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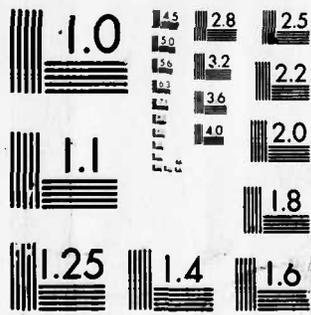
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## THESIS

SUPPLY AND FINANCIAL SYSTEMS TRAINING  
FOR  
THE LINE OFFICER AFLOAT

by

Steven Roy Gulliford

September 1977

Thesis Advisor:

J.F. Owens

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Supply and Financial Systems Training  
for  
The Line Officer Afloat

by

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Lieutenant, Supply Corps, United States Navy  
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Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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## ABSTRACT

This thesis addresses the need for a reference publication to enhance the financial and supply systems training of the U.S. Navy's Surface Warfare Officer Personnel Qualification Standards program. The thesis presents topics and discusses the reasons for the inclusion of these topics in the reference publication. In conclusion, the thesis makes several recommendations concerning the use of the reference publication and presents an appendix which provides a sample publication that could be used to meet these recommendations.

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## I. INTRODUCTION

What is wrong with the supply department? They never have the repair parts I need! Similar questions and statements concerning supply and financial systems afloat are often asked or stated aboard U.S. Navy ships. The shipboard manager wants to know why he cannot get the required funds to operate his division or department as he would like. He has questions concerning the repair parts support for the equipment his division maintains. The Division Officer or Department Head needs answers to routine supply procedural questions such as how to obtain material, how to dispose of unusable material, or how to get more funds, and better utilize them.

These financial and material management questions must be answered to enable the manager to make his daily allocation decisions. The effectiveness of the manager's daily planning is reduced by his lack of knowledge and need for answers to supply and financial questions. However, asking too many basic questions seems to be counter-productive since the time spent asking and answering these questions reduces the time available for actual management practice. Therefore, a look at other means of obtaining the supply and financial knowledge will be undertaken.

Before looking at these other means, it must be understood that the supply and financial procedures apply to all types

of shipboard managers whether the individual officer is a member of the line community, Supply Corps, Medical Corps, or Chaplain Corps. Although this thesis will focus on the answers to the line officer's questions as they pertain to operating divisions and departments such as weapons, engineering, electronics, or communications, these answers would be useful to the staff corps officer as well.

Another way to obtain the supply and financial knowledge, besides asking questions, is to do whatever seems right in a given situation. If the manager is wrong, he may find out and, therefore, he will learn from his experience. "Learning by experience" is a good technique since one can usually remember more if the task has been performed. However, the consequences of an uninformed decision may prove to be highly visible and cost the Navy significant amounts of personnel, material, and financial resources.

Assume that the ship's Engineer Officer during an overhaul period has a major piece of equipment, such as a main feed pump, which requires replacement with a modern pump made by a different manufacturer. If the Engineer Officer does not know what methods may be employed to ensure that the ship has the required repair part support, the command could incur a minor casualty in the middle of the Pacific Ocean and not be able to make the required repairs.

This casualty could result in rescheduling another ship to meet an operational commitment, providing a fleet tug to tow the ship into port, and/or requiring emergency

procurement and shipment of repair parts, which would far exceed normal procurement and transportation costs. This one example may provide a harsh learning experience and may produce an adverse effect on the reputation and career of the Engineer Officer (and the Supply Officer).

It appears that simply asking questions or learning from good and bad experience are not the most efficient means of obtaining the basic supply and financial knowledge necessary for daily decision-making. A process of formal training may prove more efficient. Formal training prior to assignment aboard ship will help develop the confidence of the individual and prevent wasted effort and bad experiences. On-the-job experience is always necessary. However, experience should come after a formal introduction to the systems involved. Formal training also helps the line officer know what questions he should ask of his subordinate personnel as well as the supply personnel.

Structural training is a most efficient and recognized method to obtain basic knowledge of shipboard life. The line officer's first contact with Navy training programs is usually through Officer Candidate School (OCS), Reserve Officer Training Corps (ROTC), or the U.S. Naval Academy. These programs emphasize the traditional aspects of the line officer's duties in areas such as navigation, engineering, and ship handling as well as introductions to Navy organization and customs. With the exception of the Naval Academy, these programs provide a very brief introduction to the role

of the line officer afloat. None of these programs cover the subject of supply or financial procedures. In 1973, the Navy introduced a program entitled "Personnel Qualification Standards". This program provides a formal method of accounting for on-the-job training and formal training lectures.

Within the Personnel Qualification Standards program, which includes enlisted and officer segments, is a portion designed specifically for the line officer afloat. This program is called "Surface Warfare Officer Personnel Qualification Standards". In addition to a formal written qualification program, two Surface Warfare Officer schools (one at Newport, Rhode Island, and one at San Diego, California) have been established to take the junior officer from Officer Candidate School, Reserve Officer Training Corps, and the U.S. Naval Academy and provide him with supplemental training in the skills required to become a surface ship division officer. This program and school provide the line officer with the basic tools necessary for performance of his daily routine and leads him through the steps of qualifying as a Division Officer, Officer of the Deck (Inport), Junior Engineering Officer of the Watch, Combat Information Center Watch Officer, Officer of the Deck (Underway), and finally, surface warfare specialist and designation as a Surface Warfare Officer.

## II. INTENT OF THESIS

The intent of this thesis is to enhance the training effort of the Surface Warfare Officer Personnel Qualification Standards program. In carrying out this intent, specific benefits are derived. One benefit is the promotion of better line officer/supply officer relationships, through a better understanding by the line officer of the supply and financial systems of the Navy. The line officer's understanding of these systems will give him an appreciation for the procedures and regulations which the Supply Officer is required to follow.

Another benefit is the ability of the line officer to better manage and plan a division's work. If the Division Officer understands the systems and the reasons for the systems which provide repair parts and money to his division, then, he can better utilize these resources. The overall benefit to the Navy will be a saving of funds through better management thereby reducing waste of manhours, material, and money.

In order to enhance the training effort, it is necessary to present the basic supply and financial information in a brief, usable form. The information must be presented in a general format in order that the line officer on any surface ship from the largest aircraft carrier to the smallest auxiliary may find it useful. It must be designed for the

line officer who deals with a computerized accounting system, as installed on aircraft carriers and other large ships, and still meet the needs of the majority of line officers who serve on non-computerized ships. The information presented must provide enough basic background for the line officer to handle daily questions and to know what additional information he requires from the supply department. It does not have to be written in such detail as to provide training for the line officer who performs the duties of the Supply Officer aboard small ships because there is already a publication for this purpose entitled "Guide for Line Officers Performing Supply Duties."

Based on the above general requirements, the following specific assumptions will be applied:

1. The information must be presented in a handbook form.
2. The handbook must be brief enough to make reading easy and rapid.
3. The handbook must provide examples, where necessary, to illustrate documents used in the supply and financial systems.
4. The handbook must present the material as it applies to the non-computerized (non-automated) ship with supplemental information provided for automated ships.
5. The material in the handbook must coincide with the information required to complete the Surface Warfare Officer Personnel Qualification Standards.

6. The information must be extracted from pertinent Navy supply and other publications. As changes occur, required information must be updated.
7. Additional information must be included which is not dictated by Navy publication but relies on line officer and supply officer experiences.

The above specific requirements assist in producing a valuable handbook which can be used as a reference for the Surface Warfare Officer Personnel Qualification Standards program as well as being utilized as a tool for the line officer in his daily contacts with Navy supply and financial systems.

### III. BACKGROUND/PROBLEMS

#### A. LINE/SUPPLY INTERFACE

Individual relationships between U.S. Navy line and supply officers can often be a classic example of the line/staff conflict as seen in private industry and in other parts of the public sector. One of the major reasons for such a relationship can be the perception of each other's role. The line officer, who is constantly under pressure to keep the ship's equipment functioning and available for any mission, perceives that the Supply Officer controls the money that he must have to do his job. There may never seem to be enough money to do what could be done and, therefore, the Supply Officer becomes a management roadblock.

In contrast, the Supply Officer may view the line officer as a poor financial manager, who could make better use of the funds provided to support the ship. As a result of these perceptions, differences may arise between line officers and supply officers over everything from spare parts and money to food or laundry service. Instead of working together to accomplish their tasks, they may work independently and waste limited resources. Although not all differences between the line officer and staff officer can or should be resolved, their perceptions of each other's role can be changed by an increase, on both sides, in the knowledge of

the other's job. This increased knowledge will help promote the necessary team effort required aboard any U.S. Naval ship.

The line officer's job requires him to manage Navy personnel, material, and funds. In his daily routine, he allocates these resources in order to support the ship's mission. For example, when he signs requests for leave, early liberty, advancement, or any other request from the personnel assigned to him, he is allocating his personnel resources. In order to effectively manage this personnel resource, he must have knowledge of Navy and command personnel regulations and policies.

Another major function that the line officer performs is the maintenance supervision of the equipment for which he is responsible. Planned maintenance must be scheduled and performed in order to maintain the ship's readiness. To accomplish the task of material maintenance management, the line officer is required to be familiar with the Navy's Maintenance and Material Management (3M) program and command policies with regard to maintenance.

Throughout his daily resource management decisions, the line officer will come in constant contact with the ship's supply department. To effectively allocate the financial resources, obtain repair parts, and handle personnel questions concerning shipboard services, he must understand the Navy's basic supply and financial procedures.

The Supply Corps officer afloat also has personnel, material, and financial management responsibilities. However, he is a staff officer and is not the ultimate material and financial manager. Although the Supply Officer accounts for all funds, maintains the consumable and repair parts inventories, and is trained in the procedures of the Navy's supply and financial systems, he is only an advisor to the Commanding Officer in regards to supply matters. The Supply Officer is not trained to decide what must be accomplished in engineering, communication, or electronic fields and, therefore, should not make the financial resource allocation decisions.

These decisions are clearly the responsibility of the Commanding Officer and/or Department Head concerned. The line officer, therefore, does require training in personnel, maintenance, supply and financial areas as well as various specialty areas, such as engineering, electronics, or weapons. Of course, the Supply Officer would also be more effective with additional training in the various technical aspects associated with the line officer's management problems. However, the intent of this thesis is to enhance the line officer training program and therefore, will emphasize this intent.

## B. GENERAL LINE OFFICER TRAINING PROGRAMS

### 1. Precommissioning

The Officer Candidate School, Reserve Officer Training Corps, and U.S. Naval Academy are precommissioning training programs designed to help a new Naval officer make the transition from a civilian to a military environment. These programs are developed to give the officer an overview of what is available in the naval service and introduce him to traditional seafaring skills, i.e. navigation and ship handling. These courses are taught to prospective line officers, supply officers, and other designated staff corps officers and, therefore, are general in nature. The courses do not include instruction in shipboard personnel, material, or financial management regulations and policies.

### 2. Post-Commissioning

The Supply Corps officer immediately upon commissioning reports to the Naval Supply Corps School in Athens, Georgia for training in shipboard supply procedures. Instruction in personnel management is also included in the curriculum.

In the past, the line officer may have been transferred to schools in communications, ship handling, or cryptography prior to being assigned to a ship. However, most newly commissioned line officers were sent directly to surface ships without additional training after commissioning. ✓ In all cases, there was little general training in shipboard regulations or policies.

The Surface Warfare Officer school has now been established which specializes in training the newly commissioned line officer to assume his role as a Division Officer aboard a surface ship. The school has two sites: Newport, Rhode Island and San Diego, California. The Surface Warfare Officer school was developed along with a comprehensive Personnel Qualification Standards program to apply the skills learned and gain further training.

There are a number of other training programs available for the Naval officer. However, they will usually occur after a significant interval of time. These programs include the Armed Forces Staff College, Naval War College, Naval Postgraduate School, and Department Head School (formerly Destroyer School). These provide advanced training in a great variety of specialties. With the exception of Department Head School, they do not provide specific instruction in shipboard procedures.

#### C. LINE OFFICER SUPPLY TRAINING

The Surface Warfare Officer training and qualification programs are based on a publication entitled "Personnel Qualification Standard for Surface Warfare Officer". The publication is divided into six sections as follows:

1. Implementation Procedures for Personnel Qualification Standards
2. Division Officer
3. Engineering
4. Officer of the Deck (OOD) Inport

5. Officer of the Deck (OOD) Underway/Combat Information Center (CIC) Watch Officer
6. Warfare

Each qualification section contains four main subdivisions; theory, systems, watchstations, and qualification cards.

The theory subdivision specifies, in general terms, the background that will assist the officer prior to commencing the study of the specific equipment(s) or system(s). This theory subdivision is normally taught at Surface Warfare Officer school. The systems subdivision explains system components, principles of operation, major parameters, system interrelations, and safety precautions which apply to an individual system or equipment. The watchstation subdivision provides operating instructions, normal and abnormal operating conditions, and emergencies and casualties. Finally, the qualification card is used to record the officer's progress toward completing the section in which he is working.

Each of the subdivisions of the six qualification sections contains several subjects. For instance, the theory subdivision of the Division Officer section has twenty-five subjects including shipboard organization, counseling, security, supply, safety, and damage control. These subjects are assigned a four-digit number whose first digit represents the qualification section. The second digit indicates in which subdivision the subject is included.

Theory subjects have a one as the second digit; systems subjects, a two; watchstations subjects, a three; and qualification subjects, a four. For example, the security subject number is 2111, which indicates that it is the eleventh subject of the theory subdivision of the Division Officer section. Within the subject, the more detailed requirements are also numbered with the subject number plus a decimal point and a number used for sequencing only. For instance, requirement number 211.31 is located under security theory and requires the officer to explain "access" and "need to know".

Throughout this thesis the requirement numbers will be used in order to provide easy reference back to the Surface Warfare Officer Personnel Qualification Standard publications. This thesis will concentrate on the requirements which apply to supply and financial systems of the Navy. (Most of these requirements appear in the Division Officer section.)

There are several subdivisions in the Division Officer section which pertain to supply and financial procedures. Section 2113, entitled "Supply Theory" includes requirements on shipboard supply functions, supply funding, publications and forms, controlled equipage, and general terminology. Another section which relates to Casualty Reports (CASREPTs) discusses required supply information needed for the reports. Maintenance Data System (MDS) theory, Section 2118, is related to the supply function since much of the information for this system comes from supply documents.

The Division Officer watchstation requirements of Surface Warfare Officer Personnel Qualification Standards list actions which each Division Officer must perform to qualify. Among these actions are the preparation of surveys, material request documents, controlled equipment custody cards, and casualty reports. Each of these actions require a basic knowledge of supply and/or financial procedures, which enables the line officer to recognize the reasons behind these actions. In spite of all the supply and financial procedures discussed in the Personnel Qualification Standards, there is not a reference publication designed to be used with the program.

There are two publications presently used as the primary references for the supply training portion of the Surface Warfare Officer Personnel Qualification Standards. The first publication is "Afloat Supply Procedures" (NAVSUP P-485), which contains the specific rules and regulations governing the supply department's procurement and inventory control functions. (This publication does not include those functions related to food service or ship's store operations.) The periodical is written for use by supply officers and supply department personnel who have had training at the Navy Supply Corps School or storekeeper "A" school. The publication is extremely lengthy and detailed and because of this does not meet the requirements proposed in the thesis intent.

The second publication is the "Guide for Line Officers Performing Supply Duties" (NAVEDTRA series 10779). This publication was written to provide basic supply knowledge to the line officer who will be performing the duties of the Supply Officer in a small fleet unit where a Supply Corps officer is not assigned. This publication contains much more information than is required for the officer to meet the Surface Warfare Officer Personnel Qualification Standards and, therefore, it is also too lengthy for the purpose of the Surface Warfare Officer program. There is not a publication available specifically written for the line officer to use as an abridged reference during Surface Warfare Officer school or upon completion of school when he is performing the duties of the Division Officer or Department Head afloat.

#### IV. IMPLEMENTATION

##### A. INTRODUCTION

The Surface Warfare Officer training program would be enhanced by providing a publication to be used in the supply and financial procedures area. In order to meet the needs of a training program and remain within the requirements listed in the thesis intent, the following sections discuss the topics which must be included in the publication and provide the reasons for their inclusion in the publication.

##### B. AFLOAT SUPPLY ORGANIZATION

As an introduction, a section on the supply department organization aboard ship is required. It delineates the functions of the supply department by explaining the material support activities (providing repair parts) and the service activities (food service, laundry, and ship's store). This section also identifies each division within the supply department and the division's area of responsibility. This makes identification of the responsible Division Officer easier when the line officer has a question concerning supply support and services. The information in this section provides the prospective Surface Warfare Officer with the knowledge to meet requirement number 2113.11 of the Supply Theory portion of the Division Officer Personnel Qualification Standard by stating the function of the ship's supply department.

C. USEFUL PUBLICATIONS AFLOAT

1. Coordinated Shipboard Allowance List (COSAL)

The Coordinated Shipboard Allowance List (COSAL) is one of the most important official Navy documents aboard ship. Without the COSAL, maintenance of equipment would be difficult to impossible. The COSAL lists:

- a. equipments/components installed on a specific ship;
- b. repair parts and special tools required for operation, overhaul, and repair of the equipment;
- c. items used in the operating spaces for the safety of personnel and the care and upkeep of the ship.

The COSAL is both a technical and supply document. It is a technical document, in that equipment nomenclatures, operating characteristics, and technical manuals are described in Allowance Parts Lists (APLs) for each equipment or component. It is a supply document, in that the COSAL provides a list of items required to achieve maximum, self-supporting capability for an extended period of time.

The COSAL must be kept up to date as equipment changes occur. The reporting of these changes to the Supply Officer, who submits them to inventory control points for repair part support, is the responsibility of the line department. As a result, the division officer or department head must have a good background in the use and maintenance of the COSAL. COSAL training is a must in the publication this thesis proposes for line officer training. COSAL

training also prepares the line officer for the following Supply Theory, Division Officer Personnel Qualification Standards:

<u>Number</u>	<u>Requirement</u>
2113.31	State the purpose of the COSAL.
2113.32	State the three main parts of the COSAL.
2113.33	Explain the method for entering and using the COSAL.

## 2. Other Publications

### a. Navy Management Data List (NMDL)

The Navy Management Data List (NMDL) provides an up to date catalog of all stock numbered items for which the Navy has a need. It lists stock number, unit of issue, unit price, and other management information. The NMDL is published on microfiche and distributed quarterly to keep the prices and stock numbers current. The primary function of the NMDL is to inform the officer as to the validity of a stock number and provide the current price in order to monitor expenditures.

### b. Master Repairable Item List (MRIL)

The Master Repairable Item List (MRIL) is a catalog of selected Navy items which, when damaged or unserviceable, are required to be returned to designated overhaul points for repair and ultimate return to system stock. It is either less expensive to repair these items than to purchase new replacements or procurement lead times

are excessive. The line officer must be aware of this publication in order to understand how the supply department determines if an item requires return.

c. Navy Consolidated Hazardous Item List (CHIL)

The Navy Consolidated Hazardous Item List (CHIL) is published to alert users of the potentially hazardous nature of certain items in the supply system. This publication includes chemicals and material which pose an inherent danger to life and property but does not include ammunition, fuel, or drugs. Within this publication is a list of items which are not allowed to be stowed aboard ship. The line officer must be aware of this publication since stowage requirements for hazardous material aboard ship is provided.

d. Afloat Shopping Guide (ASG)

The Afloat Shopping Guide (ASG) is designed to assist fleet personnel in identifying the stock numbered items that are most frequently used by ships. It gives detailed descriptions of the items, provides illustrations of many of the items, and identifies substitutes, where applicable. This publication is useful to line department personnel in trying to identify a stock number when no specific data except the item itself is available (i.e., a screw or bolt).

e. Consolidated Afloat Requisitioning Guide Overseas (CARGO)

The Consolidated Afloat Requisitioning Guide Overseas (CARGO) is published in two versions: one for

the Pacific fleet and one for the Atlantic fleet. The CARGO is tailored for use by afloat requisitioners when requesting material from replenishment ships. It identifies items by stock number and nomenclature for use in making a shopping list for underway replenishments. If the ship suffers an equipment casualty and, it cannot be repaired due to unavailable stock, the CARGO can provide an instant check to determine if the replenishment ship carries the urgently required repair part.

3. Division Officer Personnel Qualification Standards

The Supply Theory portion of the Division Officer Personnel Qualification Standards (Requirement 2113.34) requires the line officer to state the purpose and scope of several supply publications including the Navy Management Data List and the Master Repairable Item List. The additional publications in the preceding sections are useful tools that the Division Officer or Department Head can use in his daily contacts with the supply department.

D. OPERATING TARGET (OPTAR)

The daily operating and maintenance expenses of a ship are funded by the Congressional appropriation entitled "Operation and Maintenance, Navy (O&MN)". The office of the Chief of Naval Operations distributes these funds to the fleet commanders, who allocate them to the type commanders. The type commanders then provide individual ships with funds in the form of operating targets (OPTARs). These OPTAR grants are normally provided quarterly.

Once the ship receives its OPTAR grant, the Commanding Officer of the ship is responsible for the proper expenditure of the funds. The Commanding Officer will usually give each department an operating target based on a budget submission from each Department Head. The Supply Officer, in his role as a staff officer, assembles the budget submissions and discusses them with the Commanding Officer. The individual department must keep records of its expenditures to ensure it does not exceed its budget and, thereby, cause the ship to exceed its operating target.

The Type Commanders monitor each ship's expenditures. Over-obligations reflect unfavorable on the command's management ability. The chance of over-obligations will be reduced if proper planning and financial management are performed throughout each department of the ship, and especially, if the Supply Officer is providing the required staff services.

With regard to fund management, the Supply Theory section of Division Officer Personnel Qualification Standards has the following requirements:

<u>Number</u>	<u>Requirement</u>
2113.21	Explain the normal procedures used to apportion available funds within the ship.
2113.23	State the purpose and content of the following: a. Division Supply Log b. Local Budget Report

#### E. MATERIAL PROCUREMENT

In the area of material procurement, the line officer must be aware of certain restrictions instituted by higher authority. These restrictions will affect the procurement of material, by the supply department, for his division. His knowledge of key restrictions will help avoid misunderstandings and better promote a team effort for the afloat unit.

Nearly all procurement actions are transacted through Navy supply activities using requisitions prepared by the ship's supply department. The ship's senior Supply Corps Officer is the only person aboard authorized as a contracting officer for the U.S. Navy [1: 3-67].

Correct procedures to follow and the use of proper forms will greatly assist in acquiring the proper material and services. Every shipboard officer must be able to prepare a material request document in order to recognize improper documents when they are submitted by division personnel for the Division Officer's signature. The reasons for each entry on the NAVSUP Form 1250, the primary material request document for non-automated ships, and the DD Form 1348, the primary request document for the automated ships, must be known and understood.

The information in this section will meet the following Division Officer Personnel Qualification Standards:

a. Supply Theory

<u>Number</u>	<u>Requirement</u>
2113.22	State the steps and procedure for ordering and procuring material through the ship's supply system.
2113.35	State the purpose and content of the following supply documents: a. NAVSUP Form 1250 b. DD Form 1348

b. Qualification

<u>Number</u>	<u>Requirement</u>
2401.132	Prepare a NAVSUP Form 1250.
2402.18	Fill out and submit a supply requisition.
2402.325	Discuss the results of improperly filled out supply requisitions.

F. SUPPLY/3M INTERFACE

The Navy's supply system and Maintenance and Material Management (3M) Program interface in two areas which concern both the line officer and supply officer. The first area is known as pre-expended bin (PEB) material. PEB material consists of limited repair parts which are stored in departmental spaces close to the area where maintenance is performed. These parts are expended from the Supply Department's stock records when they are given to the cognizant department rather than when actually used in a maintenance action.

The pre-expended bin program is designed to provide ready access for maintenance personnel for frequently used, low value maintenance material. The criteria to establish pre-expended bins and for replenishment and monitoring of

the bins must be fully understood. This will ensure that full advantage is taken of the pre-expended bin program to save procurement lead time and to meet the requirements of the 3M program.

The other area of interface is a subsystem of the 3M program known as the Maintenance Data System (MDS). MDS is designed to provide a means of recording maintenance actions in substantial detail, so that a great variety of information may be retrieved concerning maintenance actions and equipment performance. One of the primary sources of information for MDS is the material request document (NAVSUP 1250 or DD 1348) prepared by the division's maintenance personnel.

Several entries on these documents link the repair part usage to a particular equipment. If these entries are not included on the document, the job of determining which repair parts to stock aboard ship becomes an estimate rather than a figure based on experience with the equipment and demand for the repair parts.

It is important that each manager understand his role in the pre-expended bin and Maintenance Data System programs. This section meets requirement number 2113.52c of the Supply Theory section of the Division Officer Personnel Qualification Standards. In addition, this section will provide some of the background information required to complete the MDS (Maintenance Data System) Theory section, number 2118.

#### G. REPAIRABLE MANAGEMENT

The term "repairable" refers to a component or part designated by a Navy inventory manager as an item which can be economically repaired when it becomes unserviceable. It is the responsibility of the Supply Officer to identify these components aboard ship and ensure compliance with the special management procedures associated with repairables. Awareness of required procedures in order to assist in the proper maintenance of these expensive and critical components is necessary. To be of assistance, the Division Officer or Department Head must know when the turn-in of a defective component is required, what documentation must accompany the component, and what care must be exercised to avoid further damage to the component prior to its return to the overhaul point. This subject is not presently addressed in the Division Officer Personnel Qualification Standards but in recent years has received considerable attention from inventory managers.

#### H. CONTROLLED EQUIPAGE

Controlled equipage is a small class of material which requires special management control because the material is essential for the protection of life or is relatively valuable and easily convertible to personal use. Items such as binoculars, typewriters, and first aid kits are controlled equipage. These items are located throughout the ship in offices and work spaces. The Supply Officer of the ship maintains a complete list of the items requiring control.

The accountable officer must know which items under his management are controlled equipage and how to maintain proper accounting. He must be aware of his responsibilities to take inventory, sign custody records, and report receipts or losses.

The Supply Theory section of the Division Officer Personnel Qualification Standards also requires the following:

<u>Number</u>	<u>Requirement</u>
2113.41	State the contents and purpose of the Controlled Equipage Custody Record (NAVSUP Form 306).
2113.42	Discuss the procedures a division officer must employ in accounting for controlled equipage.

#### I. SURVEYS

The survey is a document used to provide a record of action taken on the loss or damage of controlled equipage, repairable items, or other material when directed by the Commanding Officer or higher authority. The survey procedure provides an administrative review of the condition of the material, the cause of the condition, the responsibility therefore, and the recommendation for disposition. It also authorizes the expenditure of the material from the records on which it is carried.

There are two types of surveys; formal and informal. The formal survey is used when someone is held responsible for the loss or damage of the equipment or when directed by the Commanding Officer or higher authority. The formal

survey is investigated by a formal survey board of from one to three officers appointed by the Commanding Officer. The informal survey is used in all other cases. The head of the department having custody of the material performs the investigation and reviews the survey.

The procedures to follow when initiating a survey, the material requiring survey, and the types of surveys must be understood by the individual officer(s) conducting the survey. The Supply Theory portion of the Division Officer Personnel Qualification Standards requires the following:

<u>Number</u>	<u>Requirement</u>
2113.43	State the conditions under which a piece of equipment would be surveyed.
2113.44	State the content of the Survey Request, Report and Expenditure (NAVSUP Form 154).
2113.45	List the five steps of the survey procedure.
2113.46	Define the following types of surveys: a. Informal b. Formal

#### J. MISCELLANEOUS INFORMATION

##### 1. Casualty Reports (CASREPTs)

The casualty reporting system was developed by the operating managers of the Navy to inform higher authority of casualties which limit a ship's capabilities. The casualty report is transmitted via a pre-formatted message to higher authority. Within the format is a caption which requires

certain supply data on repair parts needed to correct the casualty. The line officer must work closely with the Supply Officer to ensure correct information is submitted in this message. The Operations Reports Theory section of the Division Officer Personnel Qualification Standards requires the officer student to briefly discuss the inter-relation between a CASREPT and the supply requisitioning system (Requirement number 2115.13).

2. Selected Item Management (SIM)

Selected Item Management (SIM) is a concept with which all officers must be familiar. It is an inventory control principle which, in non-automated ships, focuses management attention on the small percentage of items that experience the majority of demand. These items receive close attention and have established high and low limits in an effort to ensure a never-out stock position. The SIM process also allows the ship to stock on board additional items, based strictly on demand, even though the items may not appear in the list of authorized spares in the COSAL.

Selected Item Management also enables the Supply Officer to carry more than is allowed on authorized items, if demand justifies the additional quantity. The SIM concept gives the Supply Officer greater flexibility in managing his inventory. From the line officer's point of view, all he must do, to ensure an item is carried aboard, is to create enough demand for the item by submission of material request

documents. An item must be demanded two or more times in six months to become a SIM item and will remain a SIM item until no demand is registered in six consecutive months. Automated ships have a similar program with the same requirements but it is called "demand based" instead of SIM.

Inclusion of Selected Item Management in the training reference, meets requirement number 2113.52a of the Supply Theory portion of Division Officer Personnel Qualification Standards which requires the line officer to define the term "Selected Item Management".

### 3. Supply Operations Assistance Program (SOAP)

The Supply Operations Assistance Program (SOAP) is an area which is of utmost importance to any ship. It occurs at a time when the departments are involved in a major overhaul of the ship in a shipyard. The line department is concerned with obtaining repairs to its equipment and completing the overhaul on time and may leave the problem of supply support strictly to the supply department.

The SOAP process, which is designed to improve the supply readiness of the ship, entails the offload, identification, and inventory of shipboard stocks of repair parts, disposition of excesses, requisitioning of deficiencies, and the reload and restorage of allowed items in authorized quantities. The involved departments must provide personnel for this operation who have expertise in their rating and can identify repair parts that are applicable to the equipment they maintain aboard ship.

Often times, these personnel are also the ones that the division needs to supervise the major overhaul of equipment. Therefore, serious personnel shortages may result. However, the fact remains that their experience and knowledge are necessary to the SOAP operation to ensure that material is correctly identified and that critical repair parts are not disposed of as a result of improper identification.

When personnel are assigned to the SOAP team, who do not have the expertise required, because the experienced personnel are assigned elsewhere aboard ship, all should clearly understand the possible consequences. This situation may not be beneficial to the Supply Department and, eventually, may affect the other departments through poor supply support.

#### K. GLOSSARY

A glossary is essential to a training publication of this type. It must include one or two sentence definitions of the major terms and concepts presented in the publication in order for the line officer to have a ready reference for use in studying the financial and supply systems of the Navy. The glossary makes an excellent concluding chapter for a reference publication designed to enhance the supply and financial training efforts of the Surface Warfare Officer Personnel Qualification Standards Program.

## V. CONCLUSION

Since the asking of basic procedural questions can become an inefficient method of acquiring the knowledge necessary and on-the-job experiences may prove disastrous, the line officer must have acquired knowledge in many areas prior to reporting for duty aboard ship. Until recently, some of these areas of knowledge, such as supply and financial systems, have been left out of the line officer training programs. However, the development of the Surface Warfare Officer Personnel Qualification Standards and the accompanying schools and publications is having a significant impact on the line officer's understanding of all phases of his duties including personnel management and supply/financial planning.

Focusing on the supply and financial procedures training, it can be seen that there is an additional need for a text or reference publication to provide a condensed version of the necessary training information. This text could be printed and made available in a brief handbook format using the assumptions made in the thesis intent and include, as a minimum, the subjects discussed in the previous sections. In order to further enhance the development of a publication to meet this need, Appendix A is provided as an example of a handbook that would meet the requirements of the supply and financial training portion of Surface Warfare Officer Personnel Qualification Standards.

## VI. RECOMMENDATIONS

Due to the limited time and funds available, Appendix A provides only a starting point for development of the reference publication. It is suggested that liaison be conducted between the Surface Warfare Officer schools and the Naval Supply Systems Command, with the intent of developing a useful publication for use as the primary reference for the Supply Theory section of Division Officer Personnel Qualification Standards. It is further suggested that this handbook be used as a text for the supply portion of the Surface Warfare Officer school curriculum.

Another method of fully utilizing this handbook would be to provide copies to afloat units in sufficient quantity for every officer to have a personal copy. Wide distribution in this manner would provide the officer with a tool he can use in his daily transactions with the Supply Department. It also might be used to train department enlisted personnel in the use of supply publications, preparation of material request documents, and other aspects of the supply operation. The handbook material could become an integral part of the departmental training programs as well as various officer training programs.

## APPENDIX A - Line Officer's Guide to Supply Afloat

### Preface

This publication is a sample training guide and reference to assist line officers afloat in their daily interactions with the Navy's supply and financial systems. It is not intended to be the final reference for the supply portion of Surface Warfare Officer Personnel Qualification Standards but a guide to provide assistance in developing a publication that will provide enough information for the line officer to better understand supply/financial procedures.

It is intended that this publication provide basic knowledge in supply and financial management so the line officer can better allocate the limited resources available or know what questions to ask of the Supply Officer when more information or resources are required.

This publication was prepared using Afloat Supply Procedures, NAVSUP Publication 485, Reprint 1, Change 19 as the primary reference. As changes are made to NAVSUP P-485, this publication may require updating.

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## Chapter 1 - Afloat Supply Organization

### A. Introduction

The following section will assist the line officer in obtaining answers to specific supply questions. The supply organization presented is applicable to all ships since it is the organization which applies mainly to the aircraft carrier. In general, with the exception of the Aviation Stores and Data Processing divisions, the organization represents most afloat units.

### B. Supply Department Functions

Afloat supply functions are categorized into material support and service functions. Material support functions relate to operational and maintenance requirements, while service functions entail operating personnel service facilities.

#### 1. Material Support Functions

a. Material Included. Material support functions include procurement, receipt, stowage, issue, and accounting for the following types of material in accordance with directives and in quantities necessary for the operation of the ship and its assigned aircraft:

1. consumable;
2. equipage;
3. repair parts;
4. inert nuclear weapons material and associated test and handling equipment, tools, and consumables;
5. fuel (preparation of procurement documents only);

6. ship's store and retail clothing stock, (when facilities are provided);
7. food items;
8. medical and dental supplies (procurement only). [1:1-15]

b. Material Not Included. The following types of material are not included under afloat supply department functions:

1. Ammunition (Responsibility of ship's weapons officer);
2. War reserve stockpile nuclear weapons and major assemblies (Responsibility of ship's weapons officer);
3. Navigational and intelligence charts, maps, and related publications (Responsibility of ship's navigator);
4. Marine Corps material, when Marine Corps detachment aboard (Responsibility of officer in charge of detachment). [1:1-15]

## 2. Service Functions

Service functions include the operation of the following facilities:

1. the enlisted dining facility;
2. the ship's store and related facilities such as the laundry, vending machines, barber shop, soda fountain, dry cleaning plant, and tailor shop;
3. the disbursing office;
4. the automated data processing facility when used primarily for supply and maintenance functions (excludes all data processing facilities in intelligence centers, tactical data systems, or other similar facility);
5. the wardroom mess (when a billet has been established for a Supply Corps officer to be wardroom mess officer). [1:1-16 and 1-17]

## C. Supply Department Organization

To assist the line officer in identifying supply functions to organizational components, the duties of the

supply division of an aircraft carrier are outlined below. This list of duties is followed by the organization chart of the aircraft carrier supply department, which has been extracted and paraphrased from NAVSUP P-485, paragraph 1050.

1. Stores (S-1 Division). The stores division procures, receives, stores, expends, and accounts for consumables, equipage, repair parts, and other material for use in the daily operation and maintenance of the ship. S-1 Division also maintains the ship's OPTAR records.
2. Food Service (S-2 Division). The food service division operates all phase of the general mess including procurement, receipt, and storage of food items as well as meal preparation.
3. Sales (S-3 Division). The sales division procures, receives, issues, and sells ship's store and clothing items and operates the personnel service activities such as the laundry, barber shop, or tailor shop.
4. Disbursing (S-4 Division). The disbursing division collects and disburses all public funds aboard ship and performs all afloat pay and allowance functions.
5. Wardroom Mess (S-5 Division). The wardroom mess division procures, receives, stores, issues, and accounts for food items in the wardroom and prepares all meals served therein.

6. Aviation Stores (S-6 Division). When established, the aviation stores division will procure, receive, store, and issue all material required for aircraft support.
7. Data Processing (S-7 Division). Data processing functions include the operation of data processing equipment, maintaining files and records, and preparing and processing documents to produce records and reports for the automated supply, accounting, maintenance, or administrative systems afloat.



## Chapter 2 - Useful Publications Afloat

### A. Coordinated Shipboard Allowance List (COSAL) ✓

#### 1. Purpose

The Coordinated Shipboard Allowance List (COSAL) is the official Navy record which lists:

- a. the equipments/components installed on a specific ship to perform its operational mission;
- b. the repair parts and special tools required for operation, overhaul, and repair of equipment/components;
- c. the operating space items and consumables necessary for the safety, care, and upkeep of the ship. [1:2-32]

The COSAL is both a technical and supply document. It is a technical document, in that equipment/component/part nomenclatures, operating characteristics, and technical manuals are described in Allowance Parts Lists (APLs) and Allowance Equipage Lists (AELs). It is a supply document, in that the COSAL provides a list of items required to achieve maximum, self-supporting capability for an extended period of time.

Since the COSAL provides the ship with basic guidance for determining the items (and quantity of each item) which must be stocked by the supply department or held in the custody of other department heads, it is essential that changes be incorporated promptly and properly upon receipt, and that corrective action be taken when it is determined

that any part of the COSAL is inaccurate or incomplete. The COSAL is based on allowance list policies reflected in OPNAVINST 4441.12 series.

## 2. COSAL Segments

All COSALS include a Hull, Mechanical, Electrical, and Ordnance segment (HMEO) and an Electronic segment. The COSAL of a ship with nuclear weapons capability, or which is nuclear powered, also includes a nuclear weapons segment and/or a reactor plant segment ("Q" COSAL). Each segment of a COSAL comprises three parts, and each part includes two or more sections.

### a. HMEO Segment

(1) Introduction and Appendices. An introduction and its appendices, which precede Part I, provide general instructions for the use and maintenance of the COSAL; specific instructions peculiar to the material in each segment; and explanations of various codes used in all segments.

### (2) Part I

(a) Summary of Effective Allowance Parts/Equipage Lists (SOEAPL). The SOEAPL is a numerical sequence list, by identification number, of all effective APLs and AELs contained in Part II.

(b) COSAL Index, Section A. COSAL Index, Section A is sequenced alphabetically by equipment noun name and partial characteristic description of each effective APL and AEL.

(c) COSAL Index, Section B. COSAL Index, Section B, is sequenced alphabetically by the system or service application of each APL and AEL. (Information in Section B is the same as that in Section A, but is sequenced differently.)

(3) Part II

(a) Allowance Parts Lists (APLs). An APL is prepared for individual equipment/components and lists their repair parts. HMEO APLs are identified by a 9 digit identification number, and are filed in Part II in identification number sequence. The data format of an APL in identification number sequence. The data format of an APL is explained and illustrated on the following two pages. [1:2-44 and 2-45] Storeroom/stock quantities are not shown in APLs, but are included in the COSAL SNSL or ISL which will be explained in Part III.

## COSAL INTRODUCTION APPENDIX (A)

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### 2. DETAILED DESCRIPTION AND DATA CONTENT OF COSAL FORMATS (Cont'd)

**a. Allowance Parts Lists (APLs).** The APL is a technical document prepared for individual equipments/components and their repair parts, by listing the requirements for a ship having the exact equipment/component described therein. The APLs are filed in numerical sequence by identification number in Part II of the COSAL. Beta content within each APL is arranged in alpha/numeric sequence of the Reference/Symbol No. as noted in (7) below.

*(Note: Sub-paragraph numbers (1) thru (26) below correspond and refer to the numbers shown on the APL illustration.)*

(1) Equipment/Component Nomenclature/Characteristics. Name of Equipment/Component.

(2) Manual/Plan. The predominant technical manual and plan number. (See (7) and (8) below for additional numbers and/or information).

(3) Identification No. The APL identification number which applies to a specific equipment/component, eight digits for Ordnance Fire Control and Electronics, nine digits for IME and Ordnance. For Jettis Codes and first two digits of the nine digit APL that designates type of equipment. See Appendix (C).

(4) Beta. COSAL publication date.

(5) Page. Consecutive page numbering of all the pages required to describe one (1) equipment/component, covered by one (1) APL identification number. APLs requiring one or more pages for the printing of data will have the word "END" printed in the center of the page immediately following the last line of data for that ID No., i.e., an APL requiring six (6) pages for all data, the word "END" will appear on Page No. six (6). APLs of one (1) page of data, the word "END" will appear on page No. one (1).

(6) Characteristics. A general description, characteristics and/or other identifying information concerning the equipment/component named in (1) above.

(7) Reference/Symbol No. A number, other than a stock number, by which a part may be identified arranged in alpha/numeric sequence. It may be a manufacturer's number, service part, drawing, piece or electric/circuit symbol number.

(8) (Additional Beta Area). When additional MANUAL(s) and/or plan No.(s) are applicable or appropriate, they will be listed in this area under an appropriate caption. These numbers are in addition to those listed Sub Para a in (2) and a (8). The phrase "included in" after NAVSHIP No.(s) indicates the manual number of the parent equipment for which the component is but one (1) part.

(9) Item Name. The name listing of selected repair parts and/or related accessory components for the equipment/component described in Sub para (6). (10) Stock No. The National Stock Number (NSN) assigned to a specific repair part. When a NSN is not assigned, an Activity Control Number (ACN) will be shown.

(11) Accessory Components Applicable to a "Parent Equipment" are listed on the "Parent APL". Any additional Accessory Components not listed on the APL should be reported to SPCE.

(12) Federal Supply Code for Manufacturers (FSCM).

(13) Part Military Essentiality Code (Part MEC)

(14) Source Code.

(15) Maintenance Code.

(16) Recoverability Condensation code.

(17) Allowance) Notes Code.

*(For Codes and Definitions. See Appendix (C).)*

(18) Quantity in One Equipment/Component. (Qty in One Equip/Comp). The total population of the part within the equipment/component described by the APL.

(19) Unit of Issue (U/I). The term which connotes the physical measurement or count of quantities of an item for procurement, storage and issue. Unit of issue is abbreviated alphabetically, i.e., EA--each, BZ--dozen, SE--set, etc.

(20) Allowance Item Code (All. Item). Codes appearing in this Column are for internal use within SPCE. To determine if the item is allowed refer to Part III.

(21) On-Board Allowance Table. APLs published as part of an allowance list for shipboard use and contained in Part II of the COSAL will not have quantities printed in the onboard allowance table columns. In lieu of quantity the statement "See NSN for Qty's" will be printed in the column spaces provided for number of equipments/components.

(22) Ship Type and Hull No. The specific ship/activity for which the APL is published.

(23) Page. Consecutive page numbering from first page to last page of all pages within the applicable category. Page number preceded by the Letter E indicates IME, E, Ordnance and E, Electronics.

(24) Identification No. Same as Sub para a (3).

(25) Beta. Same as Sub para a (4).

(26) Page. Same as Sub para a (5).

APPENDIX (A)

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(b) Allowance Equipage List (AEL). The AEL is a document prepared for various categories of equipage, or for operating systems. When an AEL is used for a system, it will include the items required for the operation of the system and/or the repair parts required for support of the system. Items described in an AEL generally are operating space items (OSI) in the custody of various shipboard departments. AELs for hull, mechanical, electrical, ordnance, and electronic equipments are identified by a 9 digit identification number (preceded by a numeric 0-7 and a dash (-)) and are filed in Part II of the COSAL in identification number sequence. AEL items are consolidated by stock number, in NIIN sequence (last 9 digits of the stock number), in Part III, Section B of the COSAL. The data format of an AEL is explained and illustrated on the following four pages. [1:2-47 through 2-50]

## COSAL INTRODUCTION APPENDIX (A)

PAGE 19

### 2. DETAILED DESCRIPTION AND DATA CONTENT OF COSAL FORMATS (Cont'd)

f. Allowance Equipage Lists (AELs). The AEL is a technical document prepared for various categories of equipage or mechanical, electrical or ordnance systems. When used for systems, the AELs include the items required for operation of the system and/or the repair parts required for maintenance of the system. The AELs are filed in numerical sequence by identification number in Part II.

(Note: Sub-paragraph numbers (1) thru (24) below correspond and refer to the numbers shown on the AEL illustration.)

- (1) Equipage Nomenclature/Characteristics.
- (2) Manual/Plan. The predominant technical manual and plan number. (See (6) and (7) below for additional information.)
- (3) Identification No. The Allowance Equipage List Identification Number (AEL ID No.) which designates specific listings of material collectively known as equipage. The first digit position of the AEL ID No., followed by a dash (-) indicates the cognizant preparation and maintenance activity and general equipage significance.
  - 1 - Ordnance material
  - 2 - Ordnance material
  - 3 - Miscellaneous material
  - 4 - AUTUM CONSTR & MAINT HANDLING EQUIP
  - 5 - Flag Allowance material
  - 6 - Special Project Office material
  - 7 - Special Propulsion Plant
  - 8 - Portable Electronic Material
- (4) Data. COSAL publication data.

(5) Page. Consecutive page numbering of all pages required to describe one (1) category of equipage or mechanical/electrical and ordnance system covered by one (1) identification number. AELs requiring one or more pages for the printing of data will have the word "EMB" printed in the center of the page immediately following the last line of data for that ID No., i.e., an AEL requiring six (6) pages for all data, the word "EMB" will appear on page No. six (6). AELs of one (1) page of data, the word "EMB" will appear on page No. one (1).

(6) Characteristics. A general description, characteristics and/or other identifying information concerning the equipage, etc., named in (1) above. This may include special information and the criteria used to establish quantities in the onboard allowance tables noted in Sub Par f (10).

(7) Reference No./Descriptive Data. Contains significant information, manufacturer's part number(s), reference number(s), special comments and references to other AELs, etc.

(8) Item Name. Arranged in alphabetical sequence, the name of each item, and when appropriate or applicable, additional nomenclature, dimension, etc., to adequately describe the item as named.

(9) Stock No. The National Stock Number (NSN) assigned to the item named in (8) above. When a NSN is not assigned, a Activity Control Number (ACN) will be shown.

(10) Security Classification Code

- (11) Source Code (Source)
- (12) Maintenance Code (Maint.) (Not applicable to AELs)
- (13) Recoverability Code, Condensation Code
- (14) BLANK - NO DATA IN THIS COLUMN
- (15) Allowance Note Code (Notes)
- (16) Custody Code

(for codes and definitions, see Appendix (C).)

(17) Unit of Issue (U/I). The term which connotes the physical measurement or count of quantities of an item for procurement, storage and issue. Unit of issue is abbreviated alphabetically, i.e., EA-each, OZ-ounce, SE-sect, etc.

(18) Quantity (Qty). When used for certain AELs, the specific quantity of each individual piece or part contained within the equipage as a whole will be listed. For example, the AEL illustration (ID No. 2-5609010 included herewith) for a Dissolved Oxygen Testing Kit, lists the quantity in column (18) of each individual piece/part contained in the complete kit. Each piece/part is individually replaceable and may be requisitioned in the quantity indicated to reestablish the kit to an original complete status. Consult Characteristics Sub Par f (6) and the Source, Maintenance and Recoverability Codes (11), (12) and (13) respectively, prior to requisitioning. The abbreviation "SEL" (Select) may appear in this column for certain items from which a selection or choice must be made. Consult Characteristics Sub Par f (6) for detailed information and/or allowance criteria, prior to requisitioning SEL items.

(19) On Board Allowance Table. Consists of eight (8) numbered columns in which quantities may be shown. The criteria used to establish the quantities shown in one/several and/or all of these columns may be defined in the information contained on each AEL, as noted in Sub Par f (6). In certain cases, the total shipboard allowance quantity will be determined by the sum total of quantities appearing in designated columns of several AELs. In all cases, the applicable AEL identification number(s) will be shown in the COSAL Index, Part I, Sections A and B. The abbreviation "AR" (As Required) may appear in lieu of a specific quantity for certain items. Consult Characteristics Sub Par f (6) for detailed information and/or allowance criteria for the determination of shipboard quantities of "AR" items.

(20) Ship Type and Hull No. The specific ship/activity for which this is published.

(21) Page. Consecutive page numbering from first page to last page of all pages within the applicable category. Page Number preceded by the Letter M indicates MME, Z, Ordnance and E, Electronics.

(22) Identification No. Same as Sub Par. f (3).

(23) Date. Same as Sub. Par. f (4).

(24) Page. Same as Sub. Par. f (5).

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APPENDIX (A)

COSAL INTRODUCTION

COSAL INTRODUCTION APPENDIX (A)									
ALLOWANCE EQUIPAGE LIST (AEL)									
PAGE 15									
EQUIPAGE NOMENCLATURE CHARACTERISTICS									
DISSOLVED OXYGEN TEST KIT									
TECHNICAL DRAWING NUMBER									
03950									
STOCK NO.									
ITEM NAME									
PART 11 ALLOWANCE EQUIPAGE LIST (AEL) SECTION C									
SHIP TYPE & HULL NO.									
PAGE									
PAGE 15									
DISSOLVED OXYGEN TEST KIT	03950								
CHARACTERISTICS									
DISSOLVED OXYGEN TESTING KIT WITH ADDITIONAL ALLOWANCE OF KIT COMPONENTS FOR REPLACEMENT ITEMS INDIVIDUALLY REPLACEABLE CHEMICAL TO BE REQUISITIONED SEPARATELY WITH EACH KIT DO NOT USE AEL 2-560004010 FOR NEW CONSTRUCTION OR CONVERSION IMPROVED METHOD FOR DETERMINING DISSOLVED OXYGEN IN FEEDWATER IS SHOWN ON AEL 2-560004050									
DISSOLVED OXYGEN TEST KIT COLORIMETRIC KIT ALLOWED ALL STEAM DRIVEN SHIPS ONLY									
SEE INDEX PART 1 FOR COLUMN WHICH APPLIES									
COLUMN 1-FOR 1 KIT									
COLUMN 2-FOR 2 KITS									
COLUMN 3-FOR 3 KITS									
COLUMN 4-FOR 4 KITS									
COLUMN 5-FOR 5 KITS									
COLUMN 6-FOR 6 KITS									
8723-0020	FOR BURETTE FILLING	1H6640-00-290-3843	1						
8723-0029	FOR PIPETTE FILLING	1H6640-00-291-1162	1						
		1H6640-00-291-8076	2						
		1H0000-LL-CMO-5945	2						
		9G8125-00-980-4871	2						
		9G8125-00-179-0143	2						
		9L6640-00-285-8489	2						
		9L6640-00-264-6951	2						
		9L6640-00-782-6004	2						
		9L6640-00-290-6784	2						
		1H6630-00-372-0840	2						
		9L6640-00-245-7130	2						
		9G8150-00-190-0923	2						
		1H6640-00-914-3688	2						
		1H6610-00-290-3842	2						
		9L6640-00-290-4407	2						
		1H6610-00-270-5553	2						
		9L6640-00-171-5198	2						
		1H6610-00-275-8128	2						
		1H6610-00-290-3836	2						
8723-0030	4-695								
6MM OD X 5 1-2 IN LG									
RING TYPE HOT PLATE									
8723-0029									
8723-0033									
4 IN BLADE TAPERED HNDL									
8723-0030									
REFERENCE NO./DESCRIPTION DATA									
DD0001	H-127								
PART 11 ALLOWANCE EQUIPAGE LIST (AEL) SECTION C									
SHIP TYPE & HULL NO.									
PAGE									
PAGE 15									

## COSAL INTRODUCTION APPENDIX (A)

## 2. DETAILED DESCRIPTION AND DATA CONTENT OF COSAL FORMATS (Cont'd)

## B. ALLOWANCE EQUIPAGE LISTS FOR PORTABLE ELECTRONICS EQUIPAGE

(1) AELs developed for portable electronics differ in several ways from other AELs. They contain only one section and are identified with distinctive nomenclatures and numbers. The following ranges of AEL Numbers are being used.

Communication Equipments	7-670000001 thru 7-670009999
Infrared Equipments	7-670010000 thru 7-670019999
Radiac, Conventional	7-670020000 thru 7-670029999
Radiac, Nuclear	7-670030000 thru 7-670039999
Sonar	7-670040000 thru 7-670049999
Electronic Test Equipment	7-670050000 thru 7-670059999
Electrical Test Equipment	7-670060000 thru 7-670069999
Noise Monitoring	7-670070000 thru 7-670079999

(2) Nomenclatures of all those AELs are preceded by the Sub-Category (SCAT) Code (see NAVSHIPS 0900-001-2009 or 0967-008-90000 for General Purpose Electronic Test Equipment only). If no SCAT has been assigned by NAVSEC/NAVELEX, a "9999" is used. This is especially important in the case of General Purpose Electronic Test Equipment (GPETE) because Part II B Group II Section A of the NAVELEX COSAL is in SCAT sequence. Accordingly, allowances of GPETE are determined in terms of SCAT rather than in terms of specific equipment models.

(3) Appendix A, is an example of an AEL. The characteristics include certain technical data and, in some cases, accessories and technical manuals. Eventually, all AELs will list accessories and manuals. Technical data includes: the APL number for the equipment; the Logistics Support Status Code; the equipment priority; the equipment weight and cube; and alternate nomenclatures for the equipment.

(4) The statement "Column Selected Based on Equipments on Board" indicates that the AEL column selected is based on the equipments actually in the inventory regardless of the NAVELEX Part II B COSAL or any other allowance determination which may apply. In this way, when several equipment models are provided to fill a single functional requirement (SCAT), all of the models will be grouped together in the COSAL. When there are eight or less equipments on board column numbers reflect actual on board equipments. When there are more than eight equipments, additional AELs are prepared and identified at the end of the nomenclature as 9-16, 17-24, etc. This nineteen equipments would be shown 3 of the 17-24 AEL.

(5) Accessories furnished with the equipment are shown with a descriptive name and the part number which appears in the technical manual. Technical manual numbers are also shown. This is especially important since all accessories and technical manuals must be turned in when an equipment is turned in. Failure to do so leads to long delays in repair, can make calibration impossible and cause great expense in procuring replacements. If no accessories are listed in the AEL, the technical manual should be consulted to determine that all accessories furnished with the equipment are turned in.

(6) The next line in the AEL is the line which shows the National Stock Number and quantities. From left to right are the nomenclature of the equipment, noun name, National Stock Number including cognizance symbol and material control code, the security classification, Source, Maintenance, and Recoverability Code, Model, Unit of Issue, and quantities.

(7) Commercial equipment AELs are identified by the Federal Supply Code for Manufacturers and model number. The three or four letter Manufacturers Designating Symbol is shown in the characteristics on an alternate nomenclature. The nomenclature of the equipment itself, and its APL, appears in the COSAL index exactly as it was reported through either the SECAS or PECL system and as reflected in the Beyond System File (BSF). This means that the nomenclatures applied to the APL and the AEL may be different. National Stock Numbers/Activity Control Numbers and associated data are also listed in Section III B of the COSAL.



(4) Part III

(a) Section A, Stock Number Sequence List (SNSL) of Storeroom Items (SRI). Section A of Part III contains an SNSL of the authorized storeroom/stock allowance quantities of repair parts and other materials required to be stocked aboard to support the equipments listed in Part I. It is compiled by stock number from the APLs in Part II, and is arranged in National Item Identification Number (NIIN) sequence. Each line item specifies the stock number, nomenclature, unit of issue, allowed quantity of the repair part, the equipment supported, and certain other supply management data. The SNSL of storeroom items will usually be superseded by the Integrated Stock List (ISL) after the ship's first major overhaul. The ISL contains the same information in the same format as the SNSL except it reflects the addition or deletion of equipments/components since the SNSL was published.

(b) Section B, SNSL of Operating Space Items (OSI). Section B of Part III consolidates the operating space items listed in APLs and AELs in Part II. It is compiled by stock number and is arranged in NIIN sequence.

(c) Section C, Military Essentiality Code (MEC) List of Storeroom Items. Section C of Part III applies to Fleet Ballistic Missile submarines only and will not be discussed here. For further information, the ship's Supply Officer may be consulted.

(d) Section D, Alternate Number Cross Reference to Stock Number. Section D of Part III is arranged in alternate number sequence, cross referenced to repair parts NIIN in the COSAL SNSL, Section A and B. The alternate numbers may be manufacturer's part number or drawing and piece numbers.

(e) Section E, General Use Consumables List (GUCL). The GUCL is a list of generally used, consumable, nonequipment related items for initial outfitting of a ship's operating spaces and storerooms. The GUCL is prepared only for new construction, major conversion, or reactivated ships.

(f) Section F, Forms and Publications. Section F provides a range and depth guide of operating space and storeroom stock forms sufficient to support the ship's routine maintenance and administrative operations during the endurance periods specified by Chief of Naval Operations instructions. The endurance period for the publications will be for operating spaces only.

b. Electronic Segment

The format of the electronic segment is identical to that described above except as follows:

(1) Part II of the electronic segment includes three sections (i.e. Section A (APLs in identification number sequence), Section B (APLs in circuit symbol sequence), and Section C (AELs)).

(2) Part III of the electronic segment does not include Sections A, B, E, and F.

c. Nuclear Weapons Segment

The format of the nuclear weapons segment is identical to the HMEO segment, with the following exceptions:

(1) Part III does not include Sections C, D, E, and F.

(2) Part IIIB includes operating space items (OSI) listed in the APL/AELs in Part II and includes general use consumables. (General use consumables are included in Part IIIB to insure the support of nuclear weapons equipments and spaces, even though such items may be common items used to support other shipboard equipment and spaces.)

d. Reactor Plant Segment

The reactor plant segment, commonly referred to as the "Q" COSAL, is prepared in the same format as the HMEO segment, except that Part III does not include Sections B, C, E, and F, and a Stock Number Sequence List (SNSL) for nuclear propulsion items has been added. All "Q" COSAL allowed items, including equipage, are listed as storeroom items in Part III, Section A and require special inventory management procedures which are specified in NAVSUP P-485.

3. Use and Maintenance of the COSAL by the Line Department

Normally, there are at least two copies of the COSAL available aboard ship. One is retained by the supply

department while the other is retained by the engineering department technical library. It is obvious from the prior description of the COSAL, that it is an important document for the maintenance support of the ship. Unfortunately, many times the shipboard COSAL is incomplete or inaccurate due to a lack of knowledge at the shipboard level.

A good COSAL depends heavily upon the personnel that maintain the ship's equipment on a daily basis. It does not take long for the COSAL to become an inaccurate document when additions or deletions of equipments/components are not reported. The responsibility rests with the operating and maintenance personnel to initiate reports of equipment/component additions or deletions by notifying the supply department. In addition, the improper documentation of part usage eventually leads to inaccurate allowance quantities for storeroom stock. The usage documentation problem will be discussed in the 3M/Supply Interface section of this text.

The following are just a few of the uses of the COSAL:

- (1) To determine equipage allowance quantities;
- (2) To determine storeroom allowances of repair parts and consumables;
- (3) To provide a complete inventory of all equipments/components aboard ship;
- (4) To identify technical manuals;
- (5) To find stock numbers for repair parts.

B. Navy Management Data List (NMDL)

The Navy Management Data List (NMDL) is published by the Navy Fleet Material Support Office (FMSO). It is published on microfiche and a complete revision is distributed quarterly. The NMDL contains the following data relative to stock numbers in which the Navy has an interest:

- (1) Unit of issue;
- (2) Unit price;
- (3) Shelf life codes;
- (4) Other pertinent management information.

The NMDL also includes an integrated historical record of deleted and superceded stock numbers, with appropriate phrase codes to indicate disposition action. The NMDL is in NIIN sequence.

The line department will use the NMDL to insure stock numbers are accurate and to determine the correct unit of issue and unit price when preparing issue request documents. There are normally several copies of this publication available aboard ship.

C. Master Repairable Item List (MRIL)

The Master Repairable Item List (MRIL), published by FMSO, is a catalog of selected Navy managed items which, when unserviceable, are required to be turned in to a designated overhaul point (DOP) for repair and return to system stock. The MRIL is published in microfiche and is distributed monthly. The MRIL consists of three parts as follows:

- (1) Listing of items in NIIN sequence;
- (2) Part number cross-reference listing;
- (3) Shipping addresses for designated overhaul points.

The cognizant department must use this publication to determine if an item appears on the list and take action to turn the unserviceable item into the supply department.

D. Navy Consolidated Hazardous Item List (CHIL)

The Navy Consolidated Hazardous Item List (CHIL) is published by FMSO to alert users of the potentially hazardous nature of certain items in the supply system. This publication applies to industrial chemicals, material, and devices which pose an inherent danger to life or property, but does not include explosives, conventional bulk fuels, drugs, and chemicals dispensed by medical department pharmacies.

It is presented in three sections: Section A, NIIN sequence; Section B, nomenclature sequence; and Section C, stowage sequence. Section C is prefaced by a list of items not allowed to be stored aboard ship. The CHIL is updated by FMSO notice when required and is republished annually at which time changes are incorporated.

This publication is used for guidance in determining the stowage requirements for hazardous items and whether the material is allowed for shipboard use or not.

E. Afloat Shopping Guide (ASG)

The Afloat Shopping Guide (ASG), published by FMSO, is designed to assist fleet personnel in identifying the

stock numbered items that are most frequently requested by ships. It includes a detailed description of each item, a specific code to designate items carried by replenishment ships, and (when applicable) the stock number of substitute items. It also includes specifications for illustrations or diagrams of many types of material. The ASG is published annually in two volumes. In addition to the ASG, most ships have a copy of the GSA Catalogue which provides the same information as the ASG but includes general use items from throughout the government system. The ASG is helpful to the line department in identifying stock numbers for such common use items as nuts, bolts, or screws.

F. Consolidated Afloat Requisitioning Guide Overseas (CARGO)

The Consolidated Afloat Requisitioning Guide Overseas (CARGO) is published by FMSO in two versions: one for the Pacific fleet, and one for the Atlantic fleet. The CARGO is tailored for use by afloat requisitioners when requesting material from Mobile Logistic Support Force (MLSF) ships. The two main portions of interest to the line officer are chapters 1 and 4. Chapter 1 lists supply sources and the type of material available from each source. Chapter 4 contains the Fleet Issue Load List (FILL) for equipment related and consumable material carried by the Combat Store Ship (AFS). These chapters are useful when there is an immediate requirement and underway replenishment ships are the closest means of support, as well as being a shopping guide for regular replenishments.

## Chapter 3 - OPTAR

### A. Source

The daily operating and maintenance expenses of a ship are funded by the Congressional appropriation entitled "Operations and Maintenance, Navy". The office of the Chief of Naval Operations is responsible for allocation of these funds to the fleet commanders, who allocate funds to the type commanders. The funds are allocated by the type commander to the afloat units in the form of operating targets or OPTARs.

The specific afloat unit's OPTAR is an operating target established by the appropriate type commander. Any additions or deletions from this target must be authorized by the type commander. OPTAR grants are normally provided quarterly.

### B. Internal Allocation

Once the ship receives its OPTAR grant, the Commanding Officer of the ship is responsible for the proper expenditure of the funds. In most ships, the Commanding Officer will request budget submissions from the department heads prior to the beginning of the quarter. In order to submit a well justified budget, the department head must know how much OPTAR funds will be required to perform the planned maintenance for the next quarter and how much will be required for the general administrative operation of the

department. By planning ahead, the department head can provide the Commanding Officer with an accurate estimate of funds required.

The Commanding Officer then is in a much better position to allocate funds between departments since he will know which work can be done with funds allocated and which work either will not be done or will require supplemental funding. Once the Commanding Officer receives the departmental requests, he will allocate the OPTAR among the departments based on the budget submissions and his knowledge of the ship's requirements. In most cases, the Supply Officer will act as coordinator for the budget requests and will advise the Commanding Officer on financial matters. However, the Commanding Officer is responsible for the OPTAR allocation among departments, not the Supply Officer.

C. Financial Responsibility of the Line Officer

In many ships, after the Commanding Officer has allocated the OPTAR among departments, the department head will allocate his departmental funds among his divisions. However, whether the funds are held at the departmental or divisional level, the responsible officer must know what funds are available to him at all times. If the department head and division officer know the amount of funds available to the department or division, it will have a positive effect on the proper management of their financial and personnel resources. For instance, if personnel are allocated to a maintenance project

and the funds are not available to purchase the material required, then a hasty reassignment of personnel and much wasted effort is the result.

In order for the responsible officer to keep track of the funds allocated to him, it is recommended that he appoint a petty officer within his department or division to maintain an OPTAR log. The OPTAR log need not be extensive. It is recommended that the following columnar headings be utilized:

- (1) Julian date;
- (2) Serial number;
- (3) Nomenclature;
- (4) Stock number;
- (5) Unit of issue;
- (6) Quantity ordered;
- (7) Unit or total price;
- (8) OPTAR balance;
- (9) Date material received.

Maintenance of the OPTAR log will not only provide a view of the funds available but will provide a record of material ordered which can be reconciled with supply department records periodically. It is recommended that the reconciliation and review of outstanding material requests be done every ten days to coincide with the supply department's preparation of the departmental OPTAR status report. Constant review of outstanding requisitions will insure a better utilization of funds, when no longer required items are cancelled and the funds are used for new requirements.

Another method to get better utilization of funds is to carefully review material request documents before they are submitted to the supply department. The ordering officer must be sure that the quantity requested is the quantity required for the job. He must know what maintenance job is being performed with the material in order to use the funds available on the highest priority projects.

D. Additional Information

Type commanders have specific regulations regarding OPTAR. The Supply Officer is familiar with these regulations and can provide assistance in pursuing supplemental OPTAR grants or other sources of funds.

## Chapter 4 - Material Procurement

### A. General

Most material required for the ship to operate effectively and fulfill its mission is authorized for procurement. However, safety restrictions, Navy and fleet or type commander directives, or local regulations may prohibit procurement of certain items. Information on these restrictions can be obtained from the Supply Officer of Stores Division Officer.

There are two basic methods which the supply department can use to procure material:

- (1) by submission of a requisition to an ashore supply activity or to another naval vessel;
- (2) by purchase through the supply activity from a commercial source.

A ship normally will procure its requirements by submitting a requisition to a Navy supply activity. However, when organized supply systems cannot be used to obtain material required for immediate operations, the Supply Officer is authorized to purchase these requirements direct from a commercial source subject to certain dollar constraints, type commander restrictions, and local regulations.

It is recommended that the ship's Supply Officer or Stores Division Officer be contacted before consulting with any commercial vendor so that information on dollar

restrictions and local procurement regulations can be obtained. An important fact is that the Supply Officer of a ship is the only person aboard authorized as a contracting officer for the U.S. Navy. Therefore, he must authorize all commercial source procurements before they are consummated.

B. Requests for Material

1. Non-automated ships

The primary document for requesting material or services from the supply department is the NAVSUP Form 1250. For all material, the person requesting the material will enter the information applicable to the following data blocks in the NAVSUP Form 1250 (Paraphrased from NAVSUP P-485, para. 6207):

- a. Data Block 1 (Req Date). Enter the Julian date on which the issue request is submitted.
- b. Data Block 2 (Dept. No.). The department number is a 4-digit serial number which may be used by a ship for internal control of departmental material requests. If used, enter the next consecutive number from a checkoff list or log of a block of serial numbers provided by the Supply Officer for departmental use.
- c. Data Block 3 (Urgency). Enter Urgency of Need Designator (UND) A, B, or C selected from the following general table. (For more specific

definitions and those related to aviation units consult the Supply Officer.)

UND

Definition

- A (1) Requirement is immediate.  
(2) Without the material needed, the activity is unable to perform one or more of its primary missions.  
(3) The condition noted in definition (2) has been reported by established NORS/CASREPT procedures.
- B (1) Requirement is immediate, or it is known that such requirement will occur in the immediate future.  
(2) The activity's ability to perform one or more of its primary missions will be impaired until the material is received.
- C (1) Requirement is routine. [1:3-60]

- d. Data Block 8 (Noun Name or Ref. Sym.). Enter the noun name of the requested item (e.g., bearing), except when the part to be replaced is an electronic or ordnance item which has a reference symbol number and which has been determined to be a failed part (if failed part check box in data block 9). If the reference symbol exceeds 8 characters enter an asterisk (\*) in the first position of data block 8, and in data block 29 (Remarks), enter an asterisk and the complete reference symbol number.
- e. Data Block 13 (UIC) and Data Block 14 (WC). Enter the ship's unit identification code and the appropriate 4-digit work center code. If

- performing a maintenance action, enter the appropriate job control number in data block 15, otherwise leave data block 15 blank.
- f. Data Blocks 21, 22, and 23 (Stock Number). Enter the National Stock Number (NSN) in data blocks 21 and 22; and if a special material identification code (SMIC) is assigned to the NSN, enter the SMIC in data block 23.
  - g. Data Blocks 24 (U/I) and 25 (Quantity). Enter the unit of issue (e.g., PR, EA) and the quantity required. Limit the quantity to that actually required to accomplish a specific maintenance action.
  - h. Data Block 30 (Approved by). Most ships require a list of authorized signatures to be on file in the supply office. Only those personnel authorized within each division can approve material request documents.

In addition, if the material requested is to be used for equipment maintenance, the requester will enter the information applicable to the following data blocks (Paraphrased from NAVSUP P-485, para. 6207):

- a. Data Block 9 (FPR). Enter a check mark (✓) if the requested item is required to replace a failed part; otherwise leave blank.
- b. Data Block 10 (APL/AEL/CID). Beginning in the first position of the data block, enter the

identification number of the Allowance Parts List (APL) or Allowance Equipage List (AEL) for the equipment or component on which maintenance is to be accomplished. If an APL or AEL number cannot be found for the equipment, contact the Stores Division Officer for assistance.

- c. Data Block 16 (EIC). Beginning in the first position of the data block, enter the equipment identification code from the EIC Master Index (MSO 4790.E2579). If the EIC contains less than seven significant characters, zero fill the remaining spaces in the data block.

The following sample NAVSUP Forms 1250 are properly completed for requesting nonmaintenance related items and maintenance related items respectively [1:6-132 and 6-134].

NAVSUP FORM 1250 FOR A NONMAINTENANCE RELATED ITEM  
AFTER ENTRIES OF REQUESTER'S DATA

OPTIONAL ENTRY  
(SEE ITEM 2)

1 REQ DATE 6196	2 DEPT NO 0690	3 URGY C	4 ROD	5 LOCATION	6	7 ISSUE DATE	A REON QTY	B REON NO
8 NOUN NAME OR REF SYM RIBBON		9 FPR	10 APL/AEL/CIO		11 SW BY 12	NIS N/C	C OBL AMT	D POSTED
13 JOB CONTROL NUMBER R 521920E01				14 WC	15 JSN	16 EIC	17 EQUP COBAL SUPPT D YES NO	18 URG MARI OPTAR LOG
19 STOCK NUMBER 7510001625644				20 SC	21 COG	22 MNC	23 PSC	24 NOUN
25 QUANTITY EA				26	27	28	29	30
31				32	33	34	35	36
37				38	39	40	41	42
43				44	45	46	47	48
49				50	51	52	53	54
55				56	57	58	59	60
61				62	63	64	65	66
67				68	69	70	71	72
73				74	75	76	77	78
79				80	81	82	83	84
85				86	87	88	89	90
91				92	93	94	95	96
97				98	99	100	101	102
103				104	105	106	107	108
109				110	111	112	113	114
115				116	117	118	119	120
121				122	123	124	125	126
127				128	129	130	131	132
133				134	135	136	137	138
139				140	141	142	143	144
145				146	147	148	149	150
151				152	153	154	155	156
157				158	159	160	161	162
163				164	165	166	167	168
169				170	171	172	173	174
175				176	177	178	179	180
181				182	183	184	185	186
187				188	189	190	191	192
193				194	195	196	197	198
199				200	201	202	203	204
205				206	207	208	209	210
211				212	213	214	215	216
217				218	219	220	221	222
223				224	225	226	227	228
229				230	231	232	233	234
235				236	237	238	239	240
241				242	243	244	245	246
247				248	249	250	251	252
253				254	255	256	257	258
259				260	261	262	263	264
265				266	267	268	269	270
271				272	273	274	275	276
277				278	279	280	281	282
283				284	285	286	287	288
289				290	291	292	293	294
295				296	297	298	299	300
301				302	303	304	305	306
307				308	309	310	311	312
313				314	315	316	317	318
319				320	321	322	323	324
325				326	327	328	329	330
331				332	333	334	335	336
337				338	339	340	341	342
343				344	345	346	347	348
349				350	351	352	353	354
355				356	357	358	359	360
361				362	363	364	365	366
367				368	369	370	371	372
373				374	375	376	377	378
379				380	381	382	383	384
385				386	387	388	389	390
391				392	393	394	395	396
397				398	399	400	401	402
403				404	405	406	407	408
409				410	411	412	413	414
415				416	417	418	419	420
421				422	423	424	425	426
427				428	429	430	431	432
433				434	435	436	437	438
439				440	441	442	443	444
445				446	447	448	449	450
451				452	453	454	455	456
457				458	459	460	461	462
463				464	465	466	467	468
469				470	471	472	473	474
475				476	477	478	479	480
481				482	483	484	485	486
487				488	489	490	491	492
493				494	495	496	497	498
499				500	501	502	503	504
505				506	507	508	509	510
511				512	513	514	515	516
517				518	519	520	521	522
523				524	525	526	527	528
529				530	531	532	533	534
535				536	537	538	539	540
541				542	543	544	545	546
547				548	549	550	551	552
553				554	555	556	557	558
559				560	561	562	563	564
565				566	567	568	569	570
571				572	573	574	575	576
577				578	579	580	581	582
583				584	585	586	587	588
589				590	591	592	593	594
595				596	597	598	599	600
601				602	603	604	605	606
607				608	609	610	611	612
613				614	615	616	617	618
619				620	621	622	623	624
625				626	627	628	629	630
631				632	633	634	635	636
637				638	639	640	641	642
643				644	645	646	647	648
649				650	651	652	653	654
655				656	657	658	659	660
661				662	663	664	665	666
667				668	669	670	671	672
673				674	675	676	677	678
679				680	681	682	683	684
685				686	687	688	689	690
691				692	693	694	695	696
697				698	699	700	701	702
703				704	705	706	707	708
709				710	711	712	713	714
715				716	717	718	719	720
721				722	723	724	725	726
727				728	729	730	731	732
733				734	735	736	737	738
739				740	741	742	743	744
745				746	747	748	749	750
751				752	753	754	755	756
757				758	759	760	761	762
763				764	765	766	767	768
769				770	771	772	773	774
775				776	777	778	779	780
781				782	783	784	785	786
787				788	789	790	791	792
793				794	795	796	797	798
799				800	801	802	803	804
805				806	807	808	809	810
811				812	813	814	815	816
817				818	819	820	821	822
823				824	825	826	827	828
829				830	831	832	833	834
835				836	837	838	839	840
841				842	843	844	845	846
847				848	849	850	851	852
853				854	855	856	857	858
859				860	861	862	863	864
865				866	867	868	869	870
871				872	873	874	875	876
877				878	879	880	881	882
883				884	885	886	887	888
889				890	891	892	893	894
895				896	897	898	899	900
901				902	903	904	905	906
907				908	909	910	911	912
913				914	915	916	917	918
919				920	921	922	923	924
925				926	927	928	929	930
931				932	933	934	935	936
937				938	939	940	941	942
943				944	945	946	947	948
949				950	951	952	953	954
955				956	957	958	959	960
961				962	963	964	965	966
967				968	969	970	971	972
973				974	975	976	977	978
979				980	981	982	983	984
985				986	987	988	989	990
991				992	993	994	995	996
997				998	999	1000	1001	1002
1003				1004	1005	1006	1007	1008
1009				1010	1011	1012	1013	1014
1015				1016	1017	1018	1019	1020
1021				1022	1023	1024	1025	1026
1027				1028	1029	1030	1031	1032
1033				1034	1035	1036	1037	1038
1039				1040	1041	1042	1043	1044
1045				1046	1047	1048	1049	1050
1051				1052	1053	1054	1055	1056
1057				1058	1059	1060	1061	1062
1063				1064	1065	1066	1067	1068
1069				1070	1071	1072	1073	1074
1075				1076	1077	1078	1079	1080
1081				1082	1083	1084	1085	1086
1087				1088	1089	1090	1091	1092
1093				1094	1095	1096	1097	1098
1099				1100	1101	1102	1103	1104
1105				1106	1107	1108	1109	1110
1111				1112	1113	1114	1115	1116
1117				1118	1119	1120	1121	1122
1123				1124	1125	1126	1127	1128
1129								

## 2. Automated ships

In automated ships, the primary material request document is the DD Form 1348. (NAVSUP Form 1250 is not used in automated ship.) For all material requests, the person requesting the material must enter the information applicable to the following data blocks in the DD 1348 (Paraphrased from NAVSUP P-518, paras, 5050 and 5070):

- a. Data Block B (Requisition is from). Enter the division name or work center code and the authorizing signature.
- b. Data Block C (Noun name). Enter the noun name of the material requested.
- c. Data Blocks 4, 5, and 6 (Stock number). Enter the National Stock Number (NSN) beginning in the first position and if a special material identification code (SMIC) is assigned, enter it in data block 6.
- d. Data Block 7 (Unit of issue). Enter the unit of issue.
- e. Data Block 8 (Quantity). Enter the quantity required.
- f. Data Block 11 (Date). Enter the Julian date of the request.
- g. Data Block 12 (Serial number). The department number is a 4-digit number which is used by an automated ship for internal control of department

material requests. Enter the next consecutive serial number from a checkoff list or log of a block of numbers provided by the Supply Officer for departmental use. Note: This entry is mandatory on automated ships.

- h. Data Block V (Urgency). Enter the Urgency of Need Designator A, B, C, as appropriate. (See explanation under data block 3 of the NAVSUP 1250.)

The following additional data blocks must be completed for maintenance related material requests (Paraphrased from NAVSUP P-518, paras. 5050 and 5070):

- a. Data Block L (UIC). Enter the ship's unit identification code.
- b. Data Block M (Work Center). Enter the appropriate 4-digit work center code.
- c. Data Block N (JSN). Enter the job sequence number assigned to the maintenance being performed.
- d. Data Block P (EIC). Enter the appropriate equipment identification code.
- e. Data Block Q (FPR). Enter "FPR" if the requested item is required to replace a failed part; otherwise, leave blank.
- f. Data Blocks R and S (APL/AEL). Enter the APL or AEL number of the equipment on which maintenance is being performed.

g. Data Block U (Circuit Symbol). For electronics equipment, enter the appropriate circuit symbol number.

The following page provides sample DD Forms 1348 properly completed for requesting nonmaintenance related items and maintenance related items respectively.

DD FORM 1308 (APR) 1 MAR 74

REQUISITION SYSTEM DOCUMENT (PARALLEL)

O. O. SHOULD USE HELP

DOC IDENT	ROUTING	FSC	NITN	ADD	QUANTITY	REQUISITION	DATE	SERIAL	SUPPLEMENTARY ADDRESS	FUND	DISBURS	PROJECT	PRIORITY	REQ. IN	ADV	STAFF
SEND TO:										REQUISITION IS FROM: J. Jones, LT, USN						
A										OEΦ1						
C										RIBBON						
D										7,51,000,1,6,2,5,644						
E										EAC0002						
F										61960690						
G										61960690						
H										R52192 - OEΦ1 - 0326						
I										P3CT000 FPR . 57039.600						
J										C						

DD FORM 1308 (APR) 1 MAR 74

REQUISITION SYSTEM DOCUMENT (PARALLEL)

O. O. SHOULD USE HELP

DOC IDENT	ROUTING	FSC	NITN	ADD	QUANTITY	REQUISITION	DATE	SERIAL	SUPPLEMENTARY ADDRESS	FUND	DISBURS	PROJECT	PRIORITY	REQ. IN	ADV	STAFF
SEND TO:										REQUISITION IS FROM: J. Jones, LT, USN						
A										OEΦ1						
C										FUSE						
D										5920002962440						
E										EA00003						
F										61960691						
G										R52192 - OEΦ1 - 0326						
H										P3CT000 FPR . 57039.600						
I										B						

C. Requests for Services and Non-NSN Material

Requests for services may include copying machine, printing, typewriter repair or other services. When requesting services, it is best to consult the Supply Officer as to the procedure desired. In all cases, however, the Supply Officer must be contacted prior to allowing any commercial vendor or repair service to perform the service desired, since the Supply Officer is the only person aboard who is authorized to contractually obligate the U.S. Navy for any expenditure of funds. By consulting the Supply Officer, first, later problems to the command, such as attempting to pay vendors after the work has been completed, can be prevented.

Requests for non-NSN material must be taken directly to the supply department's technical section in order for the supply department to review them and provide assistance in identifying the material and obtaining at stock number. If the supply department cannot identify the material through shipboard sources, the nearest supply activity's technical branch will be contacted. Finally, if a purchase must be made commercially, assistance in document preparation in order to completely describe the item for the supply activity's purchasing agents can be accomplished.

## Chapter 5 - Supply/3M Interface

### A. General

There are two major areas of concern where the supply system interfaces with the maintenance system. The first area is providing repair parts and consumables to perform the required maintenance and the second is the collection of data regarding the use of these repair parts in shipboard systems. With the first function, in addition to the normal stocking of material in supply department store-rooms, is the stowage of a limited amount of material, known as pre-expended bin (PEB) material, in departmental spaces for ready accessibility to maintenance personnel. The second function of data collection is carried out by the Maintenance Data System (MDS).

### B. PEB Material

#### 1. Criteria

PEB material consists of low cost, frequently used maintenance related items which are pre-expended from supply department stock and stored in departmental work centers. Department heads designate the work center(s) in which PEB(s) will be located. The Supply Officer and other department heads jointly develop a list of the items and quantities to be pre-expended. Each operating department head appoints a petty officer to maintain and replenish pre-expended bins

for that department. To insure that only authorized items and minimum quantities are pre-expended from supply department stock, the following criteria are prescribed (paraphrased from NAVSUP P-485, para. 6169):

- a. Only maintenance related items will be pre-expended.
- b. The item must have a demand frequency of five or more per month ship-wide, or two or more per month from the same department or work center.
- c. Quantities will be limited to one month usage, except for items such as frequently used bolts, nuts, and screws when the standard unit of issue (e.g., gross) may exceed maintenance requirements for one month.
- d. The unit cost will be limited to \$25 or less, unless higher priced items are specifically authorized (in writing) by the Commanding Officer.
- e. Repairables or "critical" items will not be pre-expended.

A quarterly review of the stock records will be conducted by the supply department to determine if there are items which would be deleted from PEB because they no longer meet the criteria or if there are new items to be added because they now meet the criteria.

## 2. Replenishment of PEB Material

- a. Non-automated ships

The NAVSUP 1250 is prepared in the same manner as the NAVSUP 1250 for any maintenance related issue with the following exceptions, which have been paraphrased from NAVSUP P-485, para. 6208:

1. Data Block 10 (APL/AEL/CID). Enter the words "NOT APPL" (i.e., not applicable).
2. Data Block 15 (JSN). Enter "Z0000".
3. Data Block 16 (EIC). Enter "X00000000".

b. Automated ships

The DD Form 1348 is prepared in the same manner as the DD 1348 for any maintenance related issue with the following exceptions which are paraphrased from NAVSUP P-518, para. 5070:

1. Data Block N (JSN). Enter "Z0000".
2. Data Block P (EIC). Enter "X00000000".
3. Data Blocks R and S (APL/AEL/CID). Enter

"NOT APPL".

Note: in both cases, the quantity must be no more than one month's usage.

C. Maintenance Data System (MDS)

The Maintenance Data System, a basic element of the 3M program, is designed to provide a means of recording maintenance actions in substantial detail, so that a great variety of information may be retrieved concerning maintenance requirements and equipment performance. There are two documents which are the primary sources of information into

the system. These documents are the work request (OPNAV Form 4790/2K) and the material request document (NAVSUP 1250 or DD 1348). The work request document will indicate labor required to perform the maintenance action and the material request document will state the repair parts required to perform the maintenance action. The work request is fully explained in the 3M manuals.

The material request document must be properly completed for the repair part usage to be linked to the equipment for which the repair part was used. The entries which provide this link are the work center code, JSN, EIC, and APL/AEL numbers. These entries on the material request document must be copied directly from the work request which has been prepared for the maintenance action. If these items are not entered on the material request document, the job of determining which repair parts to stock aboard ship becomes an estimate rather than a figure based on experience with the equipment. Therefore, it is important to insure that personnel are properly documenting maintenance and repair parts usage. If a manager finds that his personnel require training in the preparation of material request documents, the Supply Officer will provide that training.

## Chapter 6 - Repairable Management

### A. General

The term "repairable" refers to a component or part designated by the cognizant inventory manager as an item which can be economically repaired when it becomes unserviceable. Repairables are identified by a special control code which is included in part of the stock number. It is the responsibility of the Supply Officer to identify these components aboard ship and ensure compliance with the special management procedures associated with repairables. The line officer must be aware of some of the procedures in order to assist in the proper maintenance of these expensive and critical components within the supply system. Every ship is required to have a shipboard instruction concerning specific responsibilities of individual personnel with regard to repairables. All line managers must read and be fully cognizant of this instruction.

### B. Turn-in Requirement

The Supply Officer is required to obtain the defective component at the time an issue request is submitted for a new component. If, however, the component cannot be removed from the equipment because it is still of some use, the Supply Officer can wait until the new unit has been issued before receiving the defective unit. In this case, the defective unit will be returned to the supply department

within 24 hours after receipt of the new unit. The line manager must ensure that the defective component is required to remain in place while awaiting receipt of the new unit, because a delay in returning the defective unit will result in more time before the defective unit is returned to the overhaul point and eventual return to the supply system. Defective units held aboard ship create critical repairable shortages.

Another area which results in delays and additional cost is the care of the component after it is removed from the equipment. Once the component has been removed from the equipment, it should be carefully packed in order to prevent further damage. Damage caused by improper handling of repairables results in added costs both in time and money to return the component to stock in the supply system.

Unserviceable mandatory turn-in items held pending shipment to the overhaul point cannot be cannibalized for parts (except for NORS requirements). Although cannibalization may satisfy an occasional requirement, it greatly extends the turn-around time for the unserviceable repairable and, consequently, causes serious shortages in the supply system.

#### C. Documentation Required

If the turn-in item is related to a maintenance action which is required to be reported in accordance with the Ship's 3M Manual (OPNAVINST 4790.4), it will be accompanied with one legible copy of the Ship's Maintenance Action Form

(OPNAV Form 4790/2K) which must be attached when it is turned in or shipped to the overhaul point. If the turn-in is not made at the time that the material request is submitted to the supply department, a copy of the original material request must accompany the turn-in to assist the supply department in matching the defective component to the material request document.

D. Training

Repairable management training is available at the following locations:

- |                    |                     |
|--------------------|---------------------|
| (1) NAVSTA Rota    | (6) NSC Oakland     |
| (2) NSA Naples     | (7) NSC Puget Sound |
| (3) NSC Norfolk    | (8) NSC San Diego   |
| (4) NSC Charleston | (9) NSC Pearl       |
| (5) NAVSTA Mayport | (10) NSD Subic      |

The training is conducted by the Fleet Repairables Assistance Agent assigned at each of these locations. The one day school is offered to maintenance personnel as well as supply department personnel and covers documentation and handling procedures for repairable components. A shipboard Supply Officer will have more information on obtaining quotas and on specific dates that the school is offered.

## Chapter 7 - Controlled Equipage

### A. General

NAVSUP P-485 defines equipage as "those non-installed and relatively durable items which are located in operating spaces or other designated areas to support recurring operational, maintenance, or administrative functions, or to provide for the health, comfort, or safety of the crew." Equipage is portable equipment such as fire hose and nozzles, gas masks, portable electronic test equipment, and office machines. Allowance quantities for ships are determined on an individual ship basis and are usually listed in the Allowance Equipage Lists (AELs) and Part IIIB of the COSAL.

### B. Controlled Equipage List

Equipage management also includes a small class of material entitled controlled equipage which requires special management attention because the material is essential for the protection of life or is relatively valuable and easily convertible to personal use. Before discussing control of the items, a list of controlled equipage items aboard ship must be obtained. Appendix 11 of NAVSUP P-485 lists items selected or approved by fleet commanders for special inventory control. All ships must ensure proper inventory management of these items. In addition, the type commander and the ship's Commanding Officer may designate additional items

which they deem necessary to be so controlled. A complete list of controlled equipage for a particular ship will be available from the Supply Officer. Some controlled equipage requires serial number control or custody signature or both. The control requirement for a specific item may also be obtained from the Supply Officer or it will be noted on the custody record.

C. Custody Records

The Controlled Equipage Custody Record (NAVSUP Form 306) is the form used as a custody record and inventory control document for controlled equipage. (Note: Automated ships may have their own computer printed custody record forms.) These forms are prepared by the supply department for all departments. They are prepared in an original and one copy for each item in the custody of each department head. The original, once complete, is retained by the Supply Officer and the copy is held by the appropriate department head in whose custody the material is retained. A sample NAVSUP Form 306 is illustrated below [1:6-54].



D. Department Head Responsibilities

The department head is responsible for signing the custody records of items designated as "signature required" and for ensuring that a proper inventory is entered on the reverse of the custody record when he relieves his predecessor. Directives also require that an inventory be taken annually during the period 15 February - 15 March and upon change of command, at the discretion of the relieving Commanding Officer. The inventoried quantities are entered on the reverse of the custody record and each department head is required to submit a letter report to the Commanding Officer, with a copy to the Supply Officer. Upon change of department head, the letter report must be signed by both the relieved and relieving department head. Letter reports will include the following (Paraphrased from NAVSUP P-485, para. 6095):

- (1) a statement that the controlled equipage inventory has been completed;
- (2) a statement that surveys applicable to shortages and unserviceable items have been submitted (or reasons why they have not been submitted);
- (3) a statement that material requests applicable to shortages or unserviceable items requiring replenishment have been submitted to the Supply Officer (or reasons why they have not been submitted);

- (4) a list of excess controlled equipage items, including justification or authority for any excess items to be retained.

The department head must keep the Supply Officer informed of changes in the status of the department's controlled equipage in order that surveys, receipts, and requisitions may be properly recorded on the original custody record held by the Supply Officer. The original and the departmental copy must always be in agreement.

E. Sub-custody of Controlled Equipage

Daily shipboard business will normally necessitate use of departmental controlled equipage by personnel other than the department head. Department heads may maintain a custody record within the department by obtaining memorandum receipts for "signature required" items when they issue such items to others or they may use additional copies of the NAVSUP Form 306 to obtain signatures. A sample memo receipt of a 3" X 5" card is shown below [1:6-63].

MEMO RECEIPT FOR CONTROLLED EQUIPAGE <u>OPS 12</u> (Appl Dept Card No.)			
Receipt is acknowledged for the following item of controlled equipage in the quantity indicated:			
BINOCULARS, prismatic, 7 X 50, w/filters, case, and straps			
Date	Serial	Quantity	Signature and Rank/Grade
3/15/70	42450	1 EA	10. E Underwood, ENS
3/15/70	703	1 EA	Richard Bacon, QM3
4/6/70	5467	1 EA	J Mc Glade, BM 2
(Columns cont'd on reverse)			

Columnar entries in a memorandum receipt for controlled equipage will be made by pen or indelible pencil. When material is returned by the user, the applicable entry in the memo receipt will be lined out by pen or indelible pencil in the presence of the person who returned the material and the deleted entry will be initialed by the person holding the memo receipt as illustrated below [1:6-64].

Date	Serial	Quantity	Signature and Rank/Grade
3/15/70	82450	1 EA	DE Underwood ENS
<del>3/15/70</del>	<del>703</del>	<del>1 EA</del>	<del>Richard Bacon JBT QM5</del>
4/4/70	5467	1 EA	G Mc Clure BM2
(Columns cont'd on reverse)			

## Chapter 8 - Surveys

### A. Purpose

The purpose of a survey is to provide a record for:

1. An administrative review of the condition of material, the cause of the condition, the responsibility therefor, and the recommendation for disposition;
2. An authorization to expend the material from the records on which carried.

### B. Material Requiring Survey

A survey is required for:

1. All mandatory turn-in repairable items which are lost or destroyed;
2. All missing controlled equipage;
3. When directed by the Commanding Officer or higher authority.

### C. Types of Surveys

#### 1. Formal Survey

A formal survey is required when culpable responsibility is indicated or when directed by the Commanding Officer or higher authority. A formal survey is made by either a commissioned officer or a board of three officers appointed by the Commanding Officer. The following officer cannot serve on a formal survey board:

- a. The Commanding Officer;
- b. The officer on whose records the material being surveyed, is carried;
- c. The officer charged with custody of the material being surveyed.

2. Informal Survey

An informal survey is required in all cases when a formal survey is not required. Informal surveys are made by the head of the department having custody of the material being surveyed.

D. Survey Origination

Surveys are usually initiated by the division officer or department head having custody of material to be surveyed. The rough survey will include the following (see illustration on next page [1:5-38]):

1. Originator's name and title;
2. Location of material to be surveyed;
3. Stock number, description, quantity, unit price, and total price of the item(s) being surveyed;
4. Reason for survey;
5. Other available data.

The description of the material must include the serial number, if applicable, and the custody card number, if the item is controlled equipage. The rough survey must provide all data

available to assist the Commanding Officer or his delegate  
in determining the type of survey required, if any, and  
to assist the surveying officer or board.

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SUPPLY AND FINANCIAL SYSTEMS TRAINING FOR THE LINE OFFICER AFLO--ETC(U)  
SEP 77 S R GULLIFORD

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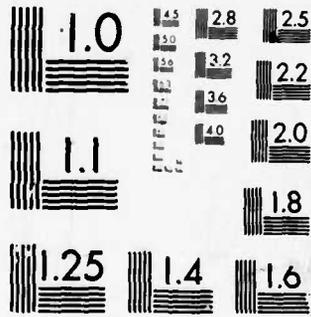


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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

# ROUGH SURVEY REQUEST

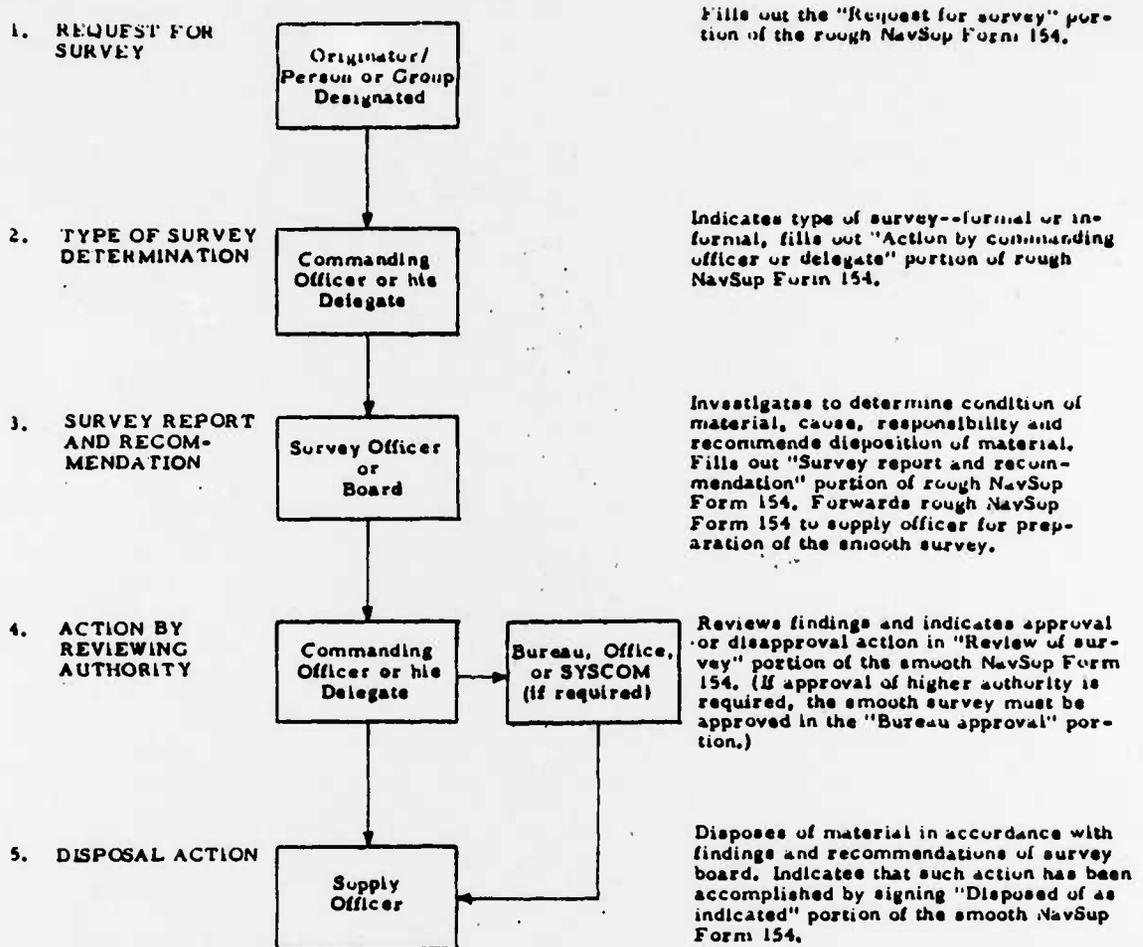
SURVEY REQUEST, REPORT AND EXPENDITURE NAVY AND A FORM 154 (REV. 8-58) 1100 010 1001		DATE 14 May 57	NUMBER
ACTIVITY U.S.S. John Paul Jones (DDG-32)		ORGANIZED (Signature and title) J. G. Ferrell, LTJG, USN	
REQUEST FOR SURVEY			
ITEM	ITEM NO. AND DESCRIPTION	QUANTITY	TOTAL VALUE
1.	24650-00-251-8966 Binoculars, ser. 3044974 Custody Card # OPs-149	1 EA	213.00
REASON FOR SURVEY Lost over the side		ACCOUNTS IN WHICH CARRIED (APA, PMA, etc. or separate)	OFFICE DATE (begin, date of receipt, etc.)
		NON-STORE	Rec'd from Supply Reqn 52192 0177 3/02
ACTION BY COMMANDING OFFICER OR DELEGATE (Date)			
TYPE OF SURVEY	SURVEY TO BE MADE BY	SIGNATURE (C.O. or delegate)	
<input type="checkbox"/> FORMAL	1. _____		
<input type="checkbox"/> INFORMAL	2. _____		
	3. _____		
SURVEY REPORT AND RECOMMENDATION			
<p>Condition: Used but serviceable</p> <p>Cause: Lost over the side during high seas</p> <p>Responsibility: None</p> <p>Recommendation: as shown below</p>			
RECOMMENDATIONS			
(Do not check)			
<input checked="" type="checkbox"/> EXP. FROM RECORDS	<input type="checkbox"/> TRANSFER TO G-370	<input type="checkbox"/> TRANSFER TO MAPS, CHARTS, CODES	(1) _____
ITEMS SURVEYED IN ACCORDANCE WITH NAVY REGULATIONS BY (Signature)			
(1)	(2)	(3)	
REVIEW OF SURVEY REPORT			
<input type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED	SIGNATURE (C.O. or delegate)	DATE
ACCOUNTING DATA		BUREAU APPROVAL	
APPROPRIATION	FUNDING ACCOUNT		
DISPOSED OF AS INDICATED	SIGNATURE	(Rank and title)	DATE

## E. Basic Steps of the Survey Procedure

The following flowchart illustrates the basic steps required in the survey procedure. [1:5-37]

### BASIC STEPS OF THE SURVEY PROCEDURE

#### STEP



F. Review of Survey Report by Bureaus, Commands, and Inventory Control Points

The following is a general list of materials which if surveyed required that a review of the survey be performed by a bureau, command, or inventory control point:

1. nuclear weapons and components;
2. ammunition;
3. small arms;
4. general purpose electronic test equipment;
5. boats;
6. bulk fuels and lubricating oil.

A more specific list which includes the particular commands requiring the survey is included in NAVSUP P-485.

G. Additional Information on Surveys

NAVSUP P-485 also provides specific information on distribution of completed surveys and disposition of the material, however, these are both functions of the supply department. Action required, when culpable responsibility is fixed by survey, is also contained in NAVSUP P-485.

## Chapter 9 - Miscellaneous Information

### A. Casualty Reports (CASREPT)

When the department head or division officer learn that an equipment or component will require reporting under the CASREPT system due to a lack of repair parts, he must immediately contact the Supply Officer. The Supply Officer can insure that the equipment is COSAL supported, investigate the lack of parts, and find alternate sources of supply. Also, if the Supply Officer cannot find the part within a short period of time, then he will be able to provide the supply information required in caption foxtrot of the CASREPT message to higher authority.

### B. Selected Item Management (SIM)

#### 1. Concept

Selected Item Management (SIM) is an inventory control principle which, in nonautomated ships, focuses management attention on the small percentage of items that experience the majority of onboard demands for material. Inventory management of repair parts and consumables designated as SIM items requires:

- a. close and continuing attention;
- b. quarterly review of stock levels;
- c. semi-annual inventory;
- d. stock replenishment based on demand, with the use of high and low limits;

- e. collective storage in a centrally located storeroom;
- f. separate stock record files (i.e., separate from non-SIM stock).

In automated ships either the term "demand based item (DBI)" or "peacetime operating stock (POS)" is used to describe SIM items.

## 2. SIM Criteria

Under the SIM concept, the designation of items as SIM is based primarily upon frequency of demand. Frequency of demand refers to the number of requests that an item experiences within a given time frame, regardless of the quantities requested or issued. Demand for a stock item is registered when the requested item is issued and the issue is posted to the stock record. If the item is not-in-stock at the time it is requested, the demand is recorded after the material has been ordered, received, and issued to the requesting department. Demand for not carried items is registered when the requested item is requisitioned and the demand is recorded in the historical demand file maintained by the supply department.

If an item experiences a frequency of demand of two or more within a six month period, it qualifies as a SIM item. Items which have not previously been stocked may be added to the supply department's inventory if they meet the SIM criteria. Once an item is designated as a SIM item

because of two separate demands within a six month period, it will remain a SIM item until no demand is registered in six consecutive months.

C. Supply Operations Assistance Program (SOAP)

As the time for a regular ship overhaul approaches, the line officer will certainly become familiar with the term SOAP. The SOAP operation is an important evolution for the entire ship and all departments will be asked to furnish personnel to assist. Therefore, it is important to understand and have a basic knowledge of the SOAP process.

A SOAP, which is designed to improve the supply readiness of the ship, entails the offloading, identification, and inventory of shipboard stocks of repair parts, disposition of excesses, requisitioning of deficiencies, and the reloading and restorage of allowed items in unauthorized quantities. Personnel from other departments must provide the technical expertise in the identification process. Their knowledge and experience are necessary to ensure that material is correctly identified and to ensure that critical repair parts are not disposed of as a result of improper identification.

D. More Supply Information

The supply department and its personnel can find the answer to nearly any supply related question. It is highly recommended that the line officer know supply department operations. Supply department personnel are aboard to provide the logistic support required for the ship to accomplish its mission.

## Chapter 10 - Glossary

Afloat Shopping Guide (ASG) - The ASG is designed to assist ✓  
fleet personnel in identifying NSN items that are most  
frequently requested by ships. It includes a detailed  
description of each item, stock numbers of substitutes,  
and illustrations of certain items.

Allowance - Authorization by the cognizant bureau to carry  
aboard ship a specific item of equipage or a repair part,  
in a given quantity.

Allowance Equipage List (AEL) - The AEL contains the allowance  
quantities of equipage to support the ship's mission.

Allowance Parts List (APL) - An APL is prepared for individual  
equipment/components and lists their repair parts and  
technical information.

Alternate Numbers - Additional numbers that can be used to  
determine an NSN such as manufacturer's part number,  
drawing and piece numbers, are referred to as alternate numbers.

Consolidated Afloat Requisitioning Guide Overseas (CARGO) - The  
CARGO is a requisitioning guide published in two versions,  
Pacific and Atlantic, which is tailored for use by afloat  
requisitioners when requisitioning material, except ammunition,  
from the Mobile Logistic Support Force (MLSF).

Consumables - Administrative and housekeeping items, routine maintenance tools, and general purpose hardware.

Consolidated Hazardous Item List (CHIL) - A list of items of a potentially hazardous nature that are found in the Navy's supply system.

Controlled Equipage - Selected items of equipage which require increased management due to their vulnerability to pilferage or essentiality to the ship's mission.

Coordinated Shipboard Allowance List (COSAL) - Contains nomenclature and nameplate data on equipment, identification data for repair parts, and designates the allowance of repair parts to be stocked in supply storerooms.

Demand Based Item (DBI) - See Peacetime Operating Stock (POS).

Equipage - Items of a durable nature that are not consumed in use and are essential to the ship's mission. An allowed quantity is determined on an individual ship basis and is contained in an AEL.

Equipment Identification Code (EIC) - A 7 digit alpha-numeric code used to identify an equipment or its components or parts for the Maintenance Data System (MDS).

Fleet Issue Load List (FILL) - The FILL is contained in the CARGO manual and lists materials carried by combat stores ships.

Frequency of Demand - The number of times that an item has been issued regardless of the quantity issued.

Maintenance Data System (MDS) - A basic element of the 3M program designed to provide a means of recording maintenance actions in substantial detail.

Master Repairable Item List (MRIL) - A catalog of selected Navy managed items which, when unserviceable, are required to be turned into a designated overhaul point (DOP).

National Stock Number (NSN) - An NSN is a 13 digit stock number that consists of a four digit Federal Supply Classification (FSC) and a nine digit National Item Identification Number (NIIN). It uniquely identifies an item in the federal supply system.

Operating Space Item (OSI) - Items required in shipboard operating spaces which are not recorded in stock records and are not under the control of the Supply Officer.

Operating Target (OPTAR) - Funds provided to purchase services, repair parts, and consumables for the daily operation and maintenance of the ship.

Peacetime Operating Stock (POS) - A term, synonymous with "demand based item", that is used by automated ships to identify items which have a relatively high usage rate. (Equivalent to SIM items in non-automated ships.)

Pre-expended Bin Material (PEB) - PEB material consists of SIM items having a low unit cost (\$25 or less) and frequent usage. They are expended from supply department stock and placed in locations conveniently available to maintenance personnel.

Repairable - A component or part designated by the cognizant inventory manager as an item which can be economically repaired when it becomes unserviceable.

Selected Item Management (SIM) - An item which has experienced a frequency of demand of two or more within the past six months. (Similar to POS and DBI in automated ships.)

Supply Operations Assistance Program (SOAP) - A concerted effort of assigned shipboard personnel, under the supervision of ashore based SOAP team members, to refine shipboard inventories of repair parts and improve the supply readiness of the ship.

Survey - A procedure required when naval material must be condemned as a result of damage, obsolescence, or deterioration, or acknowledged as non existent as a result of loss or theft.

Urgency of Need Designator (UND) - Indicates the relative urgency of need for a requirement by a ship.

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