description and therefore can be grouped under one EFD); EFDs should be unique for each configuration item and identical on all hulls within a ship class. EFDs should also be consistent

23 MAY 2011

with common Fleet usage, avoiding cryptic abbreviations. Plain English should be used by taking full advantage of the 48-character data field allotted for each EFD.

C.5.7 Preparation for Shipboard Validation. After the review/correction of the Initialization file, the PM or LTD can now schedule a shipboard validation of selected items using WinMASP. The successful performance of a validation requires the coordination of many factors, including resource availability, ship's operating schedule, time available for performance of the validation, and the amount of equipment to be validated. The key to this effort is the assistance provided by shipboard personnel, particularly the Chief Engineer and the ship's Configuration Manager, who must coordinate with the PM to determine the optimum schedule for performance. In the Configuration Verification process, the AS Team identifies, verifies, and documents select equipment changes accomplished during the availability. The AS Team also selectively validates current ship's configuration data.

C.5.8 Accomplishing the Baseline Validation. At this point, the AS Team is ready to commence its effort. When the AS Team completes its ship-check, the resulting documentation will be forwarded to the PM/LTD for review and reconciliation with the database. Additional coding (e.g., hierarchical structure, EFD) will be added by the CDM Logistics Support Contractor.

C.6 CDM/PM CO-ORDINATED ACTIONS DURING INDUSTRIAL AVAILABILITIES

During ship Overhauls/Industrial Availabilities oversight function continues, involving a broad range of actions. Coordinating with the PMs and/or LTDs as described in the CDMP manual, the CDM will monitor the performance of the MSC CDMP. Contract Operators will perform Industrial Availabilities in accordance with the contract.

C.6.1 Policies. MSC has established criteria for documenting, categorizing, and tracking equipment configuration changes. This criteria applies to all equipment configuration changes, including those completed during industrial availabilities, service order periods, by ship's force, and any other engineering or maintenance activity performing alterations on MSC ship equipment. This policy does not apply to sponsor equipment configuration changes.

23 MAY 2011

a. All newly reported or installed, unsupported equipment will be identified and categorized concerning maintenance and configuration worthiness.

b. Non-maintenance and non-configuration worthy items will not be supported with repair parts, but CLIP and ShipCLIP will retain a marker for the item and records will be retained for reference should a change request be forwarded for the same item on more than one ship or occasion.

c. Non-maintenance and non-configuration worthy items will be grouped individually, or on special 89000 series APLs, separated by system if possible.

d. Configuration worthy and maintenance worthy items will be identified by X-RIC using MSC's specified procedures. WinMASP will be used to build X-RICs for new/unsupported equipment and load initial technical data and parts list data. All data from WinMASP will be loaded into CLIP to retain Bill of Materials (BOM) information provided by manufacturers. CLIP will be loaded with all part numbers and CAGE data from equipment BOM lists, or manufacturer's parts lists, along with any related NSNs or Navy Item Control Numbers (NICNs).

C.6.2 Responsibilities. Under the CDMP, several activities are responsible for accurately documenting configuration changes and verifying equipments changed during industrial availabilities. Responsibilities of the contract operator are delineated in the ship operating contract.

a. PML

(1) Determines the timing for database downloads and scheduling/availability of ShipCLIP products.

(2) Obtains the list of all equipment configuration changes planned during availabilities (e.g., TRANSALTs, Voyage Repair Requests, Work Packages, other alteration installation schedules).

(3) Ensures that input is made to the CLIP database for all configuration-worthy planned changes in support of the availability planning process.

(4) Performs a preliminary analysis of ship's data records with the CLIP database, identifying problem areas and reconciling the differences.

23 MAY 2011

(5) Trains and tasks the MSC on-site logistic representative to monitor the installing activity's performance in preparing and validating installation data and to verify ship's configuration change request transactions that do not involve work under the cognizance of the port engineer. The MSC on-site logistics representative will interface with the Integrated Logistics Review (ILR) and Validation Teams for audit/validation work that is being accomplished by these teams in support of the CDM.

(6) Assists the Availability Support Team in resolving configuration identification problems.

(7) Directs the Availability Support Team to cross-check planned changes against the completed installation data, including conducting a review of all emergent changes. Unplanned changes will be resolved with the PMs.

(8) Reviews all change transactions to be made to the configuration database to ensure the records are complete. Complete the Quality Assurance process.

b. LTD

(1) Obtains the list of all equipment configuration changes planned during availabilities (e.g., TRANSALTs, Voyage Repair Requests, Work Packages, other alteration installation schedules).

(2) Ensures that input is made to the CMLS database for all configuration-worthy planned changes in support of the availability planning process.

(3) Performs a preliminary analysis of ship's data records with the CMLS database, identifying problem areas and reconciling the differences.

(4) Trains and tasks the MSC on-site logistics representative to monitor the installing activity's performance in preparing and validating installation data and to verify ship's configuration change transactions that do not involve work under the cognizance of the port engineer. The MSC on-site logistics representative will interface with the Integrated Logistics Review (ILR) team for audit/validation work that is being accomplished by these teams in support of the CDM.

23 MAY 2011

(5) Assists the Availability Support Team in resolving configuration identification problems.

(6) Directs the Availability Support Team to cross-check planned changes against the completed installation data, including conducting a review of all emergent changes. Unplanned changes will be resolved with the PMS.

(7) Reviews all change transactions to be made to the configuration database to ensure the records are complete. Complete the Quality Assurance process.

(8) Identifies high-cost, long-lead-time items required for 6000/12000/20000 hour overhauls (i.e., hub replacement for controllable, reversible pitch propellers.) These items are not regularly stocked due to the fact that they are rarely needed and are often expensive. Process is necessary to accommodate life cycle material requirements for repair jobs that occur every 5/10/15 years. LTD should regularly review the ship's configuration data to identify these items and ensure they are ordered in time for overhauls.

c. CDM

(1) Ensures that the proper Hierarchical Structure Codes (HSC), Equipment Functional Descriptions (EFD), and other key ship data are assigned to all change transactions.

(2) Transmits input transactions to CDMD-OA, when required.

d. Availability Support (AS) Team

(1) Obtains a configuration download from CLIP after initialization prior to each maintenance availability. Additionally, the Availability Assist Team will review the CMLS change request document tracking database, all backlogged configuration change requests forwarded by the CDM, and local ship change request files.

(2) During each availability as a part of Configuration Analysis, the AS Team will accomplish several validations. The resource availability and costs of this effort will be closely monitored.

(a) The AS team will sight validate all equipment changes accomplished during the Availability and update

23 MAY 2011

CLIP/ShipCLIP/CMLS accordingly. For all repair items in the availability work package and the MSC Planned Equipment Addition/Deletion Report, sight-validate all equipment configuration changes. Report on all items in the MSC Planned Equipment Addition/Deletion Report.

(b) The AS team will sight validate all CCFs submitted to the CDM since the previous availability to confirm component characteristics, location, serial number, HSC, etc. The AS Team will review local ship files and sight-validate all new CCFs in the files that the CDM did not identify.

(c) The AS team will selectively validate current ship configuration data. This validation will be conducted in two phases. The first phase is a sampling taken from the ship's configuration files and compared to actual equipment installed. The validator will review the ship's configuration file in WinMASP and select a random sampling of 15 major equipments (Mission Criticality Code (MCC) 3 and 4) and record data on the data sheet. Selected equipments will be sight validated and the findings compared to those recorded in WinMASP. Phase two is conducted by performing random sight validations on installed equipment, then comparing the data collected to that in the ship's configuration data files. The validator will walk the ship and take a sample of 15 major installed systems or equipments (MCC 3 and 4), as recommended by the ship's Chief Engineer. Samples should not duplicate equipment validations that are part of the ILS availability process. All discrepancies will be documented in WinMASP.

(3) Provide a monthly status report of all completed actions on change requests. Status reports for ships actually in an availability for the month will not be required.

(4) The AS Team will generate an X-RIC or configuration placeholder in the ship's configuration database for all unrecorded installed maintenance and configuration worthy equipments.

(5) The AS Team will update ship repair part allowance data after every availability and report changes to the CLIP allowance database. All contractor furnished spares for unsupported equipments that are placed in supply storerooms will also be recorded and reported.

23 MAY 2011

e. MSFSC Ship's Class Manager. The MSFSC Ship's Class Manager will ensure the configuration control and lifecycle maintenance of all ships within its class in accordance with plans approved by the COMSC Program Manager.

C.7 CSA ACTIONS DURING SHIPS OPERATING PHASE

a. Throughout normal fleet operations, MSC ships will continue to report configuration changes. In the CDMP's closed loop system for GOGO ships, the MSFSC LTD will receive and process all configuration and logistics change data generated by:

(1) Changes reported by the Fleet or other activities via the automated configuration change (CK) process.

(2) Changes reported by installing activities after installation of TRANSALTs, Voyage Repairs, Field Changes, etc.

(3) Changes (not resulting from a configuration change) to logistics elements, (e.g., Allowance Change Requests (ACR) and Fleet COSAL Feedback Reports (FCFBR)).

(4) Changes reported by any other authorized source. For GOCO ships these changes will be received and processed as described in the existing contract.

b. The CDM has identified specific requirements for reviewing, researching and processing change requests. The review process is designed to accomplish the following objectives.

(1) Feedback requests contain sufficient data in the correct format (form) to process.

(2) Request is for a valid deficiency (ship configuration records do not reflect the equipment identified).

(3) For valid deficiencies, the CDM requires specific minimum and maximum research efforts to be completed on each request.

(4) Change requests will always be processed with CDM goals of assigning a configuration record with a quantity of one.

23 MAY 2011

C.7.1 Configuration Change Request Forms (CCFs)

a. Ship CMS will be responsible for reporting all changes to configuration in the operating phase. PM and/or LTD will review change requests, forward requests to the AS Team, when the ship is within 90 days of a maintenance availability, or the CDM logistics support contractor. The CDM logistics support contractor will research and post changes, using the CLIP Configuration Status Accounting module, and update CDMD-OA monthly using the required maintenance process.

b. MSC policy is to identify equipment changes throughout the operating cycle, and place a configuration "marker" in CLIP and the CDMD-OA as soon as possible after it is reported and identified. A "marker" will be used to ensure items identified by validation or CCF are clearly labeled, avoiding duplication of the same cycle at a later date. For equipment validations and previously initiated efforts, as unsupported equipments are identified and move through the CDMP process, CLIP will allow for review of all items for maintenance significance and configuration worthiness. It will also provide cross-reference to what CDMP action initiated the support requirement, along with the related configuration item and identification of the system that requires additional logistics support. CLIP will also provide visibility of pending configuration change requests to MSFSC and Ship Contract Operators.

c. All newly reported or installed, unsupported equipment will be documented and a determination made concerning maintenance and configuration worthiness and functional significance. Non-selected items will not be supported; but CLIP and ShipCLIP will retain a configuration marker for the item. Records will be retained for reference should a change request be forwarded for the same item on another ship. Non-maintenance worthy items will be grouped individually, or on special 89000 series APLs, and separated by system if possible. Configuration and maintenance worthy items will be identified by X-RICs using CDMP specified procedures. Whenever possible, WinMASP will be used to load initial technical data and provisioning parts list (PPL) data for unsupported equipments. All data from WinMASP will be loaded into CLIP to retain BOM information provided by manufacturers or loaded by the AS Team or CDM logistics support contractor.

C.7.1.1 Responsibilities. The CDMP integrates configuration and logistics support requirements for MSC ships into one focused process using paths dictated by Ship PMs. Configuration

23 MAY 2011

Change Requests and Fleet COSAL Feedback Reports are reviewed and processed using distinct paths but in accordance with the goals of the CDMP. Ship generated change requests will receive top priority for processing.

a. CDM Logistics Support Contractor

(1) The CDM Logistics Support Contractor will review all change transactions intended for CDMD-OA to ensure that the record is complete and obtain missing data and verify any suspect data from the responsible reporting activity. (The installing activity is responsible for providing complete, accurate data to the CDM.) After ensuring that the proper data quality information, HSC, EFD, and other key ship data is correctly assigned to all change transactions, the CDM transmits the input to NAVSEALOGCEN-PAC to update CDMD-OA. Rejected transactions will be corrected and reprocessed in accordance with the CDMP's schedule. The CDM will continually compare recorded installation data with ship reports and ensure resolution of any discrepancies. If unplanned configuration changes are detected, they will be resolved with the PMs and/or LTDs. Status reports on pending/completed changes will be provided to all concerned via the ShipCLIP replication process or from the MSC Web Portal.

(2) In general, the CDM logistics support contractor need not wait for complete information prior to entering a transaction into the database. Since many activities have a need for timely configuration information, the data should be entered when basic configuration information becomes available and is correct. When additional information is received, it should be entered as a change.

(3) Using logistics research tools, the CDM logistics support contractor will attempt to identify an existing APL/AEL for the item. Research references required to properly perform this task include: HAYSTACK, NAVSEALOG HEDRS, MSC LAPL database and the CMLS database. In assigning candidate APLs, the CDM logistics support contractor will use the following order of precedence: M-series APLs, Navy APLs, N-series APLs, other APLs.

(a) For all M- or N-series APLs, determine the LAPL used in provisioning and for MSC LAPLs, determine the effective date, then check the MSC LAPL database for a revised LAPL.

(b) For CDM initialized ships, the correct HSC and MCC must be identified for all configuration changes.

23 MAY 2011

(4) All new configuration records will be a quantity of one with an HSC, unique Equipment Functional Description (EFD), MCC, ship's location and serial number/valve mark if available. All new configuration records also will include cross-references to applicable technical manuals and the NAVSEA installation drawing that establishes the configuration identification.

(5) Configuration worthy items which cannot be identified to an APL will be loaded into the ship's configuration using a temporary APL. The AS Team or CDM Logistics Support Contractor must recommend either inclusion on an 89000 series APL or development of an X-RIC. Only X-RICs developed for the following critical equipment categories - underway replenishment, aviation, communication gear - will be considered for development to M-series APLs. All other X-RICs will remain X-RICs. The PM and/or LTD will make the final decision to provision and/or procure interim spares.

b. Naval Sea Logistics Center (NAVSEALOGCEN).

For all change requests received, attempt to match equipment to a valid APL. For equipment that matches an M-series APL, change configuration records. For equipment that crossed to a Navy or N-series APL or does not cross to any existing APL, forward request along with applicable information to the PM. The PM and/or LTD will jointly determine the requirement for provisioning or converting to an M-series APL.

c. MSFSC LTD (for GOGO ships).

(1) Review ShipCLIP generated CCF replicated into the CMLS document tracking system.

(2) Review CCF for propriety and adequacy of information and completeness of technical descriptive data.

(3) Disapprove CCF that is not considered to be appropriate for further review.

(4) Return incomplete or incorrect requests to originator.

(5) Update CMLS document tracking system. Follow up if no reply received within processing time norms.

(6) Close out record on document tracking system.

23 MAY 2011

NOTE: For GOCO ships, all Configuration Change Requests submitted by ships will be received and processed as described in the existing contract.

C.7.2 Allowance Change Requests

There are specific procedures to be used for requesting COSAL/SHIPCLIP changes. The Allowance Change Request (ACR) is used to request additions, increases, deletions or decreases to allowances of equipment or portable equipment. The Fleet COSAL Feedback Report (FCFBR) is used to submit a request for correction to a technical problem in a published APL or AEL.

C.7.2.1 Operating Phase Change Reporting Process

a. ACR. An ACR is submitted by the originator using the ShipCLIP generated ACR that is replicated into the CMLS document tracking system. The LTD is authorized to approve ACRs for non-DLRs that are single ship applicable and have an extended cost of \$25,000 or less. In all other cases, the ACR will have to be approved by the Ships' Project Officer/Class Manager. The CDM has established a CDM Logistics Support Contractor to administer, analyze, and resolve configuration and allowance related problems. In close cooperation with the PM, the CDM Logistics Support Contractor will adjudicate the ACR and recommend approval/disapproval to the PM, who has approval authority for MSC unique equipment allowances. Action on an ACR will not be considered complete until final approval or disapproval notification has been provided to the originator via the ShipCLIP replication process.

b. FCFBR. A FCFBR is submitted by the originator using the ShipCLIP generated FCFBR that is replicated into the CMLS document tracking system. PM and/or LTD will review and forward to NAVSEALOGCEN for changes to M-series APLs or the CDM Logistics Support Contractor for X-RICs. FCFBRs will normally be processed by NAVSEALOGCEN within 60 days after receipt of request or forwarded immediately to the responsible technical action activity. When the review action cannot be completed within 60 days, an interim reply will be sent to the originator, via the PM and/or LTD acknowledging receipt of the FCFBR and indicating the expected completion date. As with approved ACRs, the actions taken on approved FCFBRs will be included in the ShipCLIP replication process.

23 MAY 2011

C.7.2.2 Responsibilitiesa. MSFSC LTD (for GOGO Ships).

(1) ACR Processing Requirements

(a) Approve MSC unique ACRs. Forward information copies to NAVSEALOGCEN to complete the process.

(b) Forward non-MSC unique ACRs to NAVSEALOGCEN for further processing.

(c) Determine validity of ACR change.

(d) Review existing allowance data in CMLS

(e) Attempt to identify how the existing allowance was derived, such as LAPL, and verify MSC maintenance capability and SMR codes.

(f) Review MSC's CASREP data for the items included on the ACR.

(g) For special areas of interest, such as damage control, hazardous material/hazardous waste (HM/HW), test equipment, etc., obtain an input from the COMSC N7 or N4 representative. Contact N7 counterpart to clarify response. Document results of research to avoid requirement to repeat research.

(h) Approve ACRs with total dollar value of less than \$25,000.

(i) Enter or review ACR in CMLS Tracking System.

(j) Review ACR for propriety and adequacy of information and completeness of technical descriptive data.

(k) Disapprove ACRs that are not considered to be appropriate for further review or do not meet usage criteria.

(l) Return incomplete or incorrect reports to originator.

23 MAY 2011

(m) Update CMLS document tracking system. Follow up on overaged ACRs.

(n) Coordinate ACR responses and/or correspondence from higher authority, requesting additional/clarifying information with originator. Update the tracking system.

NOTE: For GOCO ships, all Allowance Change Requests will be received and processed as described in the existing contract.

(2) Fleet COSAL Feedback Reports

(1) Enter or review FCFBR in CMLS document tracking system.

(b) Review FCFBR for propriety and adequacy of information and completeness of technical descriptive data.

(c) Disapprove FCFBR that is not considered to be appropriate for further review. If correct, go to paragraph (e).

(d) Return incomplete or incorrect report to originator.

(e) Update document tracking system. Follow up if no reply received within processing time norms.

(f) Coordinate FCFBR responses and/or correspondence from higher authority requesting additional/clarifying information with originator. Update the tracking system.

b. CDM Logistics Support Contractor

(1) Maintain a real time database for all ACRs and FCFBRs capable of:

(a) Identifying who is holding and has action on each ACR and FCFBR.

(b) Identifying approval/disapproval action taken on completed ACRs and FCFBRs including the date the action was taken.

(2) Act as central point of contact for ACRs and FCFBRs submitting activities, NAVICP and NAVSEALOGCEN.

23 MAY 2011

(3) Receive and review CDMD-OA Enterprise Resource Planning data (formerly Navy Supply Information Systems Activity (NAVSISA) Navy Enterprise Maintenance Automated Information System (NEMAIS) data) and convert it to automated CLIP updates to update APL, NIIN, NIIN to APL, and CCF data.

(4) Clear suspense files upon completion of action.

(5) Close out record on CMLS document tracking system.

C.8 LOGISTICS SUPPORT FOR CONFIGURATION CHANGES IDENTIFIED DURING THE OPERATING PHASE

The PM and/or LTD will ensure that the proper logistics support is obtained for configuration changes identified during the ship operating phase. Through the MSC continuous AS process, the PM and/or LTD uses the configuration status accounting database to review ship logistics support capabilities and align logistics support elements with the configuration of equipments installed on each MSC ship.

C.9 DATA QUALITY REQUIREMENTS

a. As in any system that depends on accurate information, configuration data quality assurance is a mandatory element. The CDM Logistics Support Contractor is responsible for the accuracy of the database at all times. As a minimum, the CDM Logistics Support Contractor will:

(1) Review the accuracy of ship configuration data baseline.

(2) Ensure that all planned and installed configuration and logistics changes are entered in the database so that data is available to all users.

(3) Cross check input transactions received against the CLIP database and the CDM working file (includes other input transactions), and resolve discrepancies.

(4) Correct all rejected transactions and reprocess within next update cycle after receipt of rejected data transactions from NAVICP.

(5) Maintain the status of all change data being processed. Monitor the performance of all activities responsible for processing data and identify deficiencies.

23 MAY 2011

(6) Advise MSFSC LTDs of serious or recurring problems with configuration data reporting from ships under their administrative command.

(7) Process backlogs of configuration changes prior to ShipCLIP Update production.

b. Data quality levels are reviewed through the use of record checks (checking master configuration/logistic data for the ship against verified record sources) using statistical sampling techniques, selected configuration maintenance validations (onboard physical configuration audits), and customer feedback. Record checks against verified sources will not include the ship's Selected Record Drawing (SRDs) unless or until there is assurance from COMSC N7 that the SRDs have been updated/upgraded to a satisfactory quality level. Periodic selected data maintenance validations, based on N4 developed criteria, will be used to target "soft spots" in data quality. Determination of candidates for selected validations will be based on the ship/class problem equipments identified in the ship's data file or fleet message traffic and supplemented by indication of trouble areas from the ship, PMs, LTDs, or COMSC Engineering Directors.

C.10 SUMMARY

The procedures and processes described in this appendix are sufficient to guide the MSC CDMP responsible activities in carrying out their mission. As in any process, experience will provide feedback on systemic improvements. This feedback will complete the closed loop and is therefore solicited.

23 MAY 2011

APPENDIX D**MSC INDUSTRIAL AVAILABILITY SUPPORT****D.1 EXECUTION OF INDUSTRIAL AVAILABILITY SUPPORT**

a. As stated in the CDMP Manual, the establishment of the CDM function expands the responsibility for accurate and up-to-date configuration data management for all MSC ships, especially during maintenance availabilities. Proper execution of the CDM's responsibility demands extensive interaction, cooperation, and communication between the ship undergoing an industrial availability, Engineering and Logistics Directors, the PMs, MSFSC Type Desks, Port Engineers, and procurement officers. All of these functional groups play a vital role in the configuration control and documentation process.

b. MSC's approach to configuration and logistics information management is driven by the fact that the majority of MSC ships operate under a phased maintenance cycle, consisting of short but frequent industrial availabilities. This phased maintenance cycle also impacts the AS and configuration update evolutions since the window of opportunity to perform the logistics and configuration data reviews necessary to maintain an accurate, up-to-date, logistics and configuration database is severely limited.

c. MSC has established several key logistics review processes to improve logistics support and configuration data management for ships undergoing industrial availabilities. The components of this closed-loop configuration verification, documentation, and tracking system are extensively covered in the MSC Logistics Desk Guide. This guide was the collaborative effort of the PM Logistics Managers, MSFSC Logistics Managers, Contract Operators, MSC Headquarters Logistics Staff, and the CDM Logistics Support Contractor. It is the reference source for ensuring correct CDMP input from industrial availabilities and will substitute for all processes and information for this Appendix.

d. The **MSC Logistics Desk Guide** is available on the Internet at <https://www.mysealift.msc.navy.mil>. Access to this site requires a Public Key Infrastructure (PKI) certificate and User Account. New users may register at the website.

23 MAY 2011

APPENDIX E

ACRONYMS & ABBREVIATIONS

ACRONYM	DEFINITION/DESCRIPTION
ABS	American Bureau of Shipping
ACR	Allowance Change Request
AEL	Allowance Equipage List
AO	Approving Official
APL	Allowance Parts List
AS	Availability Support
BOATALT	Boat Alteration
BOM	Bill of Material
BRF	Best Replacement Factor
CAGE	Commercial and Government Entity
CASREP	Casualty Report
CCF	Configuration Change Form
CCF	Component Characteristics File
CDM	Configuration Data Manager
CDMD-OA	Configuration Data Managers Database - Open Architecture
CFE	Contractor Furnished Equipment
CFM	Contractor Furnished Material
CDMP	Configuration Data Management Program
CI	Configuration Item
CIVMAR	Civilian Mariner
CK	Configuration Change Form
CLIP	Configuration and Logistics Information Program
CM	Configuration Management Corrective Maintenance
CMLS	Corrective Maintenance and Logistics Systems
COH	Complex Overhaul
COMSC	Commander, Military Sealift Command
COSAL	Coordinated Shipboard Allowance List
CRP	Controllable Reversible Pitch
CSA	Configuration Status Accounting
CSDB	Class Standard Database
CSN	Circuit Symbol Number
DLA	Defense Logistics Agency
DLR	Depot Level Repairable
DMS	Defective Material Summary
DMSMS	Diminishing Manufacturing Sources and Material Shortages
DoD	Department of Defense
DRS	Deficiency Reporting System

23 MAY 2011

EFD	Equipment Functional Description
ELE	Electronics Engineer
EOA	End of Availability
EPI	Engineering Process Instruction
FA	Fleet Assist
FCB	Functional Configuration Baseline
FCFBR	Fleet COSAL Feedback Report
FGC	Functional Group Code
FLIS	Federal Logistics Information System
FMS	Financial Management System
FSI	Functionally Significant Item
GFE	Government Furnished Equipment
GFM	Government Furnished Material
GOCO	Government Owned Contract Operated
GOGO	Government Owned Government Operated
GSA	General Services Administration
HM/HW	Hazardous Materiel/Hazardous Waste
HSC	Hierarchical Structure Code
ILO	Integrated Logistics Overhaul
ILR	Integrated Logistics Review
IS	Information System
LAPL	Lead Allowance Parts List
MLAPL	Military Sealift Command Lead Allowance Parts List
MCC	Mission Criticality Code
MILSTD	Military Standard
MRU	Minimum Replacement Unit
MSC	Military Sealift Command
MSFSC	Military Sealift Fleet Support Command
MTF	Medical Treatment Facility
NAVICP	Navy Inventory Control Point
NAVSEA	Naval Sea Systems Command
NAVSEALOGCEN	Naval Sea Logistics Center
NAVSISA	Navy Supply Information Activity
NAVSSSES	Naval Ship Systems Engineering Station
NEMAIS	Navy Enterprise Maintenance Automated Information System
NHA	Next Higher Assembly
NLA	Next Lower Assembly
NICN	Navy Item Control Number
NIIN	National Item Identification Number
NSN	National Stock Number
NWS	Naval Weapons Station
OEM	Original Equipment Manufacturer
OPNAV	Office of the Chief of Naval Operations
PDREP	Product Data Reporting and Evaluation Program

23 MAY 2011

PENG	Port Engineer System
PKI	Public Key Infrastructure
PM	Program Manager
PML	Program Logistics Manager
PE	Port Engineer
PPE	Principal Port Engineer
PPL	Provisioning Parts List
PSDPN	Production Schedule Delinquent Progress Notification
RFP	Request for Proposal
RIC	Repairable Identification Code (APL)
ROH	Regular Overhaul
SAC	Service Application Code
SALTS	Standard Automated Logistics Tool Set
SAMM	Shipboard Automated Maintenance Management
SCM	Supply Chain Management
SFWL	Ships Force Work List
ShipCLIP	Shipboard Configuration and Logistics Information Program
SIB	Ship Information Book
SIM	Selected Item Management
SITREP	Situation Report
SK	Storekeeper
SLEP	Service Life Extension Program
SM&R	Source, Maintenance & Recoverability
SMIS-SM	Shipboard Management Information System-Supply Module
SOA	Start of Availability
SOR	Service Order Request
SPS	Standard Procurement System
SRD	Selected Record Drawings
SSU	Ship Support Unit
TDBD	Top Down Breakdown
TDMIS	Technical Data Management Information System
TRANSALT	Transportation Alteration
TRS	Technical Repair Standard
TSD	Technical Support Data
UIC	Unit Identification Code
UNREP	Underway Replenishment
URL	Uniform Resource Locator
VRR	Voyage Repair Request
WinMASP	Windows based MSC Availability Support Program
WSF	Weapon Systems File

23 MAY 2011

X-RIC	Pseudo Repairable Identification Code (APL)
YNSK	Yeoman Storekeeper